IVU TRAFFIC TECHNOLOGIES

ANNUAL REPORT **2020**

KEY FIGURES

Overview

CONSOLIDATED FINANCIAL STATEMENTS IN LINE WITH IFRS

	2016	2017	2018	2019	**2020**	Change 2020 to 2019
Revenue	59.8	71.1	77.8	88.8	92.0	+ 3.2
Gross profit	42.8	47.7	52.1	62.1	70.4	+ 8.3
Personnel expenses	28.6	31.2	33.9	39.7	46.2	+ 6.5
EBIT	1.4	6.1	6.7	10.5	12.8	+ 2.3
Consolidated net loss / profit	-0.2	5.0	6.2	10.6	10.1	-0.5
Cash flow from operating activities	2.6	3.8	12.3	12.5	30.8	+ 18.3
Free cash flow	1.1	2.9	9.8	8.0	1.8	-6.2

KEY FIGURES

	2016	2017	2018	2019	**2020**
Equity ratio (Equity/Total assets)	66 %	64 %	61 %	54 %	50 %
EBIT/Revenue	2.3 %	8.6 %	8.6 %	11.8 %	13.9 %
EBIT/Gross profit	3.3 %	12.9 %	12.9 %	16.9 %	18.2 %
Dividend (€/Share)	0.00	0.10	0.12	0.16	0,20*
Full-time equivalents as annual average	393	419	458	496	572
Gross profit per FTE (in € thousand)	109	114	114	125	123

* Proposal to the Annual General Meeting

LETTER TO THE SHAREHOLDERS

Dear shareholders,

The global economy faced some major challenges over the past year. Nevertheless, IVU managed to end the 2020 financial year as well on a very successful note. All key figures continued to develop positively, with revenue increasing by 3.7% to €92.0 million, and gross profit, which reflects the added value of IVU, growing by 13.3% year-on-year to €92.0 million. EBIT developed especially positively, again hitting a record figure of €12.8 million. We would like to share this success with you, and will therefore be proposing a significantly increased dividend of €0.20 at the Annual General Meeting, which is certainly something special after such a uniqe year.

Public transport has been – and continues to be – severely affected by the consequences of the coronavirus pandemic. Passenger numbers on buses and trains fell sharply last year in all of our European domestic markets. However, the crisis had barely any impact on our business with public transport companies. We did not experience significant order cancellations, nor did we see any tangible downturn in the order intake. As a digital company, we were also in the fortunate position of being able to implement the majority of our projects and development work remotely without any problems.

The focus of our activities was on completing major orders from previous years. We achieved an important milestone with DB Long Distance at the end of the year when we put into operation vehicle scheduling with IVU.rail. We also made major strides with DB Regio when we went live with the integrated planning and dispatch system in several operating regions. We also launched our system in Sweden and Finland with our customers SJ and VR Group.

There was continued growth overall in international railway business. We are benefiting here from a considerable volume of investment, a large number of long-term contracts and regular follow-up orders. We have a strong market position courtesy of our product portfolio and our customer base including a number of European state railways, and this will continue to leverage additional opportunities for us going forward.

Matthias Rust, CTO, Martin Müller-Elschner, CEO, Leon Struijk, CCO

We are continuing to see a lot of potential in business with public transport service operators as well. The switch to electric buses will increase the demand for integrated software systems even more. Gaining an early foothold in this market means that we are in a good position to benefit from further growth in this area.

We sold off our subsidiary IVU.elect in May to allow us to focus entirely on the transport business. A more suitable partner will now be taking over the further development of the system for organising and holding elections.

At the same time, we also invested in expanding our personnel capacity in the past financial year to ensure that we are well-prepared for future orders and developments. This is because we are confident that public transport with buses and trains is – and will remain – an industry for the future that will become progressively more important in the years to come.

We are confident that IVU will continue to earn your loyalty in 2021.

Yours sincerely,

The Executive Board

Berlin, March 2021

REPORT OF THE SUPERVISORY BOARD

Dear Shareholders,

As the Supervisory Board, our function is to oversee the current economic situation and future development of IVU Traffic Technologies AG and to safeguard it over the long term. We will inform you about our work in the 2020 financial year below.

We continuously monitored and advised the Executive Board in line with legislation, the company statutes and the German Corporate Governance Code (DCGK). We informed ourselves in detail about the economic and financial performance, key business events and the strategy and planning of IVU. The Executive Board notified the Supervisory Board promptly and on a regular basis. All important facts and relevant documents required for pending decisions were made available to us in good time.

In its advisory capacity during the past year, the Supervisory Board dealt in particular with the continued growth of IVU and the organisational adaptations. Areas of focus included the impact of the coronavirus pandemic on IVU's business, planning for the customer group of public transport companies, further development of cooperations and partnerships, the sale of IVU.elect GmbH and the tender for auditing services.

The Supervisory Board consists of a total of six members, four of whom represent the shareholders and two of whom are elected by IVU employees. The shareholder representatives are Prof. Herbert Sonntag (Chairman), Ute Witt (Deputy Chairwoman), Dr Heiner Bente and Prof. Barbara Lenz. The employees are represented by Axel Zimmermann and Benedikt Woelki. Cooperation between the shareholder side and employee representatives was constructive. All members of the Supervisory Board are committed to the overarching goal of making the best decisions for the company.

The Chairman of the Supervisory Board maintained regular contact with the Executive Board above and beyond the meetings. He brought major findings and information from these discussions to the attention of the Supervisory Board members in order to keep them equally informed and give them the opportunity to offer their advice.

Activities

The Supervisory Board meets regularly in order to discuss the matters described above and take decisions. In 2020 four scheduled meetings were held: The dates in question were 26 March, 27 May, 27 August and 19 November. The Supervisory Board was represented at all meetings in a quorate number. No member of the Supervisory Board attended only half or less of the meetings of the Supervisory Board and the committees to which he or she belongs. In addition to face-to-face meetings, meetings and briefings were also held as video or hybrid events due to the coronavirus pandemic.

Supervisory Board member	Meeting attendance incl. meetings of the committees	Meeting attendance in %
Prof. Herbert Sonntag (Chairmain)	9 / 9	100
Ute Witt (Deputy Chairwoman)	7 / 7	100
Dr Heiner Bente	6 / 6	100
Prof. Barbara Lenz	4 / 4	100
Benedikt Woelki	4 / 4	100
Axel Zimmermann	7 / 7	100

As recommended in the German Corporate Governance Code (DCGK), the Supervisory Board and its committees regularly discussed matters entirely or partly without the presence of the Executive Board. These meetings also covered the extended legal requirements of the Act on the Implementation of the Second Shareholder Rights Directive (ARUG II) and addressed the provisions of the German Corporate Governance Code. The agenda items discussed either concerned the Executive Board itself or required an internal discussion with the Supervisory Board for notices or resolutions. Within the scope of the scheduled meetings, preparatory and follow-up discussions also took place between the members of the Supervisory Board for the purposes of sharing information and preparing decisions.

Focal Points of Discussions

Discussions focused on the economic situation of the company, its prospects and its future orientation in the international competitive environment. In this regard, the Supervisory Board scrutinised in detail the Executive Board's strategy for developing business with public transport companies. We support the Executive Board's efforts in expanding the product portfolio and strengthening the company's presence in additional markets.

Other key focal points of the meetings were:

- Assessing and approving planning for fiscal year 2019
- Approving the consolidated financial statements 2019
- Adopting the separate financial statements 2020
- Liquidity planning 2020
- Discussing the quarterly financial statements 2020
- Sale of IVU.elect GmbH
- Personnel
- Risk management
- Major projects and their economic impacts on the company
- Preparations for the Annual General Meeting
- Cooperation and partnerships
- Determining the focal points of the audit with the auditor for the 2020 annual financial statements (individual and consolidated financial statements)
- Safety management
- Preparations and resolutions regarding changes stemming from ARUG II and the 2019 German Corporate Governance Code

Committees

The committees support the work of the plenary assembly and prepare documents and materials for various agenda items. The following committees were convened in the 2020 financial year:

- General Committee (Prof. Herbert Sonntag (Chairman), Dr Heiner Bente)
- Audit Committee (Ute Witt (Chairwoman), Prof. Herbert Sonntag, Axel Zimmermann)

In the past financial year, the General Committee dealt with fundamental questions relating to the company, especially with strategy planning, possible M&A activities and restructuring as well as with contracts of service and personnel matters of the Executive Board, including perspective planning. In addition to numerous informative exchanges, the full committee met twice at scheduled meetings in the course of the financial year.

In the past financial year, the Audit Committee held a number of informative discussions at which it dealt in particular with the activities of the auditor and the auditing tender as well as issues relating to accounting, the internal control system, risk management and compliance. The committee met three times in 2020, with one meeting used to set out the preparation of the audit of the annual financial statements with the public auditor. All committee members were present at the meetings.

Training and professional development measures

In the past financial year, the members of the Supervisory Board regularly took part in training and professional development measures and received appropriate support from the company in this respect.

Corporate Governance

Responsible management and sustainable value creation are hugely important to IVU Traffic Technologies AG. Therefore, in 2020, the Supervisory Board and Executive Board again discussed the recommendations and suggestions of the German Corporate Governance Code and issued the declaration of conformity pursuant to Section 161 of the German Stock Corporation Act (AktG) and published it on IVU's website (www.ivu.de) together with the corporate governance declaration. With just a few exceptions, IVU meets the code's recommendations. Detailed reasons for the deviations are provided.

Annual and Consolidated Financial Statements 2020

The Audit Committee has dealt intensively with the annual financial statements of IVU Traffic Technologies AG and the consolidated financial statements of 31 December 2020 and the respective management reports together with the auditors of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft. At the accounts meeting on 24 March 2021, the Audit Committee recommended that the other members of the Supervisory Board approve the consolidated financial statements and adopt the individual financial statements of the AG. In this meeting of the Supervisory Board, we considered in detail the annual financial statements of IVU Traffic

Technologies AG, the consolidated financial statements as at 31 December 2020as well as the respective management reports. The auditors, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, were available during the meeting to answer questions. After detailed examination and discussion, we approved both the consolidated financial statements and the separate financial statement of the AG.

Berlin, 24 March 2021

For the Supervisory Board

Prof. Herbert Sonntag
Chairman of the Supervisory Board

THE MEMBERS OF THE SUPERVISORY BOARD

Shareholder representatives

Prof. Herbert Sonntag, Berlin

(Chairman of the Supervisory Board and of the General Committee, member of the Audit Committee)

Activities and mandates:

- Retired Professor of Transport Logistics at the Technical University (TH) Wildau,
- Advisory board and honorary member of LNBB Logistiknetz Berlin-Brandenburg e.V.,
- Representative for Brandenburg of Allianz pro Schiene e.V.,
- Spokesperson for logistics in the transport, mobility and logistics cluster of the states of Berlin and Brandenburg,
- Visiting Professor DKU German-Kazakh University, Almaty, Kazakhstan,
- Visiting Professor GTU Georgian Technical University, Tbilisi, Georgia.

Ute Witt, Potsdam

(Deputy Chairwoman of the Supervisory Board and Chairwoman of the Audit Committee)

Activities and mandates:

- Chairwoman of the Supervisory Board of Sellutions AG,
- Member of the Supervisory Board of Charité Research Organisation GmbH,
- Vice President, Treasurer and Head of the Budget Committee of the Berlin Chamber of Industry and Commerce,
- Member of the Tax Committee and the Advisory Board of the DIHK,
- Member of the Federal Tax Commissions of the Economic Council of the CDU e.V.,
- Board member of the Potsdamer Steuerforum e.V.,
- Member of the Economic Advisory Board of Domstift Brandenburg,
- Member of the Audit Committee of Berliner Stadtmission,
- Managing Director of Ute Witt Tax Consulting UG Steuerberatungsgesellschaft, Berlin.

Dr. Heiner Bente, Hamburg

(Member of the general committee)

Activities and mandates:

- Managing Partner, Dr. Heiner Bente Consulting, Hamburg,
- Senior Advisor at civity Management Consultants, Hamburg,
- Chairman of the Supervisory Board of birkle IT AG, Munich (since September 2020),
- Deputy Chairman of the Supervisory Board of birkle IT AG, Munich (until September 2020),
- Deputy Chairman of the Advisory Board of the Schürfeld Group, Hamburg.

Prof. Barbara Lenz, Berlin

Activities and mandates:

- Director of the Institute of Transport Research at the German Aerospace Center, Berlin,
- Professor of Transport Geography at Humboldt University, Berlin,
- Member of the Supervisory Board of Berliner Verkehrsbetriebe (BVG),
- Cluster spokesperson for the Transport, Mobility and Logistics Cluster of Berlin and Brandenburg.

Employees representatives

Benedikt Woelki, Berlin

Activities and mandates:

- Support Account Manager IVU.suite at IVU Traffic Technologies AG, Berlin.

Axel Zimmermann, Düren

(Member of the audit committee)

Activities and mandates:

- Quality manager at IVU Traffic Technologies AG, Aachen,
- Chairman of the Works Council of IVU Traffic Technologies AG at the Aachen site,
- Deputy Chairman of the General Works Council of IVU Traffic Technologies AG.

INTERVIEW WITH THE EXECUTIVE BOARD

The 2020 financial year was highly successful again for IVU with new record-breaking figures for revenue, gross profit and EBIT – despite the coronavirus. How did you manage it?

MARTIN MÜLLER-ELSCHNER: I'm very proud of our performance over the past year, not just in terms of the figures, but especially in how we dealt with the pandemic. We responded very quickly and adapted our processes in a very short space of time. It certainly helped that we mainly supply digital solutions. But without the efforts of our employees, who continued to look after their customers and projects from home – perhaps even with children in the background – we wouldn't have coped as well. I'm very grateful for that.

Public transport in particular was severely affected by the consequences of the coronavirus pandemic and suffered significant declines in passenger numbers. How did this impact your business?

MARTIN MÜLLER-ELSCHNER: When the first lockdown was announced, we – like others – feared that customers would cancel orders or we wouldn't be able to carry out our projects. But nothing like this ever materialised. There were some project delays in the beginning, but we largely caught up with these. In some cases, we actually even benefited from the situation. In Australia, for example, we implemented one project entirely from Germany. Before, it would have meant at least one employee making the round-the-world trip multiple times.

Remote working is now commonplace as a result of the pandemic. Do you think that public transport will recover from this?

MARTIN MÜLLER-ELSCHNER: Public transport will make a comeback – I'm certain of that. Perhaps not in 2021 or 2022, but certainly in the years thereafter. Coronavirus has given megatrends like digitalisation, climate protection and smart cities new momentum – and the need for mobility is still there. Even in times of weak demand, our customers in particular benefit from our solutions because they allow them to deploy their resources more efficiently.

According to your news flow, railway business in particular is booming. Could this also be a growth market in the future?

LEON STRUIJK: Even though our customer base already includes many railways in Germany and Europe, there are always more companies in the pipeline to procure systems such as IVU.rail – and we want to be ready for this. We have a strong product with high-performance features. This makes us a clear leader in Europe and well-prepared for future business. At the same time, we are pressing ahead with development. We are always bringing out new functions that are useful to our customers. We are far from being at the end of the road here.

What exactly do you mean by that?

LEON STRUIJK: Our systems are not simply finished when they go into operation. Digitalisation is evolving all the time, and there are always new possibilities for improvement. We naturally keep our finger on the pulse here. But we also look at where there might be other opportunities for us to deploy our expertise outside our existing customer groups. For instance, we recently completed full system integration for Stadler trains, which was a very important project for us. There are also overlaps with freight transport as well. Of course, we always have to weigh up how much development work will be involved to achieve greater penetration in neighbouring areas – but there is certainly still potential here.

You also entered the electric mobility market in its very early stages. How is business going there?

MATTHIAS RUST: Bit by bit, more and more transport companies are making productive use of electric buses. We put our first installations into operation with existing customers last year. We are anticipating further orders in the months ahead, including with our partner Daimler Buses. But electric mobility is still in its infancy and is only just taking off. We are generally still doing well in our business with public transport operators, particularly in our home countries, which continue to make up the lion's share of our revenue.

You haven't ruled out acquisitions in the past. Do you have anything to report in this regard?

MARTIN MÜLLER-ELSCHNER: We mainly see acquisitions as an opportunity to expand our products or tap into new markets. But what we will not do is pursue an acquisition for the sole purpose of acquiring customers. Our aim is to enhance our business where appropriate. We've had one or two promising companies in our sights in the past, but for various reasons, we are yet to conclude any acquisitions.

You recently brought several customers on board with the SaaS model. Is that the future?

LEON STRUIJK: Right now, for us software as a service is predominantly an addition to the existing business model with the sale of licences and optional hosting in our IVU.cloud. But the offer is there, and we will be watching very carefully to see how demand develops. The SaaS model certainly has advantages for both sides. On our side, we benefit primarily from plannable recurring revenue.

You sold off the election software business segment last year. Why is that?

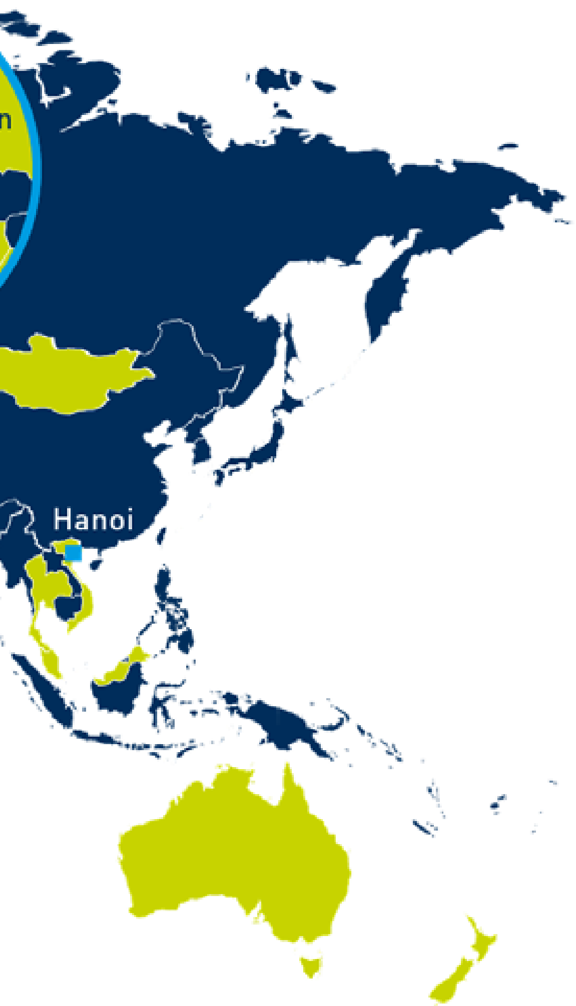
MATTHIAS RUST: We are still as proud as ever of IVU.elect, but we want to focus our efforts on what we do best: our core business with public transport. The solution we have found is ideal. The buyer voteIT has been in the election system business for a very long time and offers the best future prospects for IVU.elect.

What are your goals for 2021?

MARTIN MÜLLER-ELSCHNER: We should never underestimate the importance of completing existing projects because they lead to direct follow-up business. But we will take bolder steps, too. Alongside our existing European customers, we will pursue select international opportunities, particularly with railways and in big cities. At the same time, we will continue to invest in personnel development – "truly smart minds" in particular appreciate the unique package that IVU has to offer: challenging work in a meaningful environment with all the benefits of an international SME, and this is something that we on the Executive Board are equally passionate about with each passing year!

IVU WORLDWIDE

BERLIN (HEADQUARTERS)**, AACHEN,**
FRANKFURT AM MAIN (DE)**,**
VEENENDAAL (NL)**, ROME** (IT)**,**
BIRMINGHAM (GB)**, VIENNA** (AT)**,**
PARIS (FR)**, BUDAPEST** (HU)**,**
MONTRÉAL (CA)**, OLTEN** (CH)**,**
NEW YORK (US)**, SANTIAGO** (CL)**,**
HANOI (VN)**, ISTANBUL** (TR)



Selected references

SLOVENIA

The Slovenian national railway SŽ is modernising its systems and is relying on the integrated planning and dispatching solutions from IVU.rail.

GERMANY

On the way to the electromobile future, the Berlin public transport company BVG is gradually converting its fleet. The specialised optimisation tools of the IVU.suite will ensure maximum efficiency in the future.

SWEDEN

Our long-standing customer SJ is now using our standard system in two new concessions in Norway and the Öresund region.

FINLAND

The Finnish national railway VR Group has been using IVU.rail for the planning and dispatching of its regional trains since 2010. Now it is also using the system for the efficient deployment of its train attendants.

BELGIUM

Using IVU.suite, De Lijn modernised the passenger information at the most important transport hubs in the country. Now the bus stop computer software IVU.realtime.stop supplies the displays at every bus station with up-to-date data.

HIGHLIGHTS 2020


DRICHSTRASSE
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GERRY WEBER
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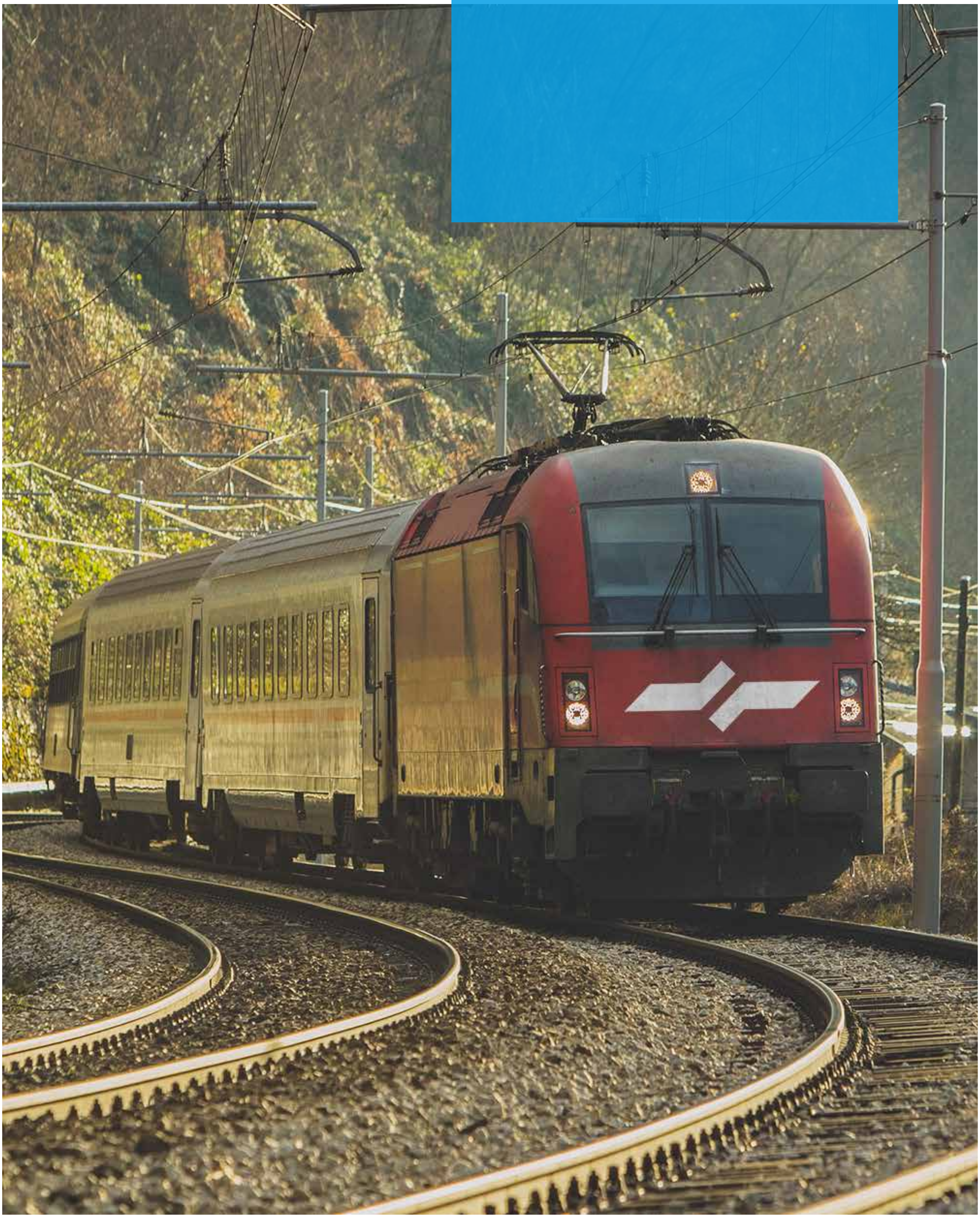
Projects

Ljubljana. Slovenian national railway chooses IVU.rail

Every day, more than 500 passenger trains of the Slovenian of national railway (Slovenske železnice, SŽ) bring their passengers to their destinations. SŽ transports almost 15 million people a year on numerous domestic and international journeys in Slovenia and in other European countries such as Austria, Croatia or Germany. IVU's integrated standard system enables SŽ to implement a continuous digital workflow across all operational areas. In this way, it is possible to control vehicle and duty planning, as well as staff and vehicle dispatching within one system. To this end, IVU.rail integrates the existing operational and planning processes at SŽ, which previously often took place manually, in order to improve workflows and ensure more efficient use of resources.

STRONG MARKET POSITION.
With installations at numerous European national railways, IVU.rail is the leading system for resource planning in Europe.

Every year, SŽ transports almost 15 million people in Slovenia, Austria, Croatia and Germany. IVU.rail enables SŽ to implement a continuous digital workflow across all operational areas.



Stockholm. SJ starts operations with IVU.rail in Norway

Since 2016 IVU.rail has been helping the Swedisch natinoal railway SJ to replace multiple individual systems in order to accelerate its planning and dispatching processes. For its two new concessions, SJ Norge and SJ Öresundståg, SJ has opted for IVU.rail again. IVU provides the hosting and all technical management of the system in IVU.cloud. In addition, the mobile app IVU.pad ensures optimum communication between drivers and dispatchers. To make sure production started on time, SJ used the standardised implementation process IVU.xpress for a fast rollout of the standard software and a short project lead time of only nine months.

Helsinki. VR Group optimises deployment of its train personnel

Efficient personnel deployment on the train: To meet increasing requirements in terms of planning and dispatch of their train personnel, Finnish state railway VR Group is using the planning and optimisation tools of IVU.rail. The company has been planning and dispatching the train schedules in regional transport as well as all parking and track occupancy at Helsinki Central Station with IVU.rail since back in 2010. Now, VR Group decided to use the IVU software also to replace the system for planning and dispatch of its conductors in regional train services and train drivers throughout the Group. IVU.rail has powerful optimisation cores that calculate the best possible duty schedule automatically on the basis of freely configurable rules.

SUCCESSFUL SYSTEM IMPLEMENTATIONS:
Even during the coronavirus pandemic, IVU's engineers implemented projects, installed systems and trained users worldwide.

Frankfurt am Main. Integrated processes at DB Regio

IVU and DB Regio are digitalising planning and dispatch in public transport systems. After five regions, two Regio networks and four commuter railway services from market leader DB Regio adopted the integrated planning and dispatch system (iPD) from IVU in 2019, the S-Bahn Stuttgart also followed in 2020. iPD enables individual regional and commuter railway service networks to plan and dispatch staff and vehicles in a single system. They benefit in particular from the continuous process chain. The duty scheduling automatically maps all changes that planners make to schedules. DB Regio already plans and dispatches more than 700,000 train kilometres per day in IVU.rail.

Mettmann. IVU awarded contract from Regiobahn

Since 1999, Regiobahn has been reliably connecting people from the regions of Mettmann, Erkrath, Düsseldorf, Kaarst, Neuss and the surrounding area across a distance of 34 km. Regiobahn is now introducing the integrated IVU.rail standard system to simplify its schedule and personnel planning. With this, Regiobahn benefits from an end-to-end digital workflow for the planning of its vehicles and employees. IVU is also taking care of the technical management and hosting of the entire system in the IVU.cloud. The special IVU.xpress implementation process also ensured that the core components of the software were ready for use when the timetable changed in December – just one month after the start of the project.

Berlin. IVU.suite set to optimise electric buses at BVG

Berliner Verkehrsbetriebe (BVG) is making strides towards the future of electric transport, with the aim of putting over 200 electric buses on Berlin's roads until the end of 2021 and making its entire fleet run on electricity by 2030. The IVU.suite specialist optimisation tools are already guaranteeing maximum efficiency for BVG's operations. The integrated standard system contains numerous functions that have been specially designed for the deployment of electric buses. To ensure efficient vehicle schedules, the system takes steps such as minimising the number of deployed vehicles and the lengths of non-revenue trips. Optimisation also takes into account factors such as the remaining range, recharge status and charging time required for the electric buses, and automatically factors in charging processes.

Basel. Verkehrs-Betriebe opt for IVU.suite

For planning and dispatching vehicles and personnel across the company, Basler Verkehrs-Betriebe (BVB) will be relying in future on IVU.suite. In addition to Switzerland, the catchment area of BVB also includes neighbouring regions in Germany and France. As a result, BVB is globally the only urban public transport operator that connects three countries with its tram lines. IVU.suite will replace the existing individual solutions and allow BVB to have a consistent workflow across all operational areas. The framework contract has a duration of 10 years with the option to extend. This involves a strategic partnership between the two companies in order to together create a fully integrated system landscape in the operational area.

DURING PLANNING, IN THE VEHICLE OR AT THE BUS STATION, the IVU solutions support public transport companies in all operational tasks and create continuous digital workflows.

Mechelen. De Lijn uses IVU.suite to provide passenger information

Up-to-date information on more than 450 displays at nearly 60 bus stations: Belgian transport company De Lijn has recently used the products from IVU.suite to modernise the passenger information at the country's key transport hubs. IVU provided its stop computer software IVU.realtime.stop, which supplies the displays at every bus station with current data. The system allows bilingual output, which is customary in many parts of Belgium, as well as automatic colour coding of the lines shown on TFT displays. The system is based on a comprehensive system for data gathering and forwarding for all of De Lijn's operating regions, based in turn on the IVU.fleet traffic control system, which ensures a continuous flow of data from the vehicle to the control centre.

Münster. Cashless Payment for Stadtwerke

Stadtwerke Münster regularly takes first place in the German public transport customer satisfaction barometer and has been one of the most popular public transport operators in Germany for years. As a pioneer in e-ticketing, the company also introduced the country's first flexible tariff for occasional riders in 2013. From 2021, passengers on many buses will not even need their smart card to make cashless payments when they board. To facilitate this, Stadtwerke Münster is upgrading the IVU.ticket.box on-board computers, which are installed in the more than 200 buses belonging to the company and its partners. IVU is also taking over the hosting for the background systems IVU.fleet, IVU.fare and IVU.realtime in the IVU.cloud.

Frankfurt am Main. DELFI migrates to IVU.cloud

Constantly up-to-date timetable data, integrated quickly and reliably for the whole of Germany – to maintain this service for the future, DELFI e.V. started using IVU.cloud. IVU's hosting environment processes detailed timetable data for all of Germany's public transport: up to a million trips per day on more than 25,000 lines with around 260,000 stops and over 600,000 stop objects. DELFI has been using the integration solution IVU.pool and other tools for this since summer 2017. Based on common industry standards, the system has extensive automations for seamless processing of the data.

Events

VDV Electric Bus Conference.
One of the last events before the corona pandemic reached Europe. Our expert René Rothe gave a presentation on the topics of performance audit and use of electric buses in everyday operations.

User Forum. Everything different

Originally planned for March, the coronavirus pandemic did not stop at our User Forum. Instead of inviting hundreds of guests to Berlin, we decided early on to cancel our annual industry get-together in the interest of our customers and employees. Instead, the User Forum took place completely digitally in May: In four webinars, we presented the latest developments in our standard solutions IVU.suite and IVU.rail to our customers. With success: more than 300 representatives of transport companies from all over the world took the opportunity to take a look into the future of operations planning and implementation with us.

IT-Trans. Digital solutions

The past year has clearly shown how much digitalisation is moving the transport industry. With this in mind, we presented ourselves at the digital IT-Trans 2020 from 1 to 3 December. Whether in product presentations via virtual roundtables or consultations via video call: visitors to the virtual trade fair were able to obtain comprehensive information about our integrated IT systems for future-proof public transport. The main focus was on electromobility, optimisation and solutions for digital employee communication.

Innovations

THE DIGITAL VEHICLE: The on-board computer is the control centre in the bus. In future, this task will be taken over by a commercially available tablet.

On-board computer system for Android tablets

A tablet instead of an on-board computer. With IVU.cockpit for Android from IVU Traffic Technologies, transport companies will in future be able to dispense with the permanent installation of driver-operated devices in their buses if required. This means that all functions of the proven on-board computer software are now also available on commercial tablets. Continuously developed for decades and in use on tens of thousands of permanently installed on-board computers worldwide, the software contains everything that is necessary for smooth driving operations.

IVU.cockpit for Android has the same user interface as the version for on-board computers. Its operation is the same as other Android devices, so no special training is required. The system is an integral part of the IVU.suite and is closely linked to the IVU.fleet control centre software, which supports dispatch with numerous automated and convenient functions.

New ticket validator from IVU and LECIP

A modern standard device for e-ticketing – the EMV Level 2 Certified LECIP Validator LV-700 provides public transport authorities with great access to contactless ticketing. IVU will offer the validator, which is fully compliant with VDV-KA, as part of their integrated, one-stop solution IVU.suite. The LV-700 series is designed for fast and smooth cashless and contactless payment with a high-speed processor and large capacity memory for demanding ticket data processing. The LV-700 series is waterproof, compact, robust, tamper-proof and designed for easy maintenance. As a new version of the well-known IVU.validator, the LV-700 complements IVU's ticketing portfolio. By enabling the customers to make quick and uncomplicated cashless payments, the IVU.validator takes some of the pressure from the driver and makes boarding faster.

As an expert in contactless ticketing, LECIP ARCONTIA distributes several thousand smart card readers and terminals in over 40 countries worldwide every year. The Swedish company has more than 20 years of experience and is committed to providing high quality and reliable solutions that meet the highest standards.

Employees

Complex systems need smart thinkers. IVU's employees develop ideas, write software, implement projects, advise customers and provide support. Their expertise is a key factor in our success.

Despite the effects of the coronavirus pandemic, IVU's growth prospects remain good. That is why we continued our intensive recruiting programme in the 2020 financial year in order to recruit suitable software and project engineers for IVU's further growth. Despite the difficult circumstances, we succeeded in attracting more than 120 new talents last year – more than ever before. This means that IVU now has 735 employees across the Group (corresponding to a personnel capacity of 572 FTE). In addition to the project departments, we have concentrated primarily on software development. In addition to the classic development locations of Berlin and Aachen, we have hired highly qualified software engineers in Rome for the first time who will support the existing teams.

We also continued the further development of our employees internally in the corona year. In a special management trainee program, we prepare promising candidates to take on management responsibility. In doing so, we are offering them excellent prospects while also helping to retain valuable knowledge in the company. With great success: The level of staff turnover at IVU in 2020 was just 6.3 percent.

TEAM SPIRIT: The in-house Developer School in January was still held on site at IVU. After that, the coronavirus pandemic shifted team work at IVU largely to the digital world as well.

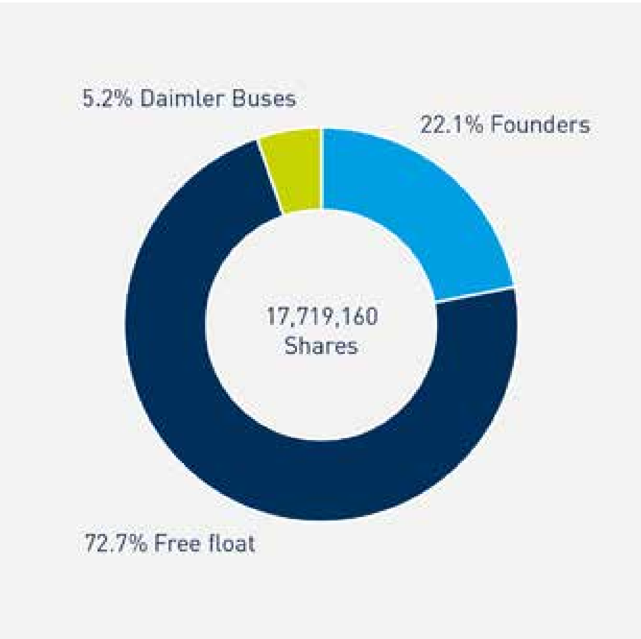
IVU share, key figures

IVU SHARE IN COMPARISON

JAN 2008 – FEB 2021

FEB 2020 – FEB 2021

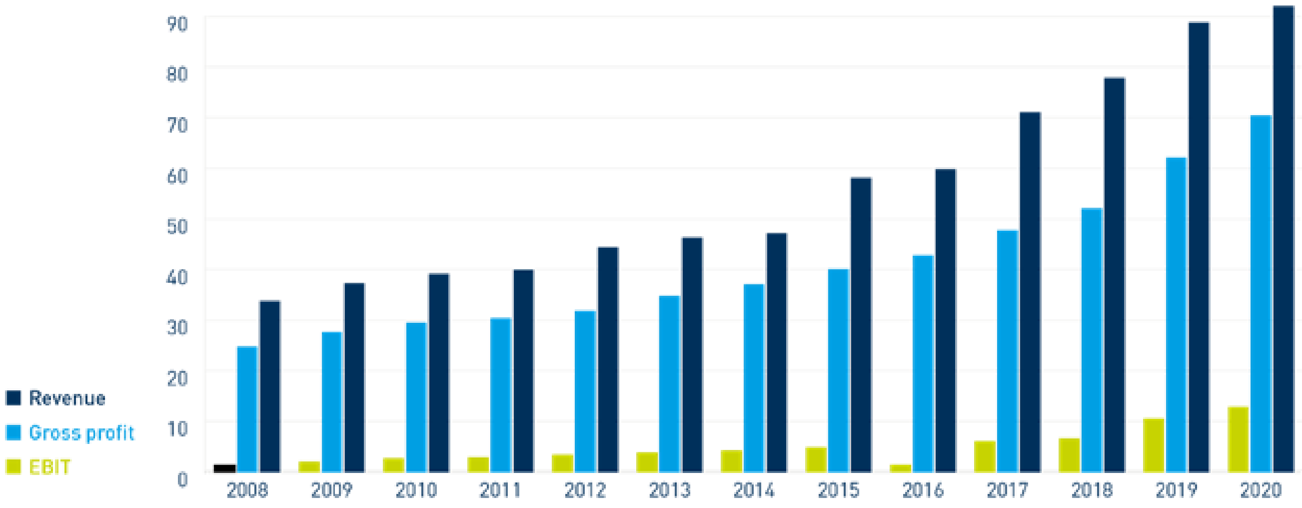
SHAREHOLDER STRUCTURE AS AT 31 DECEMBER 2020



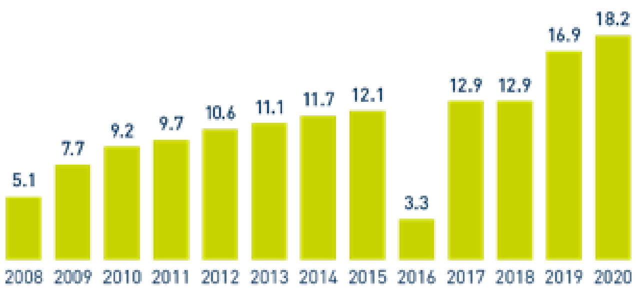
SHARES HELD BY BOARDMEMBERS AS AT 31 DECEMBER 2020

Executive Board	**Shares**
Martin Müller-Elschner	233,634
Matthias Rust	17,876
Leon Struijk	20,655
Executive Board Total	**272,165**
Supervisory Board	
Prof. Herbert Sonntag	866,000
Ute Witt	2,000
Prof. Barbara Lenz	1,200
Benedikt Woelki	100
Axel Zimmermann	1,029
Supervisory Board Total	**870,329**
BOARD MEMBERS TOTAL	**1,142,494**

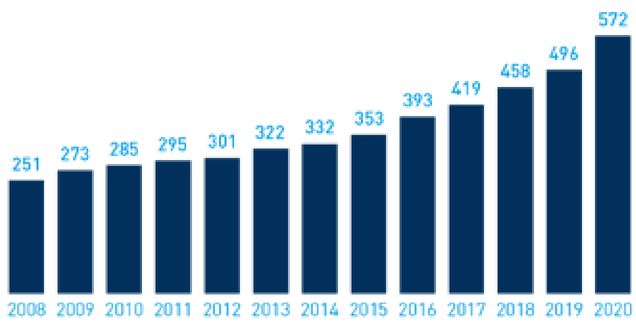
KEY FIGURES 2008-2020
IN € MILLION



EFFICIENCY 2008-2020
EBIT/GROSS PROFIT IN %



FULL TIME EQUIVALENTS 2008-2020
AS ANNUAL AVERAGE



REVENUE 2020
IN € THOUSAND

GROUP MANAGEMENT REPORT

Group Management Report for the 2020 financial year

A. **GROUP FUNDAMENTALS**

Group structure and products

IVU develops, installs, maintains and operates integrated IT solutions for buses and trains. The standard products IVU.suite and IVU.rail cover the whole spectrum of planning, operation and quality assurance for public transport and railway companies. IVU's software and hardware systems create timetables, plan and optimise the deployment of buses and trains, dispatch drivers and vehicles, control and monitor the operation of vehicle fleets, sell tickets, inform passengers, cash up takings and prepare statistics. Consequently, they increase the efficiency and the quality of public transport.

Building on more than 40 years of experience, digital solutions by IVU help transport companies to standardise their entire operational workflows and provide forward-looking services for the transport of tomorrow. From planning and deployment of resources, operational control, passenger information or performance assessment – IVU products create a consistent digital workflow.

The integrated approach of IVU systems is a particular advantage. In the context of digitalisation, it opens up opportunities to link up departments, use data extensively and optimise and accelerate workflows on a long-term basis. This way, IVU's products increase the efficiency and quality of public transport.

IVU serves customers worldwide from its locations in Berlin (headquarters), Aachen, Frankfurt/Main (Germany), Olten (Switzerland), Vienna (Austria), Veenendaal (Netherlands), Paris (France), Rome (Italy), Birmingham (Great Britain), Budapest (Hungary), Istanbul (Turkey), New York (US), Montréal (Canada), Santiago (Chile) and Hanoi (Vietnam). The core markets of IVU are Germany, Italy and Switzerland as well as the rest of Europe and railway companies worldwide.

IVU divested its business in software for organising and holding elections in the reporting year with the sale of IVU.elect GmbH, Berlin. The sole focus of its business activities is now on developing and selling IT solutions for the public transport sector.

Strategy and management

The corporate strategy of IVU is aimed at continued, financially sustainable growth, expanding its market position in the core markets and neighbouring regions of Europe, and increasing recurring revenue as the basis for the economic stability of IVU.

The foundation for the continued growth of IVU lies with sophisticated products, which it develops in cooperation and coordination with its customers. An important condition for this is maintaining product standards, so that as many customers as possible work with identical solutions. The product portfolio for the two customer groups (public transport companies/associations and railways) is to be largely integrated, providing users with consistent workflows across all operational areas.

In order to expand its position in the German-speaking domestic market, IVU relies on good customer contacts. Sales are set to expand the opportunities for up- and cross-selling products. When implementing new requirements – for example in the field of electric mobility – IVU wants to be the first point of contact for its customers. Further growth will be generated by the targeted acquisition of new customers in the neighbouring countries within Europe. In the railway market, IVU sees all global railway companies as potential customers.

Recurring revenue is expected to grow at an above average rate, or at least proportionally to consolidated revenue. Alongside the maintenance business and support, additional services relating to IVU products, such as training and consulting services, and the expansion of the cloud business will serve as growth drivers. The focus is on marketing the IVU.cloud in order to gain further customers where IVU can operate its own systems.

IVU's management systems are designed to provide a constant up-to-date picture of the economic and financial situation of the Group and to help it in achieving its strategic objectives. The key performance indicators include the development of revenue as an indicator of the growth rate, gross profit (total operating performance plus other operating income and less cost of materials) as an indicator of own value added, and operating profit (EBIT) as an indicator of profitability. The EBIT/gross profit ratio serves as a key indicator of IVU's efficiency.

Research and development

IVU has been developing complex software solutions for public transport for over 40 years. Continued development and involvement in promising research and standardisation projects are strengthening the IVU.suite products. Close collaboration with transport companies and partners in industry and science generates impetus for new functionalities and application models of IVU systems.

IVU maintains excellent contacts with technical colleges and universities, including Technical University of Berlin, Ilmenau University of Technology, Technical University of Darmstadt, RWTH Aachen University, Karlsruhe Institute of Technology, University Kassel and the Technical University of Applied Sciences Wildau. The company cooperates intensively with these education establishments in the area of research and teaching.

The research projects started in 2019 with MaaS L.A.B.S. and U-hoch-3 continued on schedule in the past fnancial year. The "LOGIN" research project to optimise the management of traffic signals for public transport, which is being funded by the German Federal Ministry of Transport and Digital Infrastructure, also began in December 2020. The aim of the project is to conduct research into the digital communication processes that control traffic lights. IVU is developing solutions for vehicle-to-infrastructure communication in line with the latest ETSI ITS-G5 standard, which is already being used as a part of Cooperative Intelligent Transport Systems (C-ITS) and for car-to-X communication. Partners in this project include ÜSTRA, the Hanover Region and the University of Kassel.

In the past year, IVU invested €4.4 million in R&D. Most of IVU's research and development work is carried out within the regular product and release cycles. These development costs continue not to be capitalised.

Personnel

The positive development of the order situation is also reflected by the growing headcount at IVU. To handle the acquired projects, enhance the product range and provide customers with high-quality support, IVU needs well-trained software and project engineers with sector-specific specialist knowledge. Their qualifications and motivation form an important pillar for lasting success and further growth. Therefore, most IVU employees are graduates. In 2020, the proportion of academics was around 80%.

Despite the coronavirus, the labour market for IT specialists remained challenging last year. The fact that the required employees were still recruited testifies to IVU's good reputation as an employer and the working environment at the company. As at 31 December 2020, IVU had a total workforce of 735 employees, including part-time employees and students (2019: 655). The average personnel capacity increased by 15.3% to 572 FTE (2019: 496) and personnel expenses climbed 16.4% to €46.2 million (2019: €39.7 million). In general, IVU operates in a high-salary environment.

	2020	2019	Change
Number of employees as at 31 December	735	655	+12%
Average full-time equivalents (FTE)	572	496	+15%

Ongoing training

Only those who are constantly at the forefront of technical development are equipped to develop complex IT systems. For this reason, IVU provides its employees with ongoing further training opportunities. This is essential to the development of high-quality systems on which customers can rely. This has led to the development of an active knowledge culture within the company. One example of this is IVU's in-house Developer School, which took place in 2020 before the outbreak of the coronavirus pandemic. It gives software engineers at IVU the opportunity to engage collectively with their colleagues with regard to new technologies and further developments in their programming environments. A similar conference for IVU project engineers took place virtually in the autumn.

Growth at IVU brings with it an increasing demand for management personnel. IVU continued to run an internal management trainee programme to prepare suitable candidates for future management roles in 2020.

Recruitment measures

To attract specialists and graduates, IVU regularly attends careers fairs. Whereas there were 16 events on the calendar in 2019, only four virtual fairs took place last year on account of the coronavirus pandemic. Plans are to attend a similar number of careers fairs as in previous years again once the pandemic has subsided.

Cooperations with universities play a key role in recruitment. In this context, IVU's software engineers lend their expertise in projects or prepare seminars and lectures. As a result, students gain insight into the technical challenges in public transport and the day-to-day tasks at IVU. To this end, IVU also makes use of the good contacts with its research partners.

Qualification programme

Fast and extensive qualification of new employees is the main ingredient in the success of IVU projects. IVU operates a structured induction programme. In intensive training courses, the future software and project engineers at the German and international offices acquire the basic knowledge they need in order to perform their tasks successfully. The seminars cover topics such as the how public transport works, IVU products and the requirements for customer-oriented project management. This brings new employees up to speed more quickly and enables them to take on their own projects in a short time frame. A total of six virtual induction programmes took place for the various areas in 2020.

Diversity

IVU is characterised by an open corporate culture. The aim is for employees to feel at home in the company. Therefore, diversity is hugely important to IVU. People from a total of 38 nations work at the various locations. The proportion of women is 30%. It is therefore well above the proportion of female graduates in the relevant STEM subjects, which averages 20.8% (2019).

B. NON-FINANCIAL STATEMENT[1]

CSR Strategy

Basic information

Acting responsibly has always been part of IVU's identity: both with regards to its customers and employees and the community in which the company operates. Non-financial performance aspects – some of which have existed at the company in one form or another for many years – make a notable contribution to the company's long-term business success.

In 2018, assisted by an external consultant, IVU systematised the aspects stipulated by Section 289c(2) of the German Commercial Code in the areas of environmental, employee and social matters, observing human rights and combating corruption and bribery. Since then, IVU has reported annually on its non-financial activities for the respective financial year. This statement relates to the period from 1 January to 31 December 2020.

The non-financial statement provides a summary of IVU's non-financial concepts and processes. Please refer to the "Risks and opportunities" section for a presentation of the material risks that are associated with IVU's business activities and highly likely to have a serious negative impact on the legally defined non-financial topic areas. IVU's business model is outlined in the "Group fundamentals" section

Material stakeholders and topics

IVU has the following material stakeholders: customers, project partners, employees, applicants and investors. Other stakeholder groups include authorities, associations and the general public. In 2018, IVU also used a materiality matrix to define topics to be highlighted within the legally prescribed fields for the first time. Materiality is derived from the overlap between stakeholder expectations and the relevance of the topics for IVU; it is based on the company's own assessments and on regular feedback that IVU's managers receive from most of the stakeholders. The Executive Board reappraised the materiality matrix in 2020.

Material topics for IVU under environmental matters include "promoting environmentally friendly mobility", "assuming ecological responsibility", "cooperating with sustainable suppliers" and "conserving resources". Under employee matters, material topics mainly include "ensuring work-life balance", "preserving equal opportunities", and "offering employees opportunities for continued development". Topics that fall under social matters include "respecting customer concerns", "protecting human rights", "supporting local communities" and "combating corruption and bribery".

[1] Not examined by the auditor as regards content.

Responsibility of the CEO

For IVU, the company's responsibility in the various areas falls within the remit of the CEO. This reflects the great importance that IVU attaches to the topic. Furthermore, the CEO ensures that the topics are regularly the subject of Executive Board meetings and once annually at the three-day workshop attended by all company managers.

The CEO receives important stimuli for shaping the social responsibility at IVU from, among others, the Advisory Board at IVU, which is made up of respected managers and experts from the sector. Contacts into the transport industry as well as the participation in associations and committees also provide impulses. Moreover, the very open corporate culture allows important issues raised by employees to reach the managers and the Executive Board of the company quickly.

Environmental responsibility

Promoting environmentally friendly mobility

IVU products make an active contribution to climate protection. They promote the efficient deployment of public transport vehicles and contribute significantly to the reduction of greenhouse gas emissions that harm the climate. In addition, they increase the attractiveness of public transport and raise the share of traffic volume accounted for by environmentally friendly alternatives. During its meetings as well in discussions with key stakeholders, the Executive Board regularly assesses the extent to which IVU is meeting this requirement. A key performance indicator here is customer structure.

PUBLIC TRANSPORT

Public transport with buses and trains is one of the most environmentally friendly modes of transport, in terms of emissions of both greenhouse gases and pollutants – way ahead of private transport and air transport. Public transport use has been growing in Germany for many years. In 2019, the last full year before the outbreak of the pandemic, the members of the Association of German Transport Companies provided transport services equating to 137.3 billion passenger kilometres. Nearly 10.6 billion passengers travelled by bus and train, thereby saving around 10.7 million tonnes of carbon dioxide.[2]

IVU systems help transport companies in Germany, Europe and worldwide to keep public transport services running smoothly and efficiently and make them appeal to as many passengers as possible. At the same time, IVU.suite products help transport companies to reduce their climate emissions.

Product	Area	Environmental impact
IVU.run	Vehicle scheduling	Efficient schedules, reduction of non-revenue trips
IVU.duty	Duty scheduling	Balanced duty schedules
IVU.vehicle	Vehicle dispatch	Optimal allocation of energy-saving vehicles
IVU.crew	Personnel dispatch	Fair allocation of duties
IVU.pad	Personnel dispatch	Submission of duty requests, avoidance of journeys
IVU.fleet	Fleet management	Vehicle surveillance and traffic intervention
IVU.cockpit	Fleet management	Driver assistance with information about efficient driving
IVU.control	Evaluation	Performance analysis reveals potential for improvement

ELECTRIC MOBILITY

IVU.suite also contains numerous functions that have been specially designed for the deployment of electric buses. The system knows the properties of the vehicles, the charging options and the route situations, and assists with suitable suggestions. This helps to maximise the use of electric buses and deploy personnel optimally. There is a particular focus on integrated management: the system combines electric buses and those with combustion engines in a single user interface and enables joint planning, dispatch, fleet management and passenger information.

In the 2020 reporting year, IVU carried out several projects involving the planning and management of electric buses. In Wiesbaden, IVU is supplying the charge management solution for eCitaro buses from Daimler Buses. For the Dutch transport company Qbuzz, IVU implemented an integrated depot management system for more than 400 diesel and electric buses. At the start of the year, the Berlin transport operator BVG also ordered IVU optimisation tools to make the most efficient use of its growing fleet of electric buses. The system also takes into account factors such as the remaining range, recharge status and charging time required for

[2] Association of German Transport Companies, 2019 statistics, p. 16, p. 26–29

the electric buses and automatically factors in charging processes.

Assuming ecological responsibility

As a company whose products promote sustainability and resource efficiency, IVU strives to reduce the carbon footprint of both the company and its employees, including in its business operations.

REGULAR ENERGY AUDIT

As an eco-friendly company, IVU takes responsibility for its own greenhouse gas emissions. We undergo regular energy audits in line with DIN EN 16247-1 with the aim of minimising our energy consumption and therefore the greenhouse gas emissions generated by our own corporate activities. In this way, we strive to use electricity, gas and oil as frugally as possible.

ENERGY-EFFICIENT SERVERS

To operate our server infrastructure for our own as well as our customers' hosted systems, we also work with certified IT service providers. Our hosting provider implements extensive energy management systems at its data centres in order to reduce power consumption. The energy consumption of all facilities and systems is optimised. The servers are powered exclusively with electricity from renewable energy sources that are extracted without causing CO_2 emissions or radioactive waste.

REDUCTION IN BUSINESS TRAVEL

To limit the need for business travel, all branches are equipped with modern video conference systems that facilitate meetings involving different locations. Nevertheless, trips are still necessary to implement projects on location, conduct training and support customers. Air travel in particular is associated with serious consequences for the environment and climate due to the high CO_2 emissions. IVU began at the start of 2018 to offset the overall environmental impact of all business air travel by using the services of the non-profit organisation Atmosfair. With these payments, the organisation supports various climate protection projects in the fields of renewable energies and energy efficiency.

At the same time, IVU has successfully intensified its efforts to reduce the need for air travel. The figures for 2020 are not comparable with previous years' figures on account of the extensive travel restrictions during the coronavirus pandemic.

Cooperating with sustainable suppliers

As a software company, IVU does not manufacture any devices. Accordingly, IVU does not consume any raw materials for the production of hardware. When selecting suppliers, IVU takes care to ensure that they comply with the fundamental standards of resource-conserving production.

Devices that IVU sells under its own name, such as the on-board computers IVU.box and IVU.ticket.box, are manufactured at a partner company based in Germany. As a member of the German Electrical and Electronic Manufacturers' Association (ZVEI), the company makes a commitment to social responsibility and voluntarily adopts the association's Code of Conduct. The manufacturer of the IVU devices is also subject to the Restriction of Hazardous Substances Directive (RoHS), and within the meaning of Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) is classed as "downstream user". Its products do not release any chemicals under normal and reasonably foreseeable conditions.

Conserving resources

As a software company, the only area where IVU consumes a significant amount of resources is electricity. To limit IVU's consumption of resources, the Executive Board regularly assesses the resource management practices at the various locations.

ELECTRICITY

The most important energy source in the company in 2020 was electricity. At its development location in Berlin, IVU makes exclusive use of electricity generated from renewable energy sources. At the Aachen location, electricity is supplied by the landlord.

According to the latest energy audit, the main consumer in Berlin was lighting, with a share of around 57%. Workstations accounted for 29% of electricity consumption. The situation was different at the Aachen location. There, workstations were the main consumer, accounting for 60%. Lighting accounted for around 21% of energy consumption here.

Consumer I Location	Berlin	Aachen
Workstations	29.0%	60.0%
Lighting	56.8%	21.4%
Test laboratory	-	18.6%
Other	14.2%	-

To further reduce energy consumption at the locations, IVU is switching to light sources fitted with LEDs. Thanks to their very high efficiency and luminosity as well as their significantly longer service life compared with fluorescent tubes, this measure will have a lasting impact on the company's resource consumption. As a result, we expect to reduce our electricity consumption for lighting purposes by over 40% in the medium term.

RECYCLING

IVU also takes steps to ensure that it keeps the other environmental impacts of its operations as low as possible. Consumables such as plastic and cardboard packaging waste are separated on-site and recycled. At all its locations, IVU collects electrical waste such as screens, bulbs, headphones and other electrical and electronic small appliances into special waste containers that are then handed over to be recycled. IVU works with specialist service providers who dispose of the devices professionally and recover used PC hardware before passing it on to the second-hand market.

Responsibility for employees

Ensuring work-life balance

The well-being of employees is one of the most important factors for a healthy working environment. The special culture at IVU is based not least on the extensive freedoms and rights of its employees. It is a stated goal of the company management to maintain and strengthen these rights.

The Executive Board regularly conducts employee surveys to provide an indication of whether it is achieving this aim. A survey was performed in 2020 as well. In the "Great Place to Work" survey, IVU scores way above average across all the relevant assessment criteria – credibility, respect, fairness, pride, team spirit – and in doing so outperformed its own top scores from 2016. 95% of employees praise the friendly working environment, and over 90% enjoy coming to work. A whopping 96% appreciate the available opportunities to take time off.

FLEXIBLE WORKING TIME MODELS

Different situations in life cannot be forced into a standardised framework. This is why IVU offers its employees flexible working time models. The relevant provisions for the German IVU locations are documented in a central company agreement (GBV), which was jointly developed by the management and the general works council of IVU.

IVU champions remote working and requests to work part time and is open to finding appropriate solutions to suit individual circumstances. As at 31 December 2020, a total 131 employees worked part time (student assistants not included).

FREE TIME IS IMPORTANT

IVU values the free time of its employees. It allows them to recharge their batteries and reduce stress levels, and it promotes their creativity. This is particularly true for holidays as well. For this reason, IVU significantly exceeds the minimum legal requirement by granting all employees working a 5-day week a total of 30 holiday days per year. Since even 30 days of holidays are sometimes not enough for certain plans, IVU has also established a time-out model that allows employees to take up to three months off.

The same applies to mothers and fathers: They can also return to their workplace without difficulty after their parental leave. In addition, IVU supports families with a childcare allowance towards the cost of accommodation, care and meals for children below school age. Parents at IVU are also entitled to paid leave of absence of up to five days per year if they have to stay at home with a sick child.

HEALTH – A VALUABLE ASSET

IVU also guarantees the welfare of its employees in the workplace. An occupational safety commission meets four times during the year to discuss the latest developments in the area of health and safety at work. At an annual safety training course, employees learn everything they need to know about everyday work routines that promote a healthy lifestyle.

IVU also looks after the welfare of its employees in the workplace. An occupational safety commission meets four times during the year to discuss the latest developments in the area of health and safety at work. At an annual safety training course, employees learn everything they need to know about everyday work routines that promote a healthy lifestyle.

To promote the general health of its employees, IVU offers numerous health and fitness classes. An "active break" regularly takes place at the Berlin and Aachen locations, where a health instructor takes the participating employees through a series of movement and stretching exercises and gives them tips on personal fitness in the office. The active break continued to take place – as a video chat – during the lockdown.

As part of the company reintegration management, IVU supports employees who were unable to work for more than six weeks in a single year due to illness when they return to their workplace.

Preserving equal opportunities

IVU is an equal-opportunity employer. Employees of any gender, nationality or sexual orientation either with or without disabilities are not only welcome at IVU but enjoy the same opportunities to develop their career within the company. IVU is convinced that diversity fosters a productive and innovation-friendly working environment. Comparisons are made with the relevant STEM study area of information technology to provide a performance indicator for the proportion of women at the company, and the figure may not fall below this benchmark.

PROPORTION OF WOMEN

Compared with the proportion of female graduates in the STEM subject computer science relevant to IVU of 20.8% (in 2019), IVU employs an above-average number of women throughout the company: As at 31 December 2020, the proportion of women across all departments was 30%. Of the new hires at IVU in the past year, 35% were women.

IVU is working to increase the proportion of women in management as well. Women now account for a third of members on the Supervisory Board. The ratio on the Executive Board is currently 0%. The proportion of women executives in the first two management levels below the Executive Board is currently 15%. IVU is striving to increase their share and is therefore selectively encouraging qualified women to take on leadership roles.

The low numbers of women in mathematical and scientific professions often proves to be an obstacle to a higher proportion of women in the company. To encourage more women and girls to take an interest in careers in the STEM area over the long term, IVU participates each year in the nationwide Girls' Day. This programme gives young schoolgirls an initial insight into the world of work and the tasks in an IT company. We also enable girls who show an interest to complete prolonged pupil internships during which they can engage more intensively with individual tasks. Unfortunately, because of the coronavirus pandemic, the event did not take place in 2020.

NON-DISCRIMINATORY WORKING ENVIRONMENT

IVU is proud of its non-discriminatory working environment. IVU also presents itself as an open employer when recruiting staff. For this reason, we have long been cooperating with the Sticks & Stones recruiting fair, the largest event of its kind in Europe for lesbian, gay, bisexual, transsexual, transgender, intersexual and queer persons. This event as well, which would otherwise have been a fixed date in our calendar, did not take place in 2020.

Age structure (without students)	**31 Dec 2020**	31 Dec 2019
< 30	108	74
30-50	398	354
> 50	111	114
TOTAL	**617**	**542**

Offering employees opportunities for continued development

An innovation-centric technology company like IVU thrives on the professional expertise of its employees. It is vital to stay up to date with the latest technology and regularly learn about new technologies and processes – and not just in the development areas. IVU therefore offers its employees encouragement and helps them to further their own professional development. For this purpose, the company organises various programmes that meet the diverse training requirements of its employees. The key performance indicator for the Executive Board here is the Group-wide training ratio.

JUNIOR STAFF

In the context of employee development IVU already set up a dedicated trainee programme for managers several years ago. It uses targeted training courses to prepare prospective team leaders to take on management duties. Last year, a total of 5 women and 6 men took part in the programme.

TRAINING OPPORTUNITIES

Internal short training courses give employees an in-depth introduction to a specific subject area. The IVU training catalogue also includes numerous external training offerings, such as employee leadership for managers, an introduction to the rail system, which is offered in conjunction with TU Berlin, as well as training courses for developers and language courses.

Social responsibility

Respecting customer concerns

Customer satisfaction is right at the heart of IVU's business activities. It is a self-professed goal of management to work closely with customers and see projects safely through to the end. To ensure that it achieves this goal, IVU has a quality management system in accordance with ISO 9001, which sets out processes, result types and roles. In the reporting year, IVU also began to set up an information security management system in accordance with ISO 27001.

QUALITY MANAGEMENT

In its quality policy, IVU commits to upholding reputable and binding business practices at all times. IVU quality management revolves around core process descriptions for sales, development, project and supplier. Additional descriptions cover product management, quote generation, human resources, IT services and result types. This is how IVU ensures that internal processes follow clear guidelines and that customers can rely on standardised processes. The quality management system in accordance with ISO 9001 is audited once a year by an external certification body.

CUSTOMER SATISFACTION

IVU regularly conducts customer surveys to measure customer satisfaction. In the survey, IVU asks customers about their experience of working with IVU, about the quality of their products and services, and about their satisfaction with IVU support. Customers also have the option of suggesting areas for improvement. The survey results are evaluated and incorporated into the work of development, project areas and support.

Regular collaboration in user groups is another means of generating inspiration for product features in particular. IVU system users are given the chance to talk to each other and to IVU developers and make an active contribution to the development of IVU products. In addition to discussing the particular operational features, one specific aim is to identify future requirements at an early stage and prepare the system for forthcoming challenges.

Protecting human rights

In the context of the business activities of IVU, the adherence to human rights is our top priority. This applies in equal measure to our own projects as well as to products manufactured or supplied on behalf of IVU. The Executive Board is responsible for ensuring that the company observes and respects human rights. When selecting project partners, IVU takes care to ensure that the principles of human rights are upheld.

Supporting local communities

IVU sees itself as an active part of society. Our stated aim is to bring the local community forward and work towards the sustainable cohabitation of humankind. This is expressed in particular through IVU's products, which enable transport companies around the world to deliver straightforward and resource-conserving mobility. In the local and regional community, IVU is an active member of the association Förderverein des Chores Berliner Bach Akademie e.V.

SHAREHOLDER PARTICIPATION

As a listed company, IVU also contributes through its business activities to the growth in society's prosperity. In this capacity, it must automatically navigate and balance the conflicting priorities of its key stakeholders: customers, employees, shareholders, suppliers and distributors. The Executive Board manages IVU in way that gives appropriate consideration to all interests, ensures that all laws and regulations are adhered to while at the same time respecting and maintaining the unique corporate culture and associated values.

To enable shareholders to participate in the company's business performance, IVU strives to maintain a sustainable dividend policy, insofar as the financial situation permits. For the 2020 financial year, the Supervisory Board and the Executive Board propose a dividend of €0.20 per share.

TAXES

IVU believes that it has a responsibility to its shareholders to limit taxes and expenses to the legally required level. At the same time, IVU is aware of its social responsibility and, by paying taxes, plays its part in funding the community as well as maintaining and expanding infrastructure.

Through IVU AG's presence and tax contributions, we are making a commitment to the German location and to the branches in Aachen and Berlin in particular. This sense of responsibility prompts us to follow a conservative tax strategy. The selection of international locations is determined by business considerations and not with a view to tax optimisation. On the contrary, these locations are necessary for our operational business activities in the countries in question. We take our responsibility seriously here, too, by complying with local tax regulations and paying the relevant taxes.

IVU does not operate aggressive tax structures to avoid paying taxes. However, we do consider tax factors when making key business decisions to take account of their impact on the budget in a reliable manner.

Our aim is to hold a proactive, transparent, professional, polite and expedient dialogue at all times with tax authorities at home and abroad and maintain a good working relationship with these authorities.

Combating corruption and bribery

EXERTING POLITICAL INFLUENCE

IVU does not actively exert political influence. Members of the Executive Board occasionally take part in political delegations to represent the business locations Germany and the Land of Berlin overseas. They do not exert any influence in this capacity. No member of the Executive Board took part in a delegation during the reporting year.

IVU is also represented in a range of national and international associations that promote public transport and information technology both politically and socially. A list of memberships can be found on the IVU website at www.ivu.com/company.

CONDUCT IN LINE WITH REGULATIONS AND STANDARDS

IVU uses work and procedural instructions, among other methods, to ensure that employees comply with the regulations and standards. To this end, the Executive Board and Supervisory Board of IVU submitted the compliance declaration regarding the adherence to the German Corporate Governance Code on 24 February 2021.

In fact, all relevant corporate processes at IVU are defined and are documented. Important functions such as quotation management, purchasing and accounting are centralized in Berlin for all subsidiaries. This guarantees that these processes are highly transparent.

In accordance with the European General Data Protection Regulation (GDPR), which came into force on 25 May 2016 and must be applied since 25 May 2018, IVU has implemented numerous technical and organisational measures to protect personal data in a standardised manner for the entire company. IVU has compiled comprehensive documentation for this purpose. IVU requires its data-processing service providers to adhere to the regulatory and company requirements for the protection of personal data. IVU has appointed its employee Joachim Nottebaum as Data Protection Officer. He can be contacted at the e-mail address datenschutzbeauftragter@ivu.de and is available as a contact person for all persons within and outside the company who may have questions and suggestions relating to data protection.

C. ECONOMIC REPORT

Industry-related conditions

IVU operates in an overall dynamic, fast-growing market environment dominated by the three megatrends of urbanisation, mobility and digitalisation. While the coronavirus pandemic has directly affected public transport in a large number of countries, no reliable claims can be made at present as to the effects on long-term mobility trends.

Provided the trends of previous years continue once the pandemic has abated, cities worldwide face the challenge of efficiently managing the growing mobility requirements of an ever-growing number of people. Car traffic would steadily decline. According to a study by the Kantar market research institute from 2019, by 2030 only around 46% of all journeys within cities would be made by car, while around 49% of journeys would be made by public transport, bicycle or on foot.[3] Digitalisation enables transport operators and local authorities to meet this high demand and improve their services.

As rail traffic has steadily increased in the past, so too has investment in railways. The World Rail Market Study 2020–2025 by UNIFE, the Association of the European Rail Industry, projects that the railway market will continue to grow in the medium and long term in spite of the coronavirus pandemic. It also anticipates that the demand for rail traffic control systems – a category that IVU solutions also fall under – will grow by 2.7% every

[3] Kantar, Mobility Futures, 22 October 2019.

year. Between 2023 and 2025, the market volume will be around €19.7 billion a year.[4]

IVU also benefits from this. Demand for IVU.rail, our software solution developed especially for railways, remains strong, with ten installations completed or commissioned with European state railways. Last year, Slovenian Railways SŽ, amongst others, opted for the IVU platform to digitalise their use of resources. IVU.rail uses sophisticated mathematical algorithms for optimising the highly complex timetabling of trains, thus helping railway companies to save valuable resources.

IVU is also the market leader in the German railway market with its standard solution. According to the Competitor Report Railways 2019/20 by mofair e.V., the alliance for fair competition in rail passenger transport, the four largest regional railway companies DB Regio, Transdev, Netinera and Abellio have a market share of around 82%. They all rely on IVU.rail for the planning and dispatching of vehicles and personnel. They are joined by IVU's customers HLB, AVG, National Express and SWEG, who also serve more than 6% of the German volume of regional public transport traffic.[5]

IVU has traditionally enjoyed great success in Europe, particularly in the German-speaking region. The company is able to build on its high level of recognition and strong networks here. The positive development of public transport also benefits IVU. According to the industry associations, the number of passengers in Germany alone has risen continuously in the past. For example, the Association of German Transport Companies (VDV) counted more than 10.413 billion passengers for 2019.[6]

The coronavirus pandemic has halted this trend. Due to the official restrictions and changes in residents' behaviour, German transport companies reported declines in passenger numbers as high as 80%. Against an almost unchanged supply, this meant that transport operators and railway companies saw a total loss of revenue of around €3.5 billion. The German federal government granted the public transport sector financial aid of up to €5 billion to help stem these losses. The Association of German Transport Companies (VDV) is expecting further loss of revenue totalling as much as €3.5 billion in 2021.[7]

So far, this development has not had an impact on investment in public transport. Last year, for example, the federal states had around €8.9 billion in regionalisation funds at their disposal to finance local public transport and regional passenger transport.[8] The Federal Ministry for the Environment also continued its funding scheme for the acquisition of electric buses for public transport, which is due to run until 2022 and has a volume of around €300 million.[9] The VDV also announced investment in model projects for further digitalisation of public transport of roughly €250 million over the next four years.[10]

Public transport generally has popular sentiment on its side, with the European Parliament and European Council, for example, declaring 2021 the European Year of Rail.[11] In December 2020, the European Commission also presented its "Sustainable and Smart Mobility Strategy"[12] within the framework of the "European Green Deal".[13] The Commission's aim is to make the EU climate neutral by 2050. Transport has an instrumental role to play in this, and the Commission intends to make it multimodal going forward. In order to achieve this, one of the aims is to continue driving forward digitalisation in the transport sector, which means that systems like those offered by IVU will be essential.

Earnings, finances and assets

Record earnings in 2020

After posting EBIT of €12.8 million (2019: €10.5 million) on revenue of €92.0 million (2019: €88.8 million), IVU remains on its successful path. The key performance

[4] UNIFE, World Rail Market Study 2020-2025, 1 October 2020, p. 5, 103.

[5] mofair e.V., Wettbewerber-Report 2019/20, 22 October 2019.

[6] Verband Deutscher Verkehrsunternehmen, ÖPNV-Bilanz 2019, 28 January 2020.

[7] Verband Deutscher Verkehrsunternehmen, ÖPNV-Bilanz 2020, 4 February 2021.

[8] Bundesregierung, Mehr Mittel für attraktiven Nahverkehr, https://www.bundesregierung.de/breg-de/aktuelles/regionalisierungsmittel-1688876, 18 March 2020.

[9] BMU, Richtlinien zur Förderung der Anschaffung von Elektrobussen im öffentlichen Personennahverkehr, 5 March 2018

[10] Verband Deutscher Verkehrsunternehmen, Erster Digitalgipfel, 9 February 2021

[11] Decision (EU) 2020/2228 of the European Parliament and of the Council of 23 December 2020.

[12] European Commission, Sustainable and Smart Mobility Strategy COM(2020) 789 final, 9 December 2020.

[13] European Commission, The European Green Deal, COM(2019) 640 final, 11 December 2019.

indicator of EBIT/gross profit increased to 18.2% in the reporting year (2019: 16.9%).

Revenue is increasing

IVU continued the growth trend of recent years in the 2020 fiscal year. Revenue rose by 3.7% to €92.0 million (2019: €88.8 million). The forecast of over €90 million was exceeded. In addition to proceeds from license sales, recurring revenue[14] from the maintenance and hosting business contributed to growth, which increased by €4.0 million and thus accounted for 34% of total revenues.

Revenue breakdown

In 2020, 49% of revenue was generated on the German market and 51% from export business. Revenue on the German market increased to €45.4 million (2019: €43.7 million), while international revenue rose to €46.6 million (2019: €45.1 million).

Other operating income

The increase in other operating income in 2020 to €6.1 million (2019: €0.4 million) is mainly due to the income of €5.3 million from the sale of IVU.elect GmbH.

Rise in gross profit

The gross profit rose by 13.3% to €70.4 million (2019: €62.1 million). The gross profit forecast for 2020 of at least €65 million was clearly exceeded, primarily due to the sale of IVU.elect GmbH.

Personnel expenses, depreciation and other expenses

Personnel expenses rose by 16.4% to €46.2 million in 2020 (2019: €39.7 million). This increase is largely due to the 15.3% rise in personnel capacity (FTE). Due to the shortage of skilled workers in the competitive IT sector, IVU generally has a high salary level. This applies both to new hires and existing employment relationships, whose salaries are brought into line with normal market levels.

Depreciation on non-current assets increased proportional to growth to €2.5 million (2019: €2.2 million).

Other operating expenses fell slightly to €8.9 million in 2020 (2019: €9.7 million) due to reduced travel expenses and lower additions to provisions.

Tax expense

The tax expense of €2.1 million mainly results from the actual tax expense for 2020 of €1.9 million (2019: €1.3 million).

Finances and assets

Equity rose by €6.0 million to €62.8 million in the reporting year (2019: €56.8 million). At 50.1%, the equity ratio in 2020 was slightly down on the previous year (2019: 54.0%). The company's net assets are stable, and its financial strength remains very good.

At €20.4 million, trade receivables are €9.8 million below the previous year's value (2019: €30.1 million). Other current assets increased by €25.6 million to €30.3 million (2019: €4.7 million), mainly due to cash investments.

Contract assets were reduced to €12.7 million (2019: €14.8 million) and remain at a low level. Contract liabilities increased to €20.4 million (2019: €9.1 million) due to high project prepayments.

Liquidity

At €30.8 million (2019: €12.5 million), operating cash flow was significantly above the previous year's level. In addition to the good operating result of IVU, high project prepayments for major projects are decisive for this. Taking into account the cash flow for investment activities of €-22.6 million and financing activities of €-6.3 million, cash and cash equivalent increased by €1.8 million. The cash flow for investing activities includes cash investments of €25.0 million. Cash flow from financing activities includes the dividend payment to shareholders of €-2.8 million.

With €31.1 million in cash and cash equivalents as at 31 December 2020 (2019: €29.3 million), IVU's financial position can be rated very good.

IVU was able to meet its financial obligations at all times in the reporting year. IVU's clients have a very positive assessment of its creditworthiness.

[14] Revenue from long-term maintenance and hosting contracts with customers.

Summary

IVU had a successful year in 2020, characterised by pleasing growth in revenue, gross profit and operating profit (EBIT) despite the corona pandemic. For 2021, we expect the continuation of the profitable growth course and are looking to the future with confidence thanks to the good order situation and promising sales opportunities.

D. FORECAST, RISK AND OPPORTUNITY REPORT

Order situation

A large portion of IVU's targets are already covered with an order backlog of over €80 million for the current financial year as at 28 February 2021. The focus is now on completing the orders. We do not anticipate any significant difficulties in completing the orders as a result of the coronavirus pandemic.

Outlook

IVU is well and robustly positioned, both technically and financially, with high liquidity, a good order backlog and rising recurring revenue.

We expect the positive business development to continue. For 2021, we expect consolidated revenue of over €100 million (actual 2020: €92.0 million), a gross profit of approximately €75 million (actual 2020: €70.4 million) and an operating result (EBIT) of over €13 million.

We do not anticipate any significant effects on IVU resulting from the coronavirus pandemic. This is mainly due to the structure of IVU's business, which focuses on the development and sale of primarily digital products. As in every year, revenue is also influenced by project-related hardware deliveries, which may be deferred in terms of annual cut-offs.

Risk management

To secure the long-term success of the company, we must identify and manage all types of risks. Our risk management aims to identify, analyse and manage risk at an early stage. The internal control system is embedded in the risk management system. Management uses deviation analyses as an instrument for corporate control.

The Executive Board assumes overall responsibility for internal controlling and risk management systems with regard to the accounting processes at the company. This includes all factors that can significantly influence the accounting and overall assessment of the financial statements, including the management report.

Risk management is based on the monthly reporting system, which contains important key performance indicators and compares planned figures with the actual figures. The subsidiaries are included in the reporting system. Regular meetings held with those responsible for revenue, cost and deadline development ensure that the Executive Board is provided with timely information about critical developments and that corrective measures can be initiated if required. To ensure that available liquidity and credit lines are adequate, liquidity is planned on a rolling basis and developments in cash and cash equivalents are monitored on a daily basis.

Risk management is a fixed item on the agenda at every meeting of the Supervisory Board and is discussed in detail at each of its meetings. The relevant risks are assessed based on the extent of possible damages and the probability of occurrence. The company has identified the following significant risks and classified them as low, medium or high based on its assessment of their estimated probability of occurrence and the extent of possible damages.

Risks

Export business

The opportunities presented by internationalisation have to be balanced against the costs of accessing new markets, which always represent an upfront investment in uncertain successes. In addition, IVU is subject to the general political and economic conditions of the countries in which it operates. This naturally brings with it risks that range from project delays to project cancellation and non-payment. Our assessment of the probability of occurrence and the extent of possible damages remains medium. To limit these types of risks, we try to minimise the costs of accessing new markets by adopting a strategic focus on more promising countries in target markets. To avoid the risk of non-payment, we use a range of instruments for securing payment, such as letters of credit, advance payments or payments on account.

Defaults

Defaults are a potential risk in all large and, in particular, international projects as experience shows that political and economic conditions can change quickly. In particular, changes in decision makers can have an impact on payment deadlines. The economic consequences of the coronavirus pandemic could also lead to payment defaults, especially among smaller customers. The probability of occurrence and the extent of damages remain unchanged at high and medium respectively. Measures to counter these risks include delivery-oriented payment plans and efficient project management. In addition, the payment practices of our customers can generally be considered good as the majority of them are from the public sector.

Project business

The project business at IVU is based entirely on service contracts that are based on the standard products of IVU.suite. This naturally brings with it the risk that the workload involved turns out to be more than was planned. Any resulting delivery delays may lead to claims being made for compensation. Our assessment of the probability of occurrence and the extent of possible damages remains medium. Measures to reduce these risks are efficient project management as well as adherence to deadlines and quality standards.

Quality deficits

In the event of deficiencies in the software or hardware supplied, this can delay the acceptance and, consequently, the payment of invoices. The probability of occurrence and the extent of damages both remain unchanged at medium. One measure to counter this risk is consistent quality management in accordance with ISO 9001. In addition, the steadily increasing degree of standardisation of IVU systems reduces the risk of quality deficits because only customer-specific adaptations rather than special developments are required and all products can be subjected to intensive testing.

Currency risks

Since IVU conducts a part of its business outside the euro zone, exchange rate fluctuations may have an impact on results. Foreign currency risks apply to receivables, liabilities, cash in hand and cash equivalents that do not correspond to the functional currency used by IVU. The probability of occurrence and the extent of potential damages remain unchanged at high and low respectively. As a hedge for cash flows in foreign currency, IVU concludes currency forward transactions as needed and where such transactions make economic sense. Here, the anticipated inflows and outflows are estimated on the basis of contracts concluded and payment agreements made. Currently, no accounting units have been established for showing hedging relationships. On the balance sheet date, there were no open currency forward transactions.

Personnel

A specialised software company such as IVU derives its strength on the market from the ability of its highly qualified specialists and managers to carry out demanding projects and meet special customer requirements. There are risks associated with the need to recruit specialists due to the growth in our business and with the potential loss of expertise. Our evaluation of the probability of occurrence is still medium with the extent of damage still at medium. Measures to reduce these risks include a long-term human resources policy to ensure low rates of staff turnover and a corporate culture based on openness and trust, which promotes a high level of staff loyalty, as well as a policy of actively recruiting highly qualified employees.

Coronavirus pandemic

The coronavirus pandemic has so far had only a minor impact on IVU's business. Due to the basic structure of IVU's business, which consists primarily of the development, sale and maintenance of digital products, and a high proportion of revenues in the domestic markets, we continue to assume that the overall risk is low.

Overall risk assessment

We are still assuming low risk overall.

Opportunities

The marketing strategy adopted by IVU aims to further expand the company's position in the domestic market and to systematically exploit the opportunities presented by internationalisation. As one of the few system manufacturers worldwide, IVU offers IT solutions for all processes at a transport company – from planning to operations and through to settlement. With our products for public transport, which are bundled in the IVU.suite, we are one of only a few providers of comprehensive, integrated solutions.

In particular, our business on the domestic market and in small and medium-sized projects is stable and therefore easily predictable. Conversely, it is difficult to plan the placement of orders and the progress of major projects. In this context, individual projects can have a major impact on IVU's result.

Overall, the opportunities for IVU are assessed as very good. We are profiting from the sustained trends towards urbanisation, digitalisation and mobility as well as the growing demands on climate protection, which are forcing cities and transport operators to invest increasingly in the expansion and modernisation of their systems. As a result of successfully implemented projects, IVU has become a sought-after project partner. We will capitalise on our strong reputation and will further expand our market position through targeted marketing activities in our chosen markets.

E. **SUPPLEMENTARY INFORMATION**

Supplementary information as per Sections 315a (1) and (2) and 315 (4) of the German Commercial Code (HGB)

The Executive Board of IVU AG received remuneration of €1,817 thousand (2019: €1,643 thousand) for the 2020 financial year. The remuneration of the Executive Board comprises a fixed (€749 thousand) and a variable portion (€1,068 thousand). The variable portion amounted to 59% (2019: 58%) of total remuneration in the year under review.

On 25 May 2016, the Annual General Meeting resolved to exempt the company from the duty to disclose the remuneration of individual members of the Executive Board for the financial years 2016 to 2020 inclusive.

Under the long-term incentive plan initiated by the company, the members of the Executive Board receive shares in the company as a further variable remuneration component in addition to an annual bonus (short-term variable remuneration component). The future transfer of the shares is dependent on the positive development of the IVU share price, taking into account the performance of the TecDAX stock market index. The term of the programme will end on 31 December 2022. The physical delivery of the shares would then have to be fulfilled by IVU in the first quarter of 2023. In accordance with the principle of sustainable remuneration, the right to transfer and the number of shares actually transferred to the Executive Board depends on the economic development of the company. A maximum total of 180,000 shares can be granted, the minimum number is 0. The fair value of the share programme was determined at the grant date to be €1,216 thousand. In determining the fair value of the share-based payment plans, a share price of IVU of € 9.86, an index value of 2,873 points – in each case on the day of the grant –, a term of 3.6 years, standard deviations of the yields of 19% (index) and 35% (share price) and a risk-free interest rate of -0.62% were used. In addition to the remuneration information mentioned above, personnel expenses of €339 thousand (2019: €198 thousand) were taken into account as a variable remuneration component for the long-term incentive plan for the members of the Executive Board during the fiscal year. In the following years until the end of the term of the programme, €339 thousand will be recognised annually in personnel expenses and transferred to the capital reserve.

The remuneration of the Supervisory Board does not contain a performance-related component and consists of fixed basic remuneration. No attendance fee is agreed.

The company's share capital of €17,719,160 is divided into 17,719,160 shares with a notional value of €1 each. By way of resolution of the Annual General Meeting on 25 May 2016, the Executive Board was authorised, with the approval of the Supervisory Board, to increase the company's share capital on one or several occasions by up to 30% of the current share capital of €17,719,160, i.e. by €5,315,748, by issuing new no-par value bearer shares against cash or non-cash contributions by 24 May 2021. The Executive Board can make use of this authorisation for any legally permissible purpose. In 2020, the Executive Board did not make use of this authorisation.

Furthermore, by way of resolution of the Annual General Meeting on 29 May 2019, the Executive Board was authorised to acquire shares in the company for any purpose permitted under Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) in the context of the statutory restrictions and in line with the following provisions by 28 May 2024. The authorisation is restricted to the acquisition of shares with a proportional amount of the share capital of €1,771,916, i.e. 10% of the share capital of €17,719,160.

Based on this resolution, the Executive Board approved buyback programs for treasury shares in the 2020 financial year on 28 January, 9 March and 16 March. The purpose of the three buyback programs was particularly to use the shares to service Executive Board remuneration and employee participation programs. A total of 174,934 shares were repurchased at a total price of €1,965 thousand. This corresponds to 0.99% of the no-par value shares in the share capital of IVU Traffic Technologies AG. The shares were acquired exclusively via the stock exchange by a bank commissioned by the company (XETRA trading). Detailed information is available on the company's website, www.ivu.de, under Investor Relations/Share.

From the shares acquired, a total of 12,995 no-par value shares were issued for all IVU employees in Germany in the 2020 financial year at an issue price of €12.36 each. The members of the Executive Board received 19,865 shares as part of their variable remuneration at an issue price of €12.39 each. The number of shares issued corresponds to 0.19% of the no-par value shares in the share capital of IVU Traffic Technologies AG.

There are no restrictions with regard to voting rights or transfer. The Executive Board is not aware of any agreements of this kind between individual shareholders. Furthermore, no material agreements have been made that contain regulations for a change of control as a result of a takeover bid.

According to Article 7 of the company statutes, the Supervisory Board appoints the Executive Board members and determines the number thereof. Further details on appointment and dismissal are governed by Sections 84 et seq. AktG.

According to Article 17 of the company statutes, the Supervisory Board is authorised to make changes to the company statutes that relate solely to the wording. Otherwise, the company statutes are adopted as per Section 179 AktG by the Annual General Meeting by a majority of at least three quarters of the share capital represented at the time of voting on the resolution.

Declaration on Corporate Governance as per Section 315d of the German Commercial Code (HGB)[15]

The company has published the corporate governance declaration, which is part of the Group management report, on its website, www.ivu.com. The corporate governance declaration comprises the declaration pursuant to Section 161 AktG regarding compliance with the German Corporate Governance Code.

Responsibility statement in accordance with Section 315 (1) Sentence 5 of the German Commercial Code (HGB)[15]

We represent that, to the best of our knowledge and in accordance with applicable accounting principles, the consolidated financial statements present a true and fair view of the Group's net assets, financial situation and results of operation, and that the Group management report describes fairly, in all material respects, the Group's business trend and performance, the Group's position and the significant risks and opportunities of the Group's expected future development.

Berlin, 24 March 2021

The Executive Board

Martin Müller-Elschner

Matthias Rust

Leon Struijk

[15] Not examined by the auditor as regards content.

CONSOLIDATED FINANCIAL STATEMENTS


Helaba

Consolidated Balance Sheet as at 31 December 2020

ASSETS	Notes	31 Dec 2020 € thou.	31 Dec 2019 € thou.
A. Current assets			
1. Cash and cash equivalents	(120)	31,096	29,254
2. Current trade receivables	(112) - (115)	20,351	30,111
3. Current receivables from joint ventures	(107) - (110)	22	295
4. Current contract assets	(116) - (118)	12,684	14,756
5. Inventories	(111)	3,756	2,692
6. Other current assets	(119)	30,313	4,676
Current assets, total		**98,222**	**81,784**
B. Non-current assets			
1. Tangible fixed assets	(103)	1,521	1,237
2. Intangible assets	(103) - (105)	11,607	11,480
3. Financial assets	(107) - (110)	385	0
4. Rights of use	(74) - (80)	10,174	7,198
5. Deferred taxes	(148) - (152)	3,440	3,553
Non-current assets, total		**27,127**	**23,468**
ASSETS, TOTAL		**125,349**	**105,252**

LIABILITIES	Notes	**31 Dec 2020** € thou.	31 Dec 2019 € thou.
A. Current liabilities			
1. Current trade accounts payable		4,730	7,567
2. Contractual liabilities	(116) - (118)	20,427	9,129
3. Current leasing liabilities	(72) - (80)	1,493	1,206
4. Provisions	(144) - (145)	7,740	6,044
5. Provisions for taxes	(148) - (152)	857	329
6. Other current liabilities	(146) - (147)	13,138	12,897
Current liabilities, total		**48,385**	**37,172**
B. Non-current liabilities			
1. Leasing liabilities	(72) - (80)	8,882	6,102
2. Deferred taxes	(148) - (152)	32	15
3. Provisions for pensions	(128) - (139)	5,252	5,160
Non-current assets, total		**14,166**	**11,277**
A. Equity			
1. Share capital	(122) - (127)	17,719	17,719
2. Additional paid-in capital	(55) - (58), (62)	581	198
3. Revenue reserve	(55) - (56)	47,377	40,098
4. Other reserve	(57)	-1,277	-1,212
5. Own shares	(124) - (127)	-1,602	0
Equity, total		**62,798**	**56,803**
LIABILITIES, TOTAL		**125,349**	**105,252**

Consolidated income statement for the 2020 financial year

	Notes	2020 € thou.	2019 € thou.
Revenue	(155)	**92,031**	**88,787**
Other operating income	(156)	6,103	380
Cost of materials	(157)	-27,772	-27,039
Gross profit		**70,362**	**62,128**
Personnel expenses	(158)	-46,204	-39,712
Depreciation on non-current assets	(159)	-2,528	-2,245
Other operating expenses	(160)	-8,854	-9,690
Earnings beofre interest and taxes (EBIT)		**12,776**	**10,481**
Financial income		53	2
Financial expenses		-271	-278
Result from investments accounted for using the equity method	(107) - (110)	-369	-119
Earnings before taxes (EBT)		**12,189**	**10,086**
Actual income taxes	(148) - (152)	-1,889	-1,278
Deferred taxes	(148) - (152)	-208	1,772
CONSOLIDATED NET RESULT		**10,092**	**10,580**

Total shares (in thousands)	(161) - (162)	17,719	17,719
Earnings per share (diluted)	(161) - (162)	0.57	0.60
Weighted average shares outstanding (in thousands)	(161) - (162)	17,597	17,719
Earnings per share (basic)	(161) - (162)	0.57	0.60

Consolidated statement of comprehensive income for the 2020 financial year

	2020 € thou.	2019 € thou.
Consolidated net result	**10,092**	**10,580**
Currency translation	9	7
Other comprehensive income to be reclassified to the consolidated income statement in subsequent periods	**9**	**7**
Actuarial gains / losses from the valuation of pension commitments	-108	-339
Income tax effect	34	105
Other comprehensive income not reclassified to the consolidated income statement in subsequent periods	**-74**	**-234**
Other comprehensive income after taxes	**-65**	**-227**
CONSOLIDATED COMPREHENSIVE INCOME AFTER TAXES	**10,027**	**10,353**

Consolidated statement of changes in equity for the financial years 2020 and 2019

	SHARE CAPITAL € thou.	CAPITAL RESERVE € thou.	RETAINED EARNINGS € thou.	OTHER RESERVES € thou.	FOREIGN CURRENCY ADJUSTMENT ITEM (OTHER RESERVES) € thou.	OWN SHARE AT ACQUISITION COST € thou.	TOTAL € thou.
Notes	(121) - (127)	(55) - (58), (62)	(55) - (56)	(57)	(57)	(124) - (127)	
As at 1 January 2019	**17,719**	**0**	**31,644**	**-1,014**	**29**	**0**	**48,378**
Consolidated net income 2019	0	0	10,580	0	0	0	10,580
Other comprehensive income after taxes	0	0	0	-234	7	0	-227
Consolidated recognised results after tax	**0**	**0**	**10,580**	**-234**	**7**	**0**	**10,353**
Addition to share-based Executive Board remuneration	0	198	0	0	0	0	198
Dividend distribution (€0.12 per share)	0	0	-2,126	0	0	0	-2,126
AS AT 31 DECEMBER 2019	17,719	198	40,098	-1,248	36	0	56,803
As at 1 January 2020	**17,719**	**198**	**40,098**	**-1,248**	**36**	**0**	**56,803**
Consolidated net income 2020	0	0	10,092	0	0	0	10,092
Other comprehensive income after taxes	0	0	0	-74	9	0	-65
Consolidated recognised results after tax	**0**	**0**	**10,092**	**-74**	**9**	**0**	**10,027**
Acquisition of own shares	0	0	0	0	0	-1,965	-1,965
Issue of own shares	0	44	0	0	0	363	407
Addition to share-based Executive Board remuneration	0	339	0	0	0	0	339
Dividend distribution (€0.16 per share)	0	0	-2,813	0	0	0	-2,813
AS AT 31 DECEMBER 2020	**17,719**	**581**	**47,377**	**-1,322**	**45**	**-1,602**	**62,798**

Consolidated statement of cash flows for the 2020 financial year

	Notes	2020 € thou.	2019 € thou.
Consolidated earnings before income taxes for the period		12,189	10,086
Depreciation of fixed assets	(159)	2,528	2,245
Change in provisions	(144) - (145)	1,480	4,826
Net interest income		218	276
Equity-settled share-based payment	(62)	339	198
Non-cash expenses / income from right of use and leasing liabilities	(72) - (80)	91	110
Other non-cash expenses / income		10	7
Share of profit of joint ventures	(110)	369	119
Result from the disposal of consolidated subsidiaries	(106)	-5,330	0
		11,894	**17,867**
Changes in current assets and liabilities		0	0
Inventories		-1,064	-546
Receivables and other assets		11,707	-7,881
Liabilities (excluding provisions)		9,653	6,345
		32,190	**15,785**
Interest paid		-144	-232
Income taxes paid		-1,284	-3,009
Cash flow from operating activities		**30,762**	**12,544**
Payments made for investments in fixed assets		-1,480	-1,053
Payments for the acquisition of shares in associated companies	(109)	-754	-119
Payments for monetary investments	(163)	-25,000	0
Proceeds from disposals of consolidated subsidiaries	(106)	4,583	0
Interest received		53	2
Cash flow from investing activities		**-22,598**	**-1,170**
Acquisition of own shares	(124) - (127)	-1,965	0
Payments for the repayment of leasing liabilities	(72) - (80)	-1,544	-1,292
Payment of dividends		-2,813	-2,126
Cash flow from financing activities		**-6,322**	**-3,418**
Cash and cash equivalents at the beginning of the period		29,254	21,298
Net change in cash and cash equivalents		1,842	7,956
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	**(120)**	**31,096**	**29,254**

+ = cash inflow / - = cash outflow

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Notes to the consolidated financial statements as at 31 December 2020

A. GENERAL INFORMATION ON THE COMPANY

1 The parent company of the IVU Group is IVU Traffic Technologies AG (IVU AG), based at Bundesallee 88, 12161 Berlin, Germany. It was founded on 4 August 1998 and is entered in the commercial register of the Berlin-Charlottenburg Local Court under HRB 69310.

2 The Executive Board adopted the consolidated financial statements as at 31 December 2020 and the Group management report for the 2020 financial year on 24 March 2021 and then submitted them to the Supervisory Board for approval. The Supervisory Board approved them at its meeting on 24 March 2021.

3 The business activities of the Group comprise the development, manufacture, marketing and operations of soft- and hardware systems for planning, organisation and information processing for public administrations, transport companies and other public and private sector operators. Services such as training and consulting are offered for IVU products. The expansion of the cloud business is also being driven forward. This includes research and the formulation of expert reports. The average number of employees in the Group was 702 in 2020 (2019: 610).

4 The main customers of the Group are operators of public transport in Germany, Europe and selected countries in the world. The IVU Group is represented at locations in Berlin (headquarters), Aachen (Germany), Olten (Switzerland), Vienna (Austria), Veenendaal (Netherlands), Paris (France) Rome (Italy), Birmingham (UK), Budapest (Hungary), San Francisco (United Sates), Santiago (Chile) and Hanoi (Vietnam).

5 The company is listed in the Prime Standard (Deutsche Börse AG) on the Frankfurt stock exchange.

B. ACCOUNTING POLICIES

Basis of preparation

6 The consolidated financial statements of IVU AG were prepared in accordance with the International Financial Reporting Standards (IFRS) as applicable in the EU and the applicable regulations of section 315e (1) of the Handelsgesetzbuch (HGB – German Commercial Code). The consolidated financial statements were prepared in euro. Unless stated otherwise, all amounts are in thousands of euro.

7 The consolidated financial statements of IVU AG were prepared on the basis of the historical cost principle.

Changes in accounting policies

8 There were no amendments to accounting standards or interpretations to be taken into account that have a material impact on the presentation of the consolidated financial statements for the financial year. The Group has not applied any standards, interpretations or amendments that have been published but have not yet come into effect prematurely.

Effects of new accounting standards

9 On 23 January 2020 the IASB published the amendment to IAS 1 'Classification of liabilities as current or non-current'. The purpose of the amendments to IAS 1 is to clarify that the classification of liabilities as current or non-current is to be based on existing rights of the company on the balance sheet date. In doing so, management's expectations as to whether such a right will actually be exercised should not be taken into account. The amendments to IAS 1 are to be applied retrospectively and for the first time for fiscal years beginning on or after January 1, 2023.

In May 2020, the IASB issued amendments to IFRS 3 "Business Combinations: References to the Conceptual Framework." The amendments are effective for annual reporting periods beginning on or after 1 January 2022 and are to be applied prospectively. Also in May 2020, the IASB issued amendments to IAS 37 "Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts – Costs of Fulfilling a Contract" to specify which costs an entity should consider when assessing whether a contract is onerous or loss-making. The amendments are effective for annual reporting periods beginning on or after 1 January 2022. In August 2020, the IASB also adopted amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 with regard to the reform of reference rates (IBOR reform) – phase 2. The amendments provide temporary relief when a reference interest rate (IBOR – Interbank Offered Rate) is replaced by an alternative near risk-free rate (RFR – Risk-free Rate) and this has an impact on financial reporting. The amendments are effective for annual reporting periods beginning on or after 1 January 2021 and are to be applied retrospectively.

On 12 February 2021, the IASB issued amendments to IAS 1 "Presentation of Financial Statements" and IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors." The amendment to IAS 1 "Disclosures of Accounting Policies" will in future require only the significant accounting policies to be presented in the notes. To be significant, the accounting policy must be related to material transactions or other events and there must be a reason for the presentation. The amendment to IAS 8 "Definition of Accounting Estimates" clarifies how entities can better distinguish changes in accounting policies from changes in accounting estimates. The amendments are effective for annual reporting periods beginning on or after 1 January 2023. According to the IASB, early application of the amendments is permitted, but requires EU endorsement.

No significant effects on the consolidated financial statements of IVU are expected from the change.

Significant judgements, estimates and assumptions

10 In preparing the consolidated financial statements, the management makes judgements, estimates and assumptions that affect the amount of the income, expenses, assets and liabilities reported, the related disclosures and the disclosure of contingent liabilities.

11 The key forward-looking assumptions and other main sources of uncertainty in the estimates at the end of the reporting period, on account of which there is a significant risk that a material adjustment to the carrying amounts of assets and liabilities could be necessary within the next financial year, are discussed below. The assumptions and estimates of the Group are based on parameters as at the time the consolidated financial statements were prepared. However, these conditions and the assumptions about future developments can change due to market developments and market conditions beyond the control of the Group. Such changes are not taken into account in the assumptions until they occur. The coronavirus pandemic is not expected to have a significant impact on IVU. This is mainly due to the structure of IVU's business, which focuses on the development and sale of primarily digital products.

12 **Impairment on goodwill**: The IVU Group tests goodwill for impairment based on the regulations of IAS 36. Impairment testing is based on the future cash flows to be generated for individual assets or groups of assets combined as cash-generating units. Further details on impairment testing can be found in paragraphs (104) and (105). The carrying amount of the tested goodwill was €11,349 thousand as at 31 December 2020 (previous year: €11,349 thousand).

13 **Revenue from contracts with customers**: The Group made the following judgements, which have a material influence on determining the amount and timing of revenue from contracts with customers.

Identification of contractual obligations in implementation projects

14 The Group provides installation services and furthermore provides licenses, hosting and maintenance services. The Group generates much of its revenue from software implementation projects. The Group has established that the licences, hardware and the services offered are in principle individually definable. However, these contractual commitments are not definable as a rule in the context of the Group's usual implementation projects. Rather, these are contractually defined service

packages, where not only the software but also integration thereof plays a key role. Accordingly, implementation projects are usually accounted for as a contractual obligation.

Measurement

15 In the case of implementation projects, the services over a period give rise to assets that do not present any alternative potential uses for IVU. In terms of the contracts, the Group has a legal claim to appropriate remuneration for the services performed at any point during the contract execution.

The Group therefore recognises revenue on the basis of the estimated performance in projects. Performance estimates are made based on an estimated quantity of hours and other project-related costs and are continuously updated. Further details on revenue from projects recognised but not yet invoiced can be found in sections (116) et seq.

16 Allowance for expected credit losses on trade receivables and contract assets: The Group does not carry out any general impairment on the basis of an impairment matrix, since there are no signs, based on past experience, of general default risks and the customer structure and financial risk management are such that no structural default risk is expected in future either (see paragraphs (47) et seq.). Expected losses are recognised via specific valuation allowances in individual cases in question. Information about expected credit losses on the Group's trade receivables and contract assets is included in paragraphs (116) et seq.

17 **Deferred tax assets**: Deferred tax assets are recognised for all unutilised tax loss carryforwards and temporary accounting differences to the extent that it is likely, or that there is substantial objective evidence, that there will be future taxable profit available against which the losses can actually be used. The calculation of the amount of deferred tax assets requires an estimate by the management based on the expected timing and amount of future taxable income together with future tax planning strategy (timing of tax events, consideration of tax risks, etc.). Deferred tax assets on loss carryforwards amounted to €5,357 thousand (2019: €6,607 thousand) as at 31 December 2020. Unutilised corporation tax losses for which no deferred tax assets have been recognised amount to €0.0 million (2019: €7.4 million), and unutilised trade tax losses to €0.0 million (2019: €2.3 million).

Deferred tax assets of €10.4 million exceed deferred tax liabilities of €6.9 million. As far as possible, the balance sheet shows netted figures, hence the reporting of a deferred tax asset of €3,440 thousand and a deferred tax liability of €32 thousand. Further details can be found in paragraphs (148) through (152).

18 **Pensions and other post-employment benefits**: The book value of the provisions as well as the cost of post-employment defined benefit plans is determined on the basis of actuarial calculations. The actuarial valuation is based on assumptions regarding discount rates, the expected pension age, future wage and salary increases, mortality and future pension increases. Owing to the long-term nature of these plans, such estimates are subject to significant uncertainty. The new Heubeck mortality tables (2018 G) had to be taken into account in the financial year. The provision for pensions and similar obligations was €5,252 thousand (2019: €5,160 thousand) as at 31 December 2020. Further details can be found in paragraph (128) et seq.

Consolidation principles

a) **Subsidiaries**

19 The consolidated financial statements comprise the financial statements of IVU AG and the subsidiaries it controls as at 31 December 2020. Control over an investee particularly exists when the Group has all of the following:

- control of the investee (i.e. based on its currently existing rights, the Group has the ability to control the activities of the investee that have a significant influence on its returns),
- risks from or rights to variable returns from its exposure in the investee and
- the ability to utilise its control so as to influence the returns from the investee.

If the Group does not hold a majority of the voting or similar rights in an investee, it takes into account all relevant facts and circumstances in assessing whether it controls an investee. These include:

- a contractual arrangement with other parties entitled to vote,
- rights resulting from other contractual arrangements,
- voting rights and potential voting rights of the Group.

If facts and circumstances suggest evidence indicating that one or more of the three control criteria have changed, the Group must check again whether it controls an investee. Subsidiaries are included in consolidation from the date when the Group gains control of them. It ends when the Group loses control of them. The assets, liabilities, income and expenses of a subsidiary that was acquired or disposed of during the reporting period are recognised in the statement of financial position or the statement of comprehensive income respectively from the date on which the Group gains control of the subsidiary until the date on which control ceases.

The gain or loss and each component of other comprehensive income are attributed to the holders of ordinary shares of the parent company and the non-controlling interests, even if this results in a negative balance for non-controlling interests. A change in the ownership interest of a subsidiary without a loss of control is accounted for as an equity transaction. If the parent company loses control over a subsidiary, it shall remove all assets, liabilities and other activities attributable to this disposal group from the Group.

20 The purchase method in accordance with IFRS 3 is applied in accounting for acquisitions. Companies acquired or disposed of during the year are included in the consolidated financial statements from the date of acquisition or up to the time of sale.

21 The excess of the cost of an acquisition over the share in the fair values of the identifiable assets and liabilities as at the date of the acquisition is referred to as goodwill and recognised as an asset. The identifiable assets and liabilities are measured at their fair values as at the acquisition date.

22 The following companies are included in the consolidated financial statements as subsidiaries. IVU AG's interests in them are identical to the existing voting rights.

	Share %
IVU Traffic Technologies Italia s.r.l., Bozen, Italy ('IVU Italia')	100.0
IVU Traffic Technologies UK Ltd., Birmingham, Great Britain ('IVU UK')	100.0
IVU Benelux B.V., Veenendaal, Netherlands ('IVU Benelux')	100.0
IVU Chile LTDA., Santiago de Chile, Chile ('IVU Chile')	100.0
IVU Traffic Technologies Inc., Wilmington, Delaware, USA ('IVU USA')	100.0
IVU Traffic Technologies Schweiz AG, Olten, Switzerland ('IVU Schweiz')	100.0
IVU Traffic Technologies Austria GmbH, Vienna, Austria ('IVU Austria')	100.0

23 The former wholly owned subsidiary IVU.elect GmbH, based in Berlin, was sold in the financial year and left the IVU Group's scope of consolidation with effect from 29 May 2020.

b) **Joint ventures**

24 In the previous year, IVU AG and ebusplan GmbH, Aachen, founded the joint venture EBS ebus solutions GmbH, based in Aachen (hereinafter: EBS). IVU AG holds a share of 74% and accounts for this using the equity method in accordance with IAS 28 because the provisions of the joint venture shareholders' agreement on voting rights mean that the Group is unable to control those activities of EBS that have a significant influence on its return.

c) **Consolidation adjustments and uniform measurement in the Group**

25 The annual financial statements of the subsidiaries included in the consolidated financial statements are based on uniform accounting standards and reporting periods.

26 Intercompany balances and transactions, and the resulting intragroup gains and unrealised gains and losses between consolidated companies, have been eliminated in full. Unrealised losses were eliminated only if the transactions gave no substantial indication of an impairment of the asset transferred.

Measurement at fair value

27 Fair value is defined the price that would have to be received from the sale of an asset or that would have to be paid for the transfer of a liability between

market participants as part of an orderly transaction on the measurement date. In measuring fair value it is assumed that the transaction in which the asset is sold or the liability is transferred takes place on

- the principal market for the asset or liability, or
- the most advantageous market if there is no principal market.

The Group must have access to the principal market or the most advantageous market. The fair value of an asset or liability is measured based on the assumptions that market participants would use when pricing the asset or liability. It is assumed that the market participants act in their economic best interest. A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its best use. The Group applies measurement methods that are appropriate in the circumstances and for which there are sufficient data to measure fair value. In doing so, the use of relevant, observable input factors is maximised and that of non-observable input factors is minimised.

All assets and liabilities that are measured at fair value or reported in the notes are assigned to the following levels of the fair value hierarchy based on the lowest input factor that is material overall for measurement:

- **Level 1** – (non-adjusted) prices quoted on active markets for identical assets or liabilities.
- **Level 2** – measurement method in which the lowest input factor that is material overall for measurement can be observed directly or indirectly on the market.
- **Level 3** – measurement method in which the lowest input factor that is material overall for measurement cannot be observed on the market.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether reclassifications between the levels of the hierarchy have occurred by checking the classification at the end of each reporting period.

Currency translation

28 The consolidated financial statements of IVU AG are prepared in euro, the reporting currency of the Group. Each company within the Group determines its own functional currency. The items included in the financial statements of the respective companies are measured using this functional currency. Foreign currency transactions are initially converted using the spot rate between the functional and the foreign currencies on the day of the transaction. Monetary assets and liabilities in foreign currencies are converted into the functional currency at the closing rate. All exchange differences are recognised in profit or loss for the period.

The functional currency of the foreign operation IVU UK is its national currency (pound sterling). As at the end of the reporting period the assets and liabilities of this subsidiary are translated into the reporting currency of IVU AG (euro) at the closing rate (GBP/EUR = 1.1123; 2019: 1.1754). Income and expenses are translated at the weighted average exchange rate for the financial year (GBP/EUR = 1.1240; 2019: 1.1393).

The functional currency of the foreign operation IVU Chile is its national currency (Chilean peso). As at the end of the reporting period the assets and liabilities of this subsidiary are translated into the reporting currency of IVU AG (euro) at the closing rate (CLP/EUR = 0.0012; 2019: 0.0012). Income and expenses are translated at the weighted average exchange rate for the financial year (CLP/EUR = 0.0011; 2019: 0.0013).

The functional currency of the foreign operation IVU Schweiz is its national currency (Swiss franc). As at the end of the reporting period the assets and liabilities of this subsidiary are translated into the reporting currency of IVU AG (euro) at the closing rate (CHF/EUR = 0.9258; 2019: 0.9213). Income and expenses are translated at the weighted average exchange rate for the financial year (CHF/EUR = 0.9341; 2019: 0.8990).

The functional currency of the foreign operation IVU USA is its national currency (US dollars). As at the end of the reporting period the assets and liabilities of this subsidiary are translated into the reporting currency of IVU AG (euro) at the closing rate (USD/EUR = 0.8149; 2019: 0.8902). Income and expenses are translated at the weighted average exchange rate for the financial year (USD/EUR = 0.8755; 2019: 0.8933).

The exchange differences arising from translation of the functional currencies of the foreign operations to the reporting currency of IVU AG are each recognised as a separate component of equity.

Non-current assets

a) Intangible assets

29 Intangible assets are measured at cost on initial recognition. Intangible assets are recognised if it is likely that the company will derive future economic benefit from them and the cost of the asset can be measured reliably. Following initial recognition, intangible assets are carried at cost less any cumulative amortisation and cumulative impairment losses (reported under depreciation and amortisation). Intangible assets – excluding goodwill – are amortised on a straight-line basis over their estimated useful lives. The amortisation period and the amortisation method are reviewed at the end of each financial year. With the exception of goodwill, the Group has no intangible assets with indefinite useful lives.

30 **Goodwill**: Goodwill is initially measured at cost, which is the excess of the total consideration transferred and the amount of the non-controlling interest in the net identifiable assets acquired and the liabilities assumed. If the fair value of the net assets acquired exceeds the total consideration transferred, the difference is recognised in profit or loss. After initial recognition goodwill is measured at cost less cumulative impairment. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units. Where goodwill has been allocated to a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

31 **Industrial rights and licenses, software**: Amounts paid for the purchase of industrial rights and licenses are capitalised and then amortised on a straight-line basis over their expected useful life.

32 The cost of new software is capitalised and treated as an intangible asset if these costs are not an integral part of the related hardware. Software is amortised on a straight-line basis over a period of three or five years, unless it has a shorter useful life.

33 Costs incurred to restore or preserve the future economic benefits that the company had originally anticipated are expensed as incurred.

34 **Capitalised development costs for internally developed software**: Research costs are expensed in the period in which they are incurred. An intangible asset arising from the development of an individual project is recognised only when the IVU Group can demonstrate the technical feasibility of completing the intangible asset so that it is available for internal use or for sale, and the intention to complete the intangible asset and use or sell it. Furthermore, the Group must demonstrate the generation of future economic benefits by the asset, the availability of resources to complete the asset and the ability to reliably determine the expenditure attributable to the intangible asset during its development. Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any cumulative amortisation and cumulative impairment losses. Amounts capitalised in previous years are amortised over the period of expected future revenue from the project (straight-line depreciation over a period of three to five years). The capitalised amount of development costs is reviewed annually for impairment, if the asset is not yet in use, or during the year if there is evidence of impairment.

35 No development costs were capitalised in the 2020 and 2019 financial years.

b) Property, plant and equipment

36 Property, plant and equipment is carried at cost less cumulative depreciation and cumulative impairment losses. If property, plant and equipment are sold or scrapped, the corresponding cost and cumulative depreciation are derecognised; any gain or loss from the disposal is reported in the income statement.

37 The cost of an item of property, plant and equipment comprises its purchase price, including import duties and other incidental purchase taxes in connection the acquisition non-refundable and any directly attributable costs incurred to bring the asset to its

location and in a working condition for its intended use. Subsequent costs such as maintenance and repair costs incurred after the assets have been put into operation are expensed in the period in which they are incurred. If it is likely that expenditure will result in the company deriving a future economic benefit above the originally assessed standard of performance from the existing asset, the expenditure is capitalised as an subsequent cost of items of property, plant and equipment.

38 Depreciation is calculated on a straight-line basis over the estimated useful life assuming a residual carrying amount of €0. If assets contain several components that have different useful lives, these components are depreciated individually over their respective useful lives. The following estimated useful lives are used for the individual groups:

- Hardware: 3 years
- Other office equipment: 3 to 15 years

Useful lives and depreciation methods for property, plant and equipment are reviewed periodically to ensure that depreciation methods and periods reflect the expected economic benefit of the assets.

c) Shares in financial assets accounted for using the equity method

39 The Group's shares in financial assets accounted for using the equity method include shares in a joint venture. A joint venture is an arrangement where the Group exercises joint control, whereby it has rights to the net assets of the arrangement rather than rights over its assets and obligations for its liabilities.

40 Shares in the joint venture are accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. After initial recognition, the consolidated financial statements include the Group's share of the comprehensive income from investments accounted for using the equity method until the date on which joint control ceases.

d) Impairment of non-current assets

41 Non-current assets are tested for impairment when facts or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The first step in impairment testing is calculating the recoverable amount of the asset or cash-generating unit (CGU). This is defined as the higher of the fair value less costs to sell and the value in use. The fair value less costs to sell is defined as the price that can be achieved in the sale of an asset or CGU between two knowledgeable, willing and independent parties less costs to sell. The value in use of an asset or a CGU is determined by the present value under the current use on the basis of expected cash flows. No impairment of non-current assets was recognised in the 2020 and 2019 financial years.

e) Financial assets

42 **Initial recognition and measurement**: On initial recognition, financial assets are classified for subsequent measurement either as at amortised cost, as at fair value in other comprehensive income without affecting profit or loss or as at fair value through profit or loss. The classification of financial assets on initial recognition depends on the characteristics of the contractual cash flows of the financial assets and on the Group's business model for managing its financial assets. Trade receivables that do not contain any significant financing components are measured at the transaction price determined in accordance with IFRS 15. Please see the accounting policies in the section "Revenue from contracts with customers".

43 **Subsequent measurement**: Financial assets are classified in four categories for subsequent measurement:

- Financial assets measured at amortised cost (debt instruments).
- Financial assets measured at fair value in other comprehensive income with reclassification of cumulative gains and losses (debt instruments).
- Financial assets measured at fair value in other comprehensive income without reclassification of cumulative gains and losses on derecognition (equity instruments).
- Financial assets measured at fair value.

44 **Financial assets measured at amortised cost (debt instruments)**: This category has the most significance for the consolidated financial statements while the other categories listed above do not play any material role. The Group measures financial assets at amortised cost if the following two conditions are met:

- The financial asset is held within the framework of a business model, the objective of which is to hold financial assets to collect the contractual cash flows, and

- the contractual terms of the financial assets lead to cash flows at specific times, which solely constitute principal and interest payments on the outstanding capital amount.

The effective interest rate is used to measure financial assets in subsequent periods and they must be tested for impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired. The Group's financial assets measured at amortised cost contain trade receivables, cash and cash equivalents and other current assets.

45 **Derecognition**: A financial asset (or part of a financial asset or a part of a group of similar financial assets) is mainly derecognised (i.e. removed from the consolidated statement of financial position) when it is classified as irretrievable.

46 **Impairment of financial assets**: Additional details of the impairment of financial assets are contained in notes "Significant judgements, estimates and assumptions" (paragraphs (10) to (13)) and in the notes on the consolidated statement of financial position, chapter C.

Expected credit losses are recognised in two steps. For financial instruments where the risk of default has not increased significantly since initial recognition, a risk provision in the amount of the expected credit losses is recognised, which is based on a default event within the next twelve months (12-month ECL). For financial instruments where the risk of default has increased significantly since initial recognition, an enterprise must recognise a risk provision in the amount of the expected credit losses over the remaining term, regardless of when the default event occurs (total term ECL).

No allowance on the basis of a write-down matrix for trade receivables and contract assets, since there are no signs of general default risks in the Group. For financial assets at amortised cost, if there is objective evidence that the company cannot recover all amounts contractually due for loans, receivable or held-to-maturity investments, an impairment loss, or a write-down on receivables is recognised in profit or loss. The impairment loss is defined as the difference between the carrying amount of the asset and the present value of expected future cash flows using the effective interest method. The carrying amount of the asset is reduced using an allowance account. The impairment loss is recognised in profit or loss. An impairment loss previously recognised in profit or loss is reversed, also in profit or loss, if the subsequent partial recovery can objectively be linked to an event occurring after the original impairment. However, an increase in value is recognised only to the extent that the amortised cost that would have been without impairment is not exceeded.

Objective and methods of financial risk management

47 In addition to trade receivables, the main financial instruments of the company are cash and cash equivalents and liabilities to banks. The aim of these financial instruments is to finance operations. The material risks are from credit and liquidity risks. Exchange rate risks are only insignificant due to the immateriality of foreign currency receivables and liabilities. Fair value risks relate solely to available-for-sale financial assets and are also insignificant.

48 Credit risks, or the risk that a counterparty does not fulfil its payment obligations, are managed through the use of credit lines and control procedures. The company obtains collateral where appropriate. The Group does not have a significant concentration of credit risk with either a single counterparty or a group of counterparties with similar characteristics. The maximum credit risk is equal to the amount of the reported carrying amounts of financial assets.

49 Liquidity risk arises from the fact that customers may not be able to fulfil their obligations to the company under the agreed conditions.

50 Moreover, the IVU Group endeavours to have sufficient cash and cash equivalents or corresponding lines of credit to meet its future obligations.

51 The maturities of financial liabilities as at 31 December 2020 are as follows:

	Due € thou.	Within 1 year € thou.	More than 1 year € thou.	**Total € thou.**
Trade payables	43	4,687	0	4,730
Other liabilities	0	10,228	0	10,228
TOTAL	**43**	**14,915**	**0**	**14,958**

Given the short-term nature of financial liabilities, as at 31 December 2020 there are no material differences between the carrying amounts shown in the statement of financial position and the undiscounted cash flows.

52 The maturities of financial liabilities as at 31 December 2019 are as follows:

	Due € thou.	Within 1 year € thou.	More than 1 year € thou.	**Total € thou.**
Trade payables	199	7,368	0	7,567
Other liabilities	0	10,456	0	10,456
TOTAL	**199**	**17,824**	**0**	**18,023**

Given the short-term nature of financial liabilities, as at 31 December 2019 there are no material differences between the carrying amounts shown in the statement of financial position and the undiscounted cash flows.

Current assets

a) **Inventories**

53 Inventories are measured at the lower of cost or the expected sales proceeds less costs yet to be incurred.

b) **Cash and cash equivalents**

54 Cash and cash equivalents comprise cash, time deposits and demand deposits. Cash and cash equivalents are defined in line with this in the consolidated statement of cash flows.

Equity

55 Equity comprises share capital, capital reserves, retained earnings, other reserves and, for the first time in the financial year, own shares.

56 In the financial year, €2,500 thousand was transferred from net income to revenue reserves (2019: €2,500 thousand).

57 Actuarial gains and losses from the measurement of pension commitments and unrealised gains and losses from currency translation in currency translation adjustments are reported in the other reserve.

58 If share capital recognised in equity is repurchased, the amount paid including the direct costs is deducted from equity. The acquired shares are classified as treasury shares and recognised in the reserve for treasury shares. If treasury shares are sold or reissued at a later date, the revenue is recognised as an increase in equity. Any difference is recognised within capital reserves.

Share-based payment arrangements

59 The fair value at grant date of share-based payment arrangements to Executive Board members is recognised as an expense with a corresponding increase in equity over the period in which the Executive Board members become unconditionally entitled to the shares. As the share-based payment agreement contains market conditions, the fair value at grant date takes into account the probability of the condition being met and accordingly reflects the probability of different outcomes.

60 **Description of share-based payment arrangements**: Under the Long Term Incentive Plan initiated by the company, the members of the Executive Board receive shares in the company as a further variable remuneration component. The future transfer of shares is dependent on the positive development of the IVU share price, taking into account the performance of the TecDAX stock market index, and the achievement of a certain target price in the fourth quarter of 2022. The term of the programme will end on 31 December 2022. The physical delivery of the shares would then have to be fulfilled by IVU in the first quarter of 2023. In accordance with the principle of sustainable remuneration, the right to transfer and the number of shares actually transferred to the Executive Board depends on the economic development of the company. A maximum total of 180,000 shares can be granted, the minimum number is 0. IVU will settle its obligations under the Long Term Incentive Plan by

repurchasing treasury shares and issuing them to Executive Board members on the settlement date.

61 **Determination of fair values**:The fair value of the share programme amounts to €1,216 thousand and was determined using the Monte Carlo simulation. The fair value of those equity instruments are measured at grant date. If a share-based payment arrangement contains a market condition, the fair value at grant date should reflect the probability that the conditions will be met and, accordingly, the probability of different outcomes. In order to do justice to this from a valuation point of view, a valuation technique was applied that takes into account various possible outcomes. In determining the fair value of the share-based payment plans, an IVU share price of €9.86, an index value of 2,873 points – in each case on the grant date – a term of 3.6 years, standard deviations of returns of 19% (index) and 35% (share price) and a risk-free interest rate of -0.62% were used.

62 **Expenses recognised in profit or loss**: Personnel expenses include expenses from share-based payments settled by equity instruments (share option programme for Executive Board members) amounting to €339 thousand (previous year: €198 thousand). In the following years until the end of the term of the programme, €339 thousand will be recognised annually in personnel expenses and transferred to the capital reserve.

Provisions for pensions

63 The IVU Group has three defined benefit pension plans. Each year, the net pension obligations (pension obligations less plan assets) are measured by recognised, independent actuaries. The cost of the benefits granted is calculated separately for each plan using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the statement of financial position with a corresponding debit or credit to other reserves through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods. The amount recognised as an asset or liability from a defined benefit plan includes the present value of the defined benefit obligation less the unrecognised past service cost and the fair value of plan assets for the immediate settlement of obligations. The plan assets consist of cash and cash equivalents and are protected from the creditors of the Group.

Current liabilities

a) Other provisions

64 Provisions are recognised only when the company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Provisions are reviewed as at the end of each reporting period and adjusted to the current best estimate. If the effect of the time value of money is material, the amount of the provision is the present value of the expenditure expected to be required to settle the obligation. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

In accordance with IAS 37, contingency reserves include current contractual obligations from onerous contracts. In the valuation, the contractually agreed revenue is compared with the order-related fixed and variable costs of meeting the obligations. General administrative and selling expenses are not included.

b) Financial liabilities

65 **Initial recognition and measurement**: financial liabilities are classified on initial recognition as financial liabilities, which are measured at fair value, as loans, as liabilities or as derivatives, which were designed as hedging instruments and are effective as such.

All financial liabilities are measured at fair value on initial recognition, less directly attributable transaction costs in the case of loans and liabilities. The Group's financial liabilities comprise trade payables and other liabilities.

Subsequent measurement: Trade payables and other liabilities are subsequently measured at amortised cost using the effective interest method.

A financial liability is derecognised if the underlying obligation is fulfilled, cancelled or has expired.

Contingent liabilities and contingent assets

66 Contingent liabilities are not reported in the financial statements. They are disclosed in the notes, unless it is highly unlikely that they will result in an outflow of economic benefits.

67 Contingent assets are not reported in the financial statements. However, they are disclosed in the notes if the inflow of economic benefits is likely.

Government grants

68 A government grant is recognised if there is reasonable assurance that the company will comply with the conditions attached to it. Government grants are recognised as income systematically in line with the expenses that they are intended to compensate. Grants received for the acquisition of property, plant and equipment are recognised in other liabilities as deferred income. The income recognised in connection with grants is reported as other operating income in the income statement.

69 The investment grants to the company from various bodies are linked to compliance with future conditions. The investment grants received from the tax authorities are subject to compliance with retention guarantees for the subsidised assets. No investment grants or subsidies were recognised as at 31 December 2020.

70 In 2020, IVU AG recognised funding under various government projects for the development of software applications and further state development funding totalling €348 thousand (2019: €52 thousand). The income is included in other operating income.

Research and development costs

71 Research and development costs amounted to €4,393 thousand in the 2020 financial year (2019: €4,402 thousand).

Leases

72 At the inception of a contract, the Group assesses whether it constitutes or contains a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Group recognises and measures all leases (with the exception of short-term leases and leases for which the underlying asset is of low value) using a single model. It recognises liabilities for lease payments and rights of use for the right to use the underlying asset.

73 **Determining the term of leases with options to extend or terminate – the Group as a lessee**: The Group determines the term of the lease on the basis of the non-cancellable period of the lease and including the periods resulting from an option to extend the lease, provided that it is reasonably certain that it will exercise this option, or the periods resulting from an option to terminate the lease, provided that it is reasonably certain that it will not exercise this option. The Group has entered into several lease agreements that include options to extend or terminate. These mainly relate to property lease agreements. The Group makes significant judgements in assessing whether there is sufficient certainty that the option to extend or terminate the lease will be exercised or not. In other words, it takes into account all relevant factors constituting an economic incentive for it to exercise the option to extend or terminate. After commencement of the lease, the Group determines again if a significant event or change in circumstances occurs that is within its control and affects whether or not it will exercise its option to extend or terminate the lease (e.g. significant leasehold improvements or significant adjustment to the underlying asset).

74 **Rights of use:** The Group recognises rights of use at the commencement date (i.e. when the underlying leased asset is ready for use). Rights of use are recognised at cost less any accumulated depreciation and any accumulated impairment losses and are adjusted for any remeasurement of the lease liabilities. The cost of rights of use includes the lease obligations recognised, the initial direct costs incurred and the lease payments made at or before provision, less any lease incentives received. Rights of use are amortised on a straight-line basis over the shorter of the lease term and the expected useful life of the lease. The rights of use are also tested for impairment.

75 **Lease liabilities:** At the lease commencement date, the Group recognises lease liabilities at the present value of the lease payments payable over the lease term. Lease payments comprise fixed payments (including in-substance fixed payments) less any lease incentives to be received. Purchase options, penalties for termination and variable lease

payments were not taken into account in the financial year. In calculating the present value of the lease payments, the Group uses its assumed incremental borrowing rate at the commencement date (interest rate statistics of the Deutsche Bundesbank), as the interest rate underlying the lease cannot be readily determined. After the commencement date, the amount of lease liabilities is increased to reflect the higher interest expense and decreased to reflect lease payments made. In addition, the carrying amount of lease liabilities is revalued if there are changes in the lease, changes in the lease term, changes in lease payments (for example, changes in future lease payments resulting from a change in the index or interest rate used to determine those payments) or a change in the assessment of a call option for the underlying asset.

76 The following table shows the carrying amounts of the rights of use recognised and the changes during the reporting period:

	Property rental € thou.	Cars € thou.	Hardware € thou.	**Total € thou.**
As at 1 January 2020	6,966	168	64	7,198
Additions	4,239	210	0	4,449
Depreciation expense	1,295	138	40	1,473
AS AT 31 DECEMBER 2020	**9,910**	**240**	**24**	**10,174**

77 The following table shows the book values of the lease liabilities and the changes during the reporting period as well as a maturity analysis of the leasing liabilities:

	2020 € thou.	2019 € thou.
As at 1 January	7,308	7,543
Additions	4,601	1,010
Interest accrued	–24	47
Payments	1,510	1,292
AS AT 31 DECEMBER	**10,375**	**7,308**
Of which due within 1 year	1,493	1,206
Of which due between 1 and 5 years	4,499	3,842
Of which due in more than 5 years	4,383	2,260

78 The following amounts were recognised in profit or loss in the reporting period:

	2020 € thou.	2019 € thou.
Depreciation expense for rights of use	1,473	1,276
Interest expenses for lease liabilities	127	126
Expenses for short-term leases (included in other operating expenses)	34	38
Expenses for leases with an asset of low value	0	0
Variable lease payments	0	0
TOTAL AMOUNT RECOGNISED IN PROFIT OR LOSS	**1,634**	**1,440**

79 The Group has entered into several lease agreements that include options to extend or terminate. This mainly relates to the property lease agreements for the Berlin, Aachen and Rome locations. The assessment of whether the exercise of these options to extend and renew is sufficiently certain requires significant judgements on management's part.

80 The Group's cash outflows for leases amounted to €1,544 thousand in 2020 (2019: €1,330 thousand). In addition, the Group reported non-cash additions to rights of use and lease liabilities of €4,449 thousand in 2020 (2019: €931 thousand).

Revenue from Contracts with Customers

81 The IVU Group mainly generates its revenue from project business. In this, it enters into agreements with customers for the development/production of software and its adaptation. These projects also include the sale of hardware and services, e.g. installation, consulting, training, maintenance and the sale of licenses.

82 Revenue from contracts with customers is recognised if control of goods and services is transferred to the customer. It is recognised at the amount of consideration which the Group is expected to receive in exchange for these goods or services to a customer. The Group has come to the conclusion that it acts as principle with its sales transactions, as it usually has control of goods or services before these are passed to the customer.

83 The significant judgements, estimates and assumptions in connection with revenue from contracts with customers are explained in sections (13) et seq.

84 For all types of contract, the Group checks whether several commitments are contained in the contract, which constitute separate contractual obligations, to which a part of the transaction price must be allocated. In determining the transaction price, the Group takes account of the effects of variable consideration, the existence of significant financing components, non-cash consideration and, if applicable, consideration to be paid to a customer.

85 The Group offers the warranties usually prescribed by law for the rectification of defects, which were present at the time of sale. These assurance-type warranties, as they are known, are recognised in accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets." Details on the accounting policy for warranty provisions are included in section (64).

86 As a rule, the Group has no material costs for contract initiation to be capitalised, as sales take place on the Group's behalf and no direct commission is paid for these. Other contract initiation costs, e.g. stamp duties and other fees are insignificant in amount.

87 Revenue is recognised over a period of time or at a specific point in time depending on the contract and the service to be supplied.

a) Project business

88 For long-term project agreements that satisfy the conditions for measurement over a period of time (the service creates an asset that does not represent an alternative use for IVU), revenue from the development and sale of software products and implementations is deferred and recognised based on the percentage of completion of the project using an input-oriented method. The percentage of completion is usually determined by the ratio of costs incurred to the total planned costs. Advance payments received from customers are offset against contract assets on a project related basis and progress billings to customers are - unless they are already settled - reported under trade receivables. Changes in the project conditions can lead to adjustments to the originally recognised costs and revenue for individual projects. The changes are recognised in the period in which these changes are established, which is usually the case when supplementary agreements are concluded between the company and its customers.

b) Sale of licenses

89 The IVU Group recognises its revenue on the basis of a corresponding contract at a certain point in time, once the license has been delivered, the sale price is fixed or determinable, there are no significant liabilities to customers and realisation of the receivables is deemed probable.

c) Maintenance, consulting and training

90 Revenue from maintenance contracts is recognised over a period of time on a straight-line basis over the term of the contract. Income from consulting and training is recognised when the service is rendered.

d) Supply of hardware

91 Proceeds from the sale of goods (hardware deliveries) are recognised at a certain point in time when delivery has taken place and the risks and rewards have been transferred to the buyer. The corresponding revenue is included in paragraph (155) under revenue for goods/services/works contracts.

e) Contract balances

92 **Contract assets**: A contract asset is the claim to receive consideration in exchange for goods or services, which were transferred to a customer. If the Group complies with its contractual obligations by transferring goods or services to a customer before the customer pays the consideration or before the payment is due, a contract asset is recognised for the contingent claim for consideration.

93 **Trade receivables**: A receivable is an unconditional claim by the Group to consideration, i.e. it becomes due automatically through the passage of time. The accounting policies for financial assets are explained in sections (42) et seq.

94 **Contract liabilities**: A contract liability is the Group's obligation to transfer goods or services to a customer for which it has received consideration (or is still to receive consideration) from the latter. If the customer pays a consideration before the Group transfers goods or services, a contract liability is recognised, if the payment is made or due.

Contract liabilities are recognised as revenue as soon as the Group fulfils its contractual obligations.

Income taxes

95 Current tax assets and tax liabilities for both the current period and prior periods are measured at the amount expected in the form of a refund from the tax authorities or to be paid to the tax authorities respectively. The calculation of this amount is based on the tax rates and tax laws in effect at the end of the reporting period or that will shortly be in effect thereafter.

96 Deferred taxes are recognised using the asset and liability method on all temporary differences between the carrying amounts for assets and liabilities in the statement of financial position and their amounts in the tax base as at the end of the reporting period. Deferred tax liabilities are recognised for all taxable temporary differences with the following exceptions:

- The deferred tax liability from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss is not recognised.
- The deferred tax liability is not recognised for taxable temporary differences in connection with investments in subsidiaries, associates or interests in joint ventures if the timing of the reversal of the temporary difference can be controlled and it is probably that the temporary differences will not reverse in the foreseeable future.

97 Deferred tax assets are recognised for all deductible temporary differences, unutilised tax loss and interest carryforwards and unused tax credits to the extent that it is likely that future taxable income will be generated against which these deductible temporary differences and the unutilised tax loss and interest carryforwards and unused tax credits can be offset.

98 The following exceptions apply:

- The deferred tax assets from deductible temporary differences from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss are not recognised.
- Deferred tax assets from taxable temporary differences in connection with investments in subsidiaries, associates or interests in joint ventures are only recognised to the extent that the temporary differences will reverse in the foreseeable future and there will be sufficient taxable profit against which the temporary differences can be used.

The carrying amount of deferred tax assets is assessed at the end of each reporting period and written down to the extent that it is no longer probable that sufficient taxable profit will be available against which the deferred tax asset can be at least partially offset. Unrecognised deferred tax assets are assessed at the end of each reporting period and recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

99 Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled. The tax rates and tax laws which are in effect or that have been announced as at the end of the reporting period apply. Deferred and current taxes relating to items recognised directly in equity are recognised in equity and not in profit or loss.

100 Deferred tax assets and deferred tax liabilities are offset against each other if the Group has a legally enforceable right to offset current tax assets against current tax liabilities and these income taxes relate to the same taxable entity, which is assessed by the same tax authority.

Sales tax

101 Revenue, expenses and assets are recognised net of the amount of sales tax, except:

- When the sales tax incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case, the sales tax is recognised as part of the cost of acquisition of the asset or as part of the expense item, as applicable.
- When receivables and payables are stated with the amount of sales tax included.

The net amount of sales tax recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the consolidated statement of financial position.

Segment reporting

102 No business segments that can be used as a basis for segment reporting can be derived from the reporting structure for the 2020 financial year because the IVU Group has only one reportable segment 'IVU Total' in the 2019 and 2020 financial years. The financial information on geographical segments is presented in Note F.

C. NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Non-current assets

Intangible assets and property, plant and equipment

103 With regard to the development of non-current assets in the financial year ending 31 December 2020, reference is made to the development of intangible assets and property, plant and equipment shown in the statement of changes in fixed assets.

104 On 31 December 2020 and 31 December 2019, the IVU Group carried out impairment tests in line with the concept of value in use with respect to goodwill. For the impairment test, "IVU Total" is treated as a cash-generating segment. The carrying amount attributable to it for goodwill is €11,349 thousand (2019: €11,349 thousand).

105 The impairment test is based on the cash flow forecast for the cash-generating unit over a period of five years. Beyond the planning horizon, further cash flows were included assuming growth of 2.0% (previous year: 2.0%). Furthermore, for the detailed planning period the management is planning growth in gross profit of 4.8% on average. The cash flows shown were derived from past information and contractually agreed orders for the 2021financial year. The assumptions by management regarding business development trends in the software industry are consistent with the expectations of industry experts and market observers. Discount rates of 10.90% before taxes (2019: 12.62%) were applied. The adjustment of interest rates reflects current economic conditions (real economy developments and financing conditions). As there is significant uncertainty regarding projected cash flows and financing terms in the light of the existing economic conditions, the Executive Board of the IVU Group conducted the impairment test on the basis of a worst-case scenario of 10% and 20% lower cash flows, discount rate adjustments after taxes by 1 and 2 percentage points and a reduction of the growth rate after the end of the detailed planning period of 0.5% and 0. This also did not give rise to impairment requirements.

Divestments in the business year

106 In the financial year, IVU sold all shares in its wholly owned subsidiary IVU.elect GmbH with effect from 29 May 2020. The transaction comprised all assets, liabilities and other activities attributable to this disposal and resulted in the following effects:

	2020 € thou.
Revenue*	-452
Income after taxes*	-147
Non-current assets	–12
Contract assets	–400
Receivables and other assets	–127
Cash and cash equivalents	–717
Assets sold	**–1,256**
	0
Provisions for taxes	–128
Contract liabilities	–732
Trade payables	–68
Other current liabilities	–313
Deferred tax liabilities	–45
Liabilities sold	**–1,286**
Capital	**30**
Sales proceeds	5,300
Selling profit	5,330

* until the date of sale

The business transactions of IVU.elect GmbH up to the date of sale are reflected in the corresponding items of the consolidated income statement. The purchase price was paid in full in cash and the gain on disposal is recognised in other operating income.

Investments accounted for using the equity method

107 For accounting policies, please see paragraphs (39) et seq.

108 As at 31 December 2020, the carrying amount of financial assets accounted for using the equity method was €385 thousand (2019: €0 thousand) and includes the shares in EBS, which was founded in the financial year 2019. EBS is a joint venture which the Group manages jointly. EBS mainly operates in the development of software for the planning and control of electric buses. The joint venture is not listed on the stock exchange.

109 EBS was founded in the financial year 2019. It has no goodwill. In accordance with the agreement under which EBS was established, the Group has a payment obligation to the company of €854 thousand. The Group has already fully complied with this obligation and has paid €754 thousand to the company for financing purposes in the past financial year.

110 The following table summarises the financial information of EBS for the 2020 and 2019 financial year as presented in its own financial statements:

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Ownership interest	74 %	74 %
Non-current assets	4	3
Current assets	9	49
Cash and cash equivalents	239	12
Financial liabilities	–25	0
Non-financial liabilities	–7	–312
Net assets (100%)	**220**	**–248**
Group share of net assets (74%)	163	–184
Carrying amount of the share in the Group as at 31 December	385	0
	1 Jan 2020 to 31 Dec 2020	7 Mar 2019 to 31 Dec 2019
COMPREHENSIVE INCOME (100%)	**–286**	**–373**
Group share in comprehensive income (74%)	–212	–276

In the reporting year, in addition to the pro rata comprehensive income of €-212 thousand for 2020, further pro rata cumulative income of €-157 thousand were recognised. This could not be recognised in the previous year because the net investment in EBS was negative as at the previous year's balance sheet date. Consequently, pro rata income to be recognised amounting to €-369 thousand (2019: €-119 thousand) is recognised in the consolidated income statement.

Current assets

Inventories

111 Inventories are composed of merchandise and advance payments as follows:

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Merchandise	1,645	1,118
Advance payments	2,111	1,574
TOTAL	**3,756**	**2,692**

Trade receivables

112 Trade receivables include value adjustments as follows:

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Trade receivables	20,918	30,483
Specific valuation allowances	–567	–372
TOTAL	**20,351**	**30,111**

113 Trade receivables do not bear interest and mature in between 0 and 90 days. The specific valuation allowances recognised developed as follows:

	2020 € thou.	2019 € thou.
As at 1 January	372	289
Charge for the year	483	174
Utilised	–70	–42
Unused amounts reversed	–218	–49
As at 31 December	567	372

114 The reversal through profit or loss results from incoming payments for receivables that had been written down individually.

115 The maturity structure of trade receivables was as follows as at 31 December:

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Neither past due nor impaired	15,828	22,087
Past due, not impaired		
< 30 days	3,707	3,475
31 to 60 days	138	900
61 to 90 days	416	539
> 90 days*	262	3,110
	4,523	8,024
AS AT 31 DECEMBER	**20,351**	**30,111**
Of which current receivables	20,351	30,111
Of which non-current receivables	0	0

* Of which paid by 26 February 2021: €106 thousand (previous year: €1.943 thousand)

Contract assets/contract liabilities

116 Reported contract assets relate to our contingent claims for consideration for complete performance of our contractual services. If the claim to receive consideration becomes unconditional because the project has been concluded or accepted by the customer, the amounts recognised as contract assets are reclassified into trade receivables. Contract assets are usually calculated by the ratio of costs incurred to the total planned costs (cost-to-cost method). This item includes directly allocable costs (staff costs and third-party services) and an appropriate portion of overheads.

117 As at 31 December 2020, there were contract assets of €12,684 thousand (previous year: €14,756 thousand).

Contract liabilities of €20,427 thousand (previous year: €9,129 thousand) include advance payments received and deliveries and services invoiced as agreed, which exceed the corresponding contract assets.

The obligations reported under contractual liabilities at the beginning of the financial year led to revenues of €3.0 million (previous year €2.9 million). IVU usually receives payments from customers on the basis of a settlement schedule, which is a component of customer contracts.

For further details of revenue from contracts with customers see paragraph (155).

118 There are normal warranty obligations for goods accepted under construction contracts.

Other current assets

119 Other current assets include €25 million in notice deposits with a notice period of at least three months and overnight deposits with banks, which are deposited to secure guarantees and are not freely available. Advance payments of income taxes during the year result in tax assets as at the reporting date. Payments to a hosting service provider to secure purchasing conditions were actively deferred over the term.

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Notice deposits	25,000	0
Demand deposits to secure guarantees	2,868	2,884
Receivables from tax credit	643	866
Prepaid expenses	1,519	362
Other	283	564
TOTAL	**30,313**	**4,676**

Cash and cash equivalents

120 Cash and cash equivalents nearly exclusively consist of bank balances.

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Bank balances	31,093	29,251
Cash balances	3	3
TOTAL	**31,096**	**29,254**

Equity

121 Please see the statement of changes in consolidated equity for details.

122 The fully paid-in share capital entered in the commercial register as at the end of the reporting period amounts to €17,719,160.00 (2019: €17,719,160.00) and consists of 17,719,160 (2019: 17,719,160) no-par value shares.

123 By way of resolution of the Annual General Meeting on 25 May 2016, the Executive Board was authorised, with the approval of the Supervisory Board, to increase the company's share capital on one or several occasions by up to 30% of the current share

capital of €17,719,160, i.e. by €5,315,748, by issuing new no-par value bearer shares against cash or non-cash contributions by 24 May 2021. The Executive Board can make use of this authorisation for any legally permissible purpose. In 2019 and 2020, the Executive Board did not make use of this authorisation.

124 Furthermore, by way of resolution of the Annual General Meeting on 29 May 2019, the Executive Board was authorised to acquire shares in the company for any purpose permitted under Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) in the context of the statutory restrictions and in line with the following provisions by 28 May 2024. The authorisation is restricted to the acquisition of shares with a proportional amount of the share capital of €1,771,916, i.e. 10% of the share capital of €17,719,160.

125 Based on this resolution, the Executive Board approved buyback programs for treasury shares in the 2020 financial year on 28 January, 9 March and 16 March. The purpose of the three buyback programs was to particularly use the shares to service Executive Board remuneration and employee participation programs. A total of 174,934 shares were repurchased at a total price of €1,965 thousand. This corresponds to 0.99% of the no-par value shares in the share capital of IVU Traffic Technologies AG. The shares were acquired exclusively via the stock exchange by a bank commissioned by the company (XETRA trading). Detailed information is available on the company's website, www.ivu.de, under Investor Relations/Share.

From the shares acquired, a total of 12,995 no-par value shares were issued for all IVU employees in Germany in the 2020 financial year at an issue price of €12.36 each. The members of the Executive Board received 19,865 shares as part of their variable remuneration at an issue price of €12.39 each. The number of shares issued corresponds to 0.19% of the no-par value shares in the share capital of IVU Traffic Technologies AG.

126 As at 31 December 2020, IVU AG held 142,074 treasury shares. These are deducted from equity at average acquisition cost as a separate item of €1,602 thousand (2019: €0 thousand).

127 The development of treasury shares for the financial year is therefore as follows:

	2020 shares
Treasury shares as at 1 January	0
Purchased in the financial year	174,934
Transferred to the Executive Board	–19,865
Transferred to employees	–12,995
TREASURY SHARES AS AT 31 DECEMBER	**142,074**

Non-current liabilities

Pension provisions

128 Pension provisions are recognised for benefit obligations (pension, invalidity, widows' and orphans' pensions) and for current payments to eligible active and former employees of IVU AG and their surviving dependents.

129 The amount of the pension obligation (defined benefit obligation) was calculated using actuarial methods on the basis of the following assumptions:

	2020 **%**	2019 %
Discount rate	1.00	1.30
Salary trend	2.50	2.50
Pension trend	2.00	2.00
Turnover	3.00	3.00

130 The salary trend includes expected future salary increases, which are estimated annually depending on inflation and the period of service with the company.

The net pension expenses are as follows:

	2020 **€ thou.**	2019 € thou.
Service cost	4	3
Interest expense	65	94
EXPENSE FOR THE PERIOD	**69**	**97**

131 The following table shows the composition of pension obligations:

	2020 **€ thou.**	2019 € thou.
Present value of pension obligations, 31 Dec	5,494	5,452
Less fair value of plan assets	242	292
PROVISIONS FOR PENSIONS	**5,252**	**5,160**

132 The following table shows the development of pension obligations:

	2020 € thou.	2019 € thou.
Present value of pension obligations, 1 Jan	5,452	5,170
Service cost	4	3
Interest expense	69	102
Pension payments	–245	–241
Actuarial gains from changes in financial assumptions recognised in equity (other income)	193	460
Actuarial losses from experience adjustments recognised in equity (other income)	21	–42
PRESENT VALUE OF PENSION OBLIGATIONS, 31 DEC	**5,494**	**5,452**

133 The following table shows the development of plan assets:

	2020 € thou.	2019 € thou.
Fair value of plan assets, 1 Jan	292	366
Net return on plan assets	3	7
Additions to plan assets	0	0
Payments from plan assets	–160	–160
Actuarial gains recognised in equity (other income)	107	79
PLAN ASSETS, 31 DEC	**242**	**292**

134 A quantitative sensitivity analysis of the main assumptions as at 31 December 2020 is presented below.

Assumption	Interest sensitivity		**Pension trend sensitivity**
Scenario	Increase by 0.50%	Decrease by 0.50 %	Increase by 1.00%
Effect on defined benefit obligation (in € thou.)	–316	348	+ 676

The above sensitivity analysis was performed using a method that extrapolates the effect of realistic changes in the key assumptions as at the end of the reporting period on the defined benefit obligation.

135 The average term of defined benefit obligations as at the end of the reporting period is 11.99 years (2019: 12.20 years).

136 The expected return on plan assets is based on a discount factor of 1.00% (2019: 1.30%). No contributions will be paid into the plan in the next twelve months.

137 The plan assets are composed exclusively of cash.

138 The anticipated payment structure for the years 2021 to 2030 is shown below:

Pension payments made	**€ thou.**
2019	241
2020	245

Expected pension payments	**€ thou.**
2021	258
2022	271
2023	274
2024	274
2025	275
2026 - 2030	1,350

139 Defined contribution plans exist only in the form of the mandatory contributions by IVU AG to the state pension. Employer contributions of €2,750 thousand (2019: €2,354 thousand) were paid in the reporting year.

Lease liabilities

140 For information on leases including lease liabilities, please refer to paragraphs (72) et seq.

Current liabilities

Financial liabilities

141 IVU has the following credit facilities:

	Credit facility € thou.	**Utilisation 31 Dec 2020 € thou.**	Utilisation 31 Dec 2019 € thou.
Deutsche Bank AG	1,000	0	0
HSBC	1,000	0	0
Monte del Paschi di Siena	150	0	0

142 The revocable credit line with Deutsche Bank AG and HSBC remains unchanged at €1,000 thousand each. The lines of credit were not utilised in the financial year. Collateral in favour of the banks has not been agreed.

143 Expenses for interest and commission amounted to €140 thousand (2019: €152 thousand) in the 2020 financial year.

Provisions

144 Provisions developed as follows:

	As at 1 Jan 2020 € thou.	Utilised € thou.	Unused amounts reversed € thou.	Arising during the year € thou.	**As at 31 Dec 2020 € thou.**
Warranty	5,141	283	307	2,059	6,610
Impending loss	903	2	230	459	1,130
	6,044	**285**	**537**	**2,518**	**7,740**
of which current	6,044	0	0		7,740

145 The provisions for warranties relate to warranty risks from completed projects or completed deliveries. Contingency reserves were formed for future loss-making business due to cost developments (full cost basis).

Other current liabilities

146 Other current liabilities are composed as follows:

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Staff-related liabilities	8,008	7,741
Liabilities from contract risks	176	310
Liabilities social security	102	80
Liabilities from outstanding invoices	1,895	2,281
Other	47	44
	10,228	**10,456**
Tax liabilities (sales tax, wage tax)	2,910	2,441
TOTAL	**13,138**	**12,897**

147 The staff-related liabilities essentially include holiday entitlements, overtime obligations and special payments.

Actual income taxes and deferred taxes

148 German trade income tax is levied on the trade income derived from income subject to corporation tax. The effective trade tax rate depends on the municipality in which the IVU Group operates. The average trade tax rate for 2020 was 15.1% (2019: 15.1%). The corporation tax rate for the 2019 and 2020 financial years is 15%. In addition to corporation tax, there is a solidarity surcharge of 5.5% on the assessed corporation tax. Thus, the effective tax rate for the calculation of current income taxes for the 2020 financial year is 30.92% (2019: 30.91%).

149 Income tax expense for the current financial year breaks down as follows:

	2020 € thou.	2019 € thou.
Current tax expenses		
Current year and prior periods (expense -, income +)	−1,889	−1,278
Deferred tax income/expense		
Change to tax loss carryforwards	−1,250	2,159
Tax-effective goodwill amortisation	−1	1
Change of right of use	−979	−2,142
Change to long-term order production	580	−729
Change of lease liabilities	1,006	2,176
Change to pension provisions	−19	−6
Change to other assets	−34	29
Change to other provisions	489	284
	−208	**1,772**
EXPENSE - / INCOME + FROM INCOME TAXES	**−2,097**	**494**

150 The following table shows the reconciliation of income tax expense:

	2020 € thou.	2019 € thou.
IFRS earnings (before taxes)	12,189	10,086
Tax rate	30.92 %	30.91 %
Notional income tax expense	−3,769	−3,117
Off-balance sheet tax additions/reductions	194	−56
Foreign withholding taxes	−52	75
Non-capitalised new loss carryforwards	1,620	1,512
Utilisation of tax loss carryforwards	0	2,190
Tax expense from prior periods*	16	−95
Effects of tax rate differences	45	12
At-equity valuation**	−114	−37
Other	−37	10
CURRENT TAX EXPENSES / INCOME	**−2,097**	**494**

* of which: current taxes €-95 thousand (2019: €-115 thousand), deferred taxes €111 thousand (2019: €20 thousand)

** reported under Other in the previous year

151 The deferred taxes reported in IVU's consolidated statement of financial position break down as follows:

	31 Dec 2020 € thou.	Delta 2020	31 Dec 2019 € thou.
Deferred tax assets			
Goods	0	−6	6
Receivables Italy	0	−43	43
Other assets	81	15	66
Pension provisions	827	14	813
Other provisions	907	489	418
Lease liabilities	3,182	1,006	2,176
Tax losses carried forward	5,357	−1,250	6,607
	10,354	225	10,129
Deferred tax liabilities			
Tax-effective goodwill amortisation	−1,738	−1	−1,737
Right of use	−3,121	−979	−2,142
Long-term order production	−2,087	625	−2,712
	−6,946	**−355**	**−6,591**
Deferred tax assets/ liabilities, net	**3,408**	**−130**	**3,538**
of which affecting the income situation		−208	
of which equity changes		33	
of which deconsolidation IVU.elect		45	
Carrying amount			
Deferred tax assets	3,440	−113	3,553
Deferred tax liabilities	−32	−17	−15

152 The IVU Group has the following tax loss carryforwards:

	31 Dec 2020 € thou.	31 Dec 2019 € thou.
Loss carryforward for German trade tax	14,838	23,855
Loss carryforward for German corporation tax	19,697	28,624

There are no significant foreign loss carryforwards. The German loss carryforwards do not expire.

153 During the reporting year, a tax audit of IVU AG for the years 2015 to 2017 was completed. Agreement was reached on all open points. All notices for the years in question have already been issued and are final and have been taken into account accordingly in the tax items.

D. NOTES TO THE CONSOLIDATED INCOME STATEMENT

154 The income statement has been prepared in accordance with the total cost format.

Revenue from Contracts with Customers

155 Revenue is distributed to the various revenue types as follows:

	2020 € thou.	2019 € thou.
Goods/services/works contracts	38,924	41,543
Licences	21,415	19,588
Maintenance/Hosting	31,692	27,656
TOTAL	**92,031**	**88,787**

The position "goods/services/work contracts" include returns from licenses as part of consistent work contracts.

Of the contracts for implementation projects (for details of contract assets and contract liabilities on the reporting date, see paragraphs (116) et seq.) in place as at 31 December 2020, revenue of €51 million is likely to be realised in subsequent years, of which €19 million after more than twelve months.

Of the maintenance and hosting contracts in place as at 31 December 2020, revenue of at least €32 million is likely to be realised in the 2021 financial year.

The company makes use of the provision in IFRS 15.121(b).

Other operating income

156 Other operating income is composed as follows:

	2020 € thou.	2019 € thou.
Gain on disposal of subsidiaries	5,330	0
Income from the reversal of impairment losses	218	50
Government grants	348	52
Exchange rate gains	126	232
Other	81	46
TOTAL	**6,103**	**380**

In the current financial year, the gain from the sale of IVU.elect (see paragraph 106) is a special effect included in other operating income.

Cost of materials

157 Cost of materials is distributed to purchased goods and purchased services as follows:

	2020 € thou.	2019 € thou.
Cost of purchased goods	15,339	18,195
Cost of purchased services	12,433	8,844
TOTAL	**27,772**	**27,039**

Staff costs

158 Staff costs distribute as follows:

	2020 € thou.	2019 € thou.
Wages and salaries	39,439	33,835
Social security, post-employment and other employee benefit costs	6,765	5,877
Of which for pensions	2,750	2,354
TOTAL	**46,204**	**39,712**

Depreciation and amortisation on assets

159 Depreciation and amortisation on non-current assets break down into the following parts:

	2020 € thou.	2019 € thou.
On intangible assets	140	219
On rights of use	1,473	1,276
On property, plant and equipment	915	750
TOTAL	**2,528**	**2,245**

Other operating expenses

160 Other operating expenses can be distributed as follows:

	2020 € thou.	2019 € thou.
Selling expenses	1,558	2,684
Operating expenses	3,089	2,315
Administrative expenses	2,783	2,351
Other	1,424	2,340
TOTAL	**8,854**	**9,690**

Operating costs increased mainly due to the requirements of internal IT projects and the provision of IT infrastructure in line with demand. By contrast, the coronavirus pandemic led to a decrease in travel activities reported under selling expenses.

Earnings per share

161 Under IAS 33, the calculation of basic earnings per share is determined by dividing the consolidated net income by the weighted number of shares. The development of treasury shares is explained in paragraphs (125) to (127).

	2020	2019
Net profit / loss for the period (€ thousand)	10,092	10,580
Number of ordinary shares as at 1 Jan (thousands)	17,719	17,719
Number of ordinary shares as at 31 Dec (thousands)	17,719	17,719
Diluted earnings per share (EUR/share)	0.57 €	0.60 €
Number of circulating weighted shares (thousands)	17,597	17,719
BASIC EARNINGS PER SHARE (EUR/SHARE)	**0.57 €**	**0.60 €**

162 Diluted earnings per share are calculated by adjusting the profit attributable to ordinary shareholders and the weighted average number of shares outstanding for the effects of all the dilutive potential ordinary shares arising on the exercise of share subscription rights. For this purpose, the number of ordinary shares to be included is equal to the weighted average number of ordinary shares plus the weighted average number of ordinary shares that would be issued as a result of the conversion of all the dilutive potential ordinary shares

into ordinary shares. The conversion of stock options into ordinary shares is considered effective on the date on which the options were granted.

E. NOTES TO THE STATEMENT OF CASH FLOWS

163 The reported cash and cash equivalents are not subject to any restriction by a third party. Invested notice deposits with a notice period of at least three months of €25.0 million (2019: €0.0 million) are included under other assets. Interest and income tax payments are reported. In accordance with the resolution of the Annual General Meeting of 28 May 2020, a dividend of €0.16 per dividend-bearing share, €2,812,324 in total, was distributed. The composition of cash and cash equivalents is shown in paragraph (120). For the effects of the sale of IVU elect GmbH, we refer to the presentation in paragraph (106).

F. NOTES TO SEGMENT REPORTING

164 The IVU Group applies IFRS 8 Operating Segments. This standard requires the disclosure of information on the Group's operating segments. The IVU Group is organised and managed holistically.

Geographical segment information:

165 The IVU Group realised 49.3%, 10.6%, 8.2% and 8.2% of its revenues in the financial year with customers in Germany, Italy, Switzerland and the Netherlands. The basis for the allocation is the location of the customer.

	GERMANY		EUROPE		OTHERS		TOTAL	
in € thousand	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
Revenue from transactions with external customers	45,393	43,695	45,050	42,474	1,588	2,618	92,031	88,787
Assets per region	113,649	92,308	8,187	7,550	73	1,841	121,909	101,699
Investment expenditure	1,434	982	46	39	0	32	1,480	1,053
Impairments	1,011	831	1,517	1,397	0	17	2,528	2,245

166 IVU develops software solutions for the customer groups of transport operations (buses, trains, ferries) and purchasers (associations, states, municipalities) with the aim of supporting and optimising the planning and operation of transport services with intelligent IT systems. There were no customers with whom 10% or more of total sales were transacted in the financial year.

G. OTHER DISCLOSURES

Commitments and contingencies

Letters of credit

167 As at the end of the reporting period, letters of credit of €13,040 thousand, €375 thousand of which in foreign currency (2019: €10,882 thousand, €492 thousand of which in foreign currency) were assumed by various banks for the IVU Group.

Employees

168 The average number of employees of the IVU Group was 702 in the financial year (2019: 610). The breakdown of employees by function is as follows:

	2020	2019
Project work/sales	313	275
Production/software development	282	239
Administration	107	96
TOTAL	**702**	**610**

Auditing and consultancy fees

169 The auditor's fees recognised as expenses in the financial year amount to €151 thousand. In addition, expenses for other services were recorded by the auditor as follows:

	2020 € thou.
Tax advisory services	19
Tax compliance foreign countries	9

170 The non-audit services performed by the auditor solely relate to compliance activities, i.e. preparation of tax declarations, support within the scope of the tax audit and documentation.

Related party disclosures

171 Related parties are those with the ability to control the IVU Group or significantly influence its financial and operating policies. In addition to control, the existence of trust relationships was also taken into account in determining the significant influence of related parties on the financial and operating policies of the IVU Group.

Related companies

172 The affiliated companies included in the consolidated financial statements as well as the joint venture EBS are considered related parties. There are no other related parties.

173 In the financial year, the Group made payments of €754 thousand to the joint venture for financing purposes (see paragraph (109)).

174 Transactions between IVU AG and its subsidiaries consisted of the reallocation of license revenue, development services and allocations for services rendered that were eliminated in consolidation.

Related persons

175 The following persons are considered related parties:

Executive Board members of IVU AG

- Martin Müller-Elschner (CEO and CFO)
- Matthias Rust (member of the Executive Board)
- Leon Struijk (member of the Executive Board)

The members of the Supervisory Board were:

- Prof Herbert Sonntag, Berlin (Chairman of the Supervisory Board and the General Committee, Member of the Audit Committee)

  Professor emeritus for Transport Logistics at the Technical University of Applied Sciences, Wildau,

  Member of the Advisory Board and Honorary Member LNBB Logistiknetz Berlin-Brandenburg e.V.,

  Representative for Brandenburg of the Allianz pro Schiene e.V.,

  Spokesperson for Logistics in the Transport, Mobility and Logistics Cluster of the Berlin Brandenburg states,

  Visiting Professor at German-Kazakh University, Almaty Kazakhstan,

  Visiting Professor at Georgian Technical University, Tbilisi Georgia.

- Ute Witt, Potsdam (Deputy Chairwoman of the Supervisory Board and Chairwoman of the Audit Committee)

  Member of the Supervisory Board of Charité Research Organisation GmbH,

  Vice-Chairwoman, Treasurer and Head of the Budget Committee of the Berlin Chamber of Commerce and Industry,

  Member of the Tax Committee and of the Advisory Board of the German Industry and Trade Federation, Berlin,

  Member of the Federal Commissions for Taxes in the Economic Council of the CDU, Berlin,

  Chairwoman of the Executive Board of Potsdamer Steuerforum e.V., Potsdam,

  Member of the economic advisory board of the cathedral chapter Brandenburg, Brandenburg an der Havel,

  Member of the examination and audit committee of Berliner Stadtmission, Berlin,

  Managing Director of Ute Witt Tax Consulting UG Steuerberatungsgesellschaft, Berlin.

- Dr Heiner Bente, Hamburg (Member of the General Committee)

  Managing Partner, Dr. Heiner Bente Consulting, Hamburg,

  Senior Advisor at civity Management Consultants, Hamburg,

  Chairman of the Supervisory Board of birkle IT AG, Munich (since September 2020)

  Deputy Chairman of the Supervisory Board of birkle IT AG, Munich (until September 2020),

  Deputy Chairman of the Advisory Board of Schürfeld Gruppe, Hamburg.

- Prof. Barbara Lenz, Berlin

  Director of the Institute of Transport Research at the German Aerospace Centre, Berlin,

  Professor for Traffic Geography, Humboldt University of Berlin, Member of the Supervisory Board of Berliner Verkehrsbetriebe (BVG),

Cluster Spokeswoman for the Transport, Mobility and Logistics Cluster of the Berlin Brandenburg states.

- Benedikt Woelki, Berlin

  Support Account Manager IVU.suite at IVU Traffic Technologies AG, Berlin.

- Axel Zimmermann, Düren (Member of the General Committee)

  Quality manager at IVU Traffic Technologies AG, Aachen,

  Chairman of the Works Council of IVU Traffic Technologies AG at the Aachen location,

  Deputy Chairman of the General Works Council of IVU Traffic Technologies AG.

Related party transactions

176 There were no other business transactions between related parties and companies of the IVU Group in the reporting year or the previous year.

177 In the financial year 2020, Martin Müller-Elschner, CEO, sold 10,000 IVU shares on the market.

Remuneration of the Executive Board and the Supervisory Board

178 The Executive Board of IVU AG received remuneration of €1,817 thousand (2019: €1,643 thousand) in the 2020 financial year. The remuneration of the Executive Board comprises a fixed (€749 thousand) and a variable portion (€1,068 thousand). The variable portion amounted to 58.8% (2019: 58.5%) of total remuneration in the year under review.

On 25 May 2016 the Annual General Meeting resolved to exempt the company from the duty to disclose the remuneration of individual members of the Executive Board for the financial years 2016 until 2020, inclusive.

179 Under the Long Term Incentive Plan initiated by the company, the members of the Executive Board receive shares in the company as a further variable remuneration component in addition to an annual bonus (short-term variable remuneration component). The future transfer of the shares is dependent on the positive development of the IVU share price, taking into account the performance of the TecDAX stock market index. The term of the programme will end on 31 December 2022. The physical delivery of the shares would then have to be fulfilled by IVU in the first quarter of 2023. In accordance with the principle of sustainable remuneration, the right to transfer and the number of shares actually transferred to the Executive Board depends on the economic development of the company. A maximum total of 180,000 shares can be granted, the minimum number is 0. In addition to the remuneration information mentioned above, personnel expenses of €339 thousand (2019: €198 thousand) were taken into account as a variable remuneration component for the long-term incentive plan for the members of the Executive Board during the fiscal year. In the following years until the end of the programme, €339 thousand per year will be recognised through personnel expenses and added to the capital reserve. For further explanations, please refer to paragraphs (59) to (62).

180 Pension provisions of €2,585 thousand (2019: €2,555 thousand) were reported for former members of the Executive Board. Furthermore, pension payments of €151 thousand (2019: €151 thousand) were made for former members of the Executive Board.

181 The Supervisory Board received remuneration of €135 thousand in 2020 (2019: €101 thousand). The remuneration of the Supervisory Board does not include a performance-related component and consists of a fixed basic remuneration. An attendance fee has not been agreed.

182 The shareholdings of the members of the Executive Board and the Supervisory Board are as follows:

Executive Board	Shares 31 Dec 2020	Shares 31 Dec 2019
Martin Müller-Elschner (Chairman)	233,634	235,000
Matthias Rust	17,876	12,300
Leon Struijk	20,655	14,998
Supervisory Board		
Prof. Herbert Sonntag	866,000	866,000
Ute Witt	2,000	1,000
Prof. Barbara Lenz	1,200	-
Benedikt Woelki	100	-
Axel Zimmermann	1,029	680

Supplementary Report

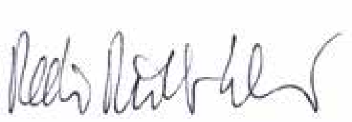
183 Since 31 December 2020, there have been no events of particular significance that have affected the situation of the Group regarding earnings, finances and assets.

Disclosures on the German Corporate Governance Code

184 The 2021 declaration of compliance was issued by the Executive Board and the Supervisory Board on 24 February 2021 and can be accessed by shareholders at all times on the IVU AG homepage (www.ivu.com) under Investor Relations.

The Executive Board

Berlin, 24 March 2021



Martin Müller-Elschner

Matthias Rust

Leon Struijk

CONSOLIDATED FIXED-ASSETS SCHEDULE

DEVELOPMENT IN INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT 2020

	HISTORICAL ACQUISITION/PRODUCTION COSTS			
	As at 1 Jan 2020	Addition	Disposal	**As at 31 Dec 2020**
I. Intangible assets	€ thou.	€ thou.	€ thou.	€ thou.
1. Industrial property rights and licenses, software	7,742	267	1	8,008
2. Goodwill	14,626	0	0	14,626
3. Primary intangible assets	15,503	0	0	15,503
	37,871	267	1	38,137
II. Property	0	0	0	
1. Technical equipment and machinery	410	0	122	288
2. Other equipment, operating and office equipment	9,599	1,213	384	10,428
3. Advance payments and assets under construction	4	1	0	5
	10,013	1,214	506	10,721
III. Financial assets	0	0	0	
1. Investments	0	754	369	385
	0	754	369	385
IV. Rights of use	0	0	0	
1. Real estate	8,088	4,239	0	12,327
2. Other equipment, operating and office equipment	386	210	96	500
	8,474	4,449	96	12,827
	56,358	**6,684**	**972**	**62,070**

DEPRECIATION					RESIDUAL BOOK VALUES	
As at 1 Jan 2020 € thou.	Addition € thou.	Currency difference € thou.	Disposal € thou.	**As at 31 Dec 2020 € thou.**	**As at 31 Dec 2020 € thou.**	As at 31 Dec 2019 € thou.
7,611	140	0	1	7,750	258	131
3,277	0	0	0	3,277	11,349	11,349
15,503	0	0	0	15,503	0	0
26,391	140	0	1	26,530	11,607	11,480
393	0	0	121	272	16	17
8,383	915	7	377	8,928	1,500	1,216
0	0	0	0	0	5	4
8,776	915	7	498	9,200	1,521	1,237
0	0	0	0	0	385	0
0	0	0	0	0	385	0
1,122	1,295	0	0	2,417	9,910	6,966
154	178	0	96	236	264	232
1,276	1,473	0	96	2,653	10,174	7,198
36,443	**2,528**	**7**	**595**	**38,383**	**23,687**	**19,915**

CONSOLIDATED FIXED-ASSETS SCHEDULE

DEVELOPMENT IN INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT 2019

	HISTORICAL ACQUISITION/PRODUCTION COSTS				
I. Intangible assets	**As at 1 Jan 2019** € thou.	Addition € thou.	Reclassification € thou.	Disposal € thou.	**As at 31 Dec 2019** € thou.
1. Industrial property rights and licenses, software	7,653	104	0	0	7,757
2. Goodwill	14,626	0	0	0	14,626
3. Primary intangible assets	15,505	0	0	0	15,505
	37,784	104	0	0	37,888
II. Property					
1. Technical equipment and machinery	511	0	0	66	445
2. Other equipment, operating and office equipment	8,515	666	3	252	8,932
3. Advance payments and assets under construction	3	0	-3	0	0
	9,029	666	0	318	9,377
II. Right of use					
1. Real estate	511	0	0	66	445
2. Other equipment, operating and office equipment	8,515	666	3	252	8,932
	9,026	931	3	318	10,278
	55,839	**1,701**	**3**	**636**	**57,543**

DEPRECIATION					RESIDUAL BOOK VALUES	
As at 1 Jan 2019	Addition	Reclassification	Disposal	**As at 31 Dec 2019**	**As at 31 Dec 2019**	As at 31 Dec 2018
€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
6,974	536	0	0	7,510	-7,510	679
3,277	0	0	0	3,277	-3,277	11,349
15,505	0	0	0	15,505	-15,505	0
25,756	536	0	0	26,292	-26,292	12,028
391	63	0	65	389	-389	56
7,381	815	0	251	7,945	-7,945	987
0	0	0	0	0	0	0
7,772	878	0	316	8,334	-8,334	1,043
391	63	0	65	389	-389	0
7,381	815	0	251	7,945	-7,945	0
7,772	878	0	316	8,334	-8,334	0
41,300	**2,292**	**0**	**632**	**42,960**	**-42,960**	**13,071**

AUDITOR'S REPORT

Reproduction of the audit opinion

We have issued the following audit opinion on the consolidated financial statements, the group management report and the ESEF documents:

INDEPENDENT AUDITOR'S REPORT

To IVU Traffic Technologies AG

Report on the audit of the consolidated financial statements and the Group management report

Reasonable assurance opinion

We have audited the consolidated financial statements of IVU Traffic Technologies AG, Berlin, and its subsidiaries (the Group) – consisting of the consolidated statement of financial position as at 31 December 2020, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the period from 1 January to 31 December 2020, in addition to the notes to the consolidated financial statements, including a summary of the key accounting policies. We also audited the Group management report of IVU Traffic Technologies AG for the financial year from 1 January to 31 December 2020. In accordance with German statutory provisions, we did not audit the content of the non-financial Group statement in chapter "B. Non-financial statement" nor the Group's corporate governance declaration in accordance with section 315d HGB under "Declaration on Corporate Governance as per Section 315d of the German Commercial Code (HGB)" in the Group management report.

In our opinion, based on the findings of our audit:

- the attached consolidated financial statements, in all material respects, comply with the IFRSs as adopted by the EU and the additional requirements of German commercial law in accordance with section 315e(1) HGB, and give a true and fair view of the net assets and financial position of the Group in accordance with these requirements as at 31 December 2020 and its results of operations for the financial year from 1 January to 31 December 2020; and
- as a whole, the attached Group management report provides a suitable view of the Group's position. In all material respects, this Group management report is consistent with the consolidated financial statements and with German legal requirements, and accurately presents the risks and opportunities of future development. Our audit opinion on the Group management report does not extend to the content of the non-financial Group statement in chapter "B. Non-financial statement" nor the Group's corporate governance declaration in accordance with section 315d HGB under "Declaration on Corporate Governance as per Section 315d of the German Commercial Code (HGB)" in the Group management report.

In accordance with section 322(3) sentence 1 HGB, we declare that our audit has not led to any objections to the regularity of the consolidated financial statements or the Group management report.

Basis for the reasonable assurance opinion

We conducted our audit in accordance with section 317 of the Handelsgesetzbuch (HGB – German Commercial Code), the EU Audit Regulation (No. 537/2014) and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW – German Institute of Public Auditors). Our responsibility under these provisions and policies is described further in the section of our audit report entitled "Auditor's responsibility for the audit of the consolidated financial statements and the Group management report". We are independent from the Group companies in accordance with the commercial and professional regulations of European and German law and have fulfilled our other German professional obligations in accordance with these requirements. Furthermore, in accordance with Article 10(2)(f) of the EU Audit Regulation, we declare that we have not performed any prohibited non-audit services as defined by Article 5(1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to serve as a basis for our audit opinions on the consolidated financial statements and the Group management report.

Key issues in the audit of the consolidated financial statements

Key issues pertaining to the audit are those that, based on our professional judgement, were most significant in our audit of the consolidated financial statements for the financial year 1 January to 31 December 2020. These issues were taken into account in the context of our audit of the consolidated financial statements as a whole and in the formation of our audit opinion; we have not issued a separate opinion on these issues.

The audit issues that we consider to be key are described below:

1. Revenue regognition with special consideration of the measurement of contract assets and liabilities from long-term project orders

Reasons for identification as a key audit issue

A significant part of the Group's business activities is conducted through long-term project orders. In addition, sales revenues are generated from maintenance and services. As at 31 December 2020, receivables from contract assets and liabilities from long-term project orders not yet invoiced and advance payments received on the same (figures before netting) are reported in the consolidated financial statements (see notes (116) to (118) of the notes to the consolidated financial statements).

Sales for maintenance and services is generally recognised when the services are rendered. Sales for long-term project contracts are generally recognized over a certain period of time according to the profit realization method based on the stage of completion. The relevant standard is IFRS 15 "Revenue from Contracts with Customers". As revenue from long-term contracts with customers can sometimes cover several financial years, there is an inherent estimation uncertainty in their accounting, particularly with regard to the expected total costs, the costs still to be incurred until completion, the estimated revenues and profit contributions and other project risks, which can be influenced by discretionary decisions of the company's officers. Revenues, estimated total costs and profit recognition may differ materially from the original estimates due to new information about the development of costs and changes in project scope during the term of a project agreement. The assessment of the stage of completion for the measurement of contract assets and liabilities from long-term project orders can be influenced by the adjustment of expected values or the consideration (or not) of expenses and thus sales revenues.

Due to the significant influence of sales revenues on the consolidated net profit for the year and the inherent estimation uncertainty, particularly with regard to the expected total costs and other project risks, which are influenced by discretionary decisions, we deem the revenue recognition with special consideration of the measurement of contract assets and liabilities from long-term project orders and related revenue recognition a key audit issue.

Audit procedure

Within a structural and functional audit of the accounting-related internal control system we have assessed the processes relevant to the recognition of sales revenues and the measurement of contract assets and liabilities from long-term project orders. We tested the effectiveness of the controls implemented for the processes recognising revenue from maintenance, services and long-term contract manufacturing as well as from progress billings and the recognition and allocation of staff costs to contracts at IVU Traffic Technologies AG, Berlin.

Sales from maintenance and services were reconciled on a sample basis to the relevant contractual arrangements with customers and evidence of service provision. For the measurement of contract assets and liabilities from long-term project contracts, we assessed the estimates and discretionary decisions made by the legal representatives on the basis of a risk-oriented selected sample within the framework of individual case audits. In particular, we have selected project orders that show significant changes in order values, cost and margin trends as well as other significant projects. As part of the assessment of the contract analyses carried out by the legal representatives, we assessed in particular whether the requirements for the recognition of revenue over time were met for project contracts. In addition, we assessed which different types of services the contracts contain and whether these can be independently defined and thus accounted for. Our audit procedures included, among other things, reviewing the contractual basis and terms and conditions, including contractually agreed provisions for partial deliveries and services, termination rights, penalties for delay and contractual penalties, and damages. In addition to obtaining audit evidence (e.g. project and partial acceptance and contract conditions), surveys and discussions were conducted with the responsible project management on the development of the projects, the reasons for deviations between planned costs and actual costs, the current assessment of the costs expected to be incurred until completion and the estimates of order risks in order to assess the valuation of customer orders with long-term contract production on the basis of the continuously updated project plans. In addition, evidence was obtained for recorded expenses with regard to the objective allocation of expenses and their economic origin before 31 December 2020, so that they could be taken into account when measuring the progress of work. In addition, analytical audit procedures were performed with regard to the development of contract values as well as planned and actual costs and the resulting estimated total costs and margin development. An audit was carried out for contractual liabilities to check the correct offsetting of inventories according to the percentage of completion with the partial final invoices and advance payments received on the basis of the partial final invoices, as well as incoming payments in random samples.

Our audit did not give rise to any objections regarding the sales recognition with special consideration of the measurement of contract assets and liabilities from long-term project orders and related revenue recognition.

Reference to related information

Related information can be found under notes (14), (15), (116) to (118) and from note (155) in the notes to the consolidated financial statements.

2. Impairment testing of goodwill

Reasons for identification as a key audit issue

Goodwill is recognized in the consolidated financial statements under intangible assets as at 31 December 2020. The recoverable amounts determined to assess impairment are based on the value of the cash-generating unit (CGU) in use as determined on the basis of the expected future cash flows, which are derived from the expected future operating results in the budget for the 2021 financial year, the detailed planning period until the 2025 financial year and the forecast perpetual annuity.

The impairment test to be performed at least once a year is a complex process based on discretionary assumptions, particularly with regard to the future development of the Group's financial position and results of operation as well as the discount rates used. Even relatively small changes in the discount rates used can sometimes have a significant impact on the amount of the calculated enterprise value or the recoverable amount. The outcome of these valuations is therefore highly dependent on how the legal representatives estimate future cash inflows and on the discount rates used in each case.

Given the complexity of the underlying company planning, which entails an elevated risk of accounting misstatement, and the degree of discretion displayed in measurement, we deemed the impairment testing of goodwill a key audit issue.

Audit procedure

We involved our measurement specialists in our audit procedures to assist in the assessment of the measurement method applied. We have followed the methodological procedure for carrying out the impairment test with regard to compliance with the requirements for an impairment test in accordance with IAS 36 Impairment of Assets. We assessed the assumptions regarding the future development on the basis of company planning by comparing this with the current development in the company's figures. In particular, regarding the impairment of the goodwill, we analysed the expectations of the company's officers regarding the future development and profitability of business and the underlying assumptions. With the support of our valuation specialists, we have compared and analysed the parameters used to determine the discount rates with externally available market data and reconstructed the calculation with regard to the resulting requirements of IAS 36 and IDW RS HFA 40.

We have also performed sensitivity analyses in order to assess a possible impairment risk in the event of a possible change in one of the key valuation assumptions.

Our audit procedures did not give rise to any objections regarding the impairment testing of goodwill.

Reference to related information

Related information provided by the company can be found under notes (12), (30), (104) and (105) in the notes to the consolidated financial statements.

Other information

The Supervisory Board is responsible for the report of the Supervisory Board, the company's officers are responsible for the miscellaneous other information. Other information includes the following:

- the content of the non-financial statement in chapter "B. Non-financial statement";
- the responsibility statement in accordance with section 297(2) sentence 4 HGB and section 315(1) sentence 5 HGB in chapter "E. Supplementary information" under "Responsibility Statement in accordance with section 315(1)" in the Group management report;
- the Group's corporate governance declaration in accordance with section 315d HGB in chapter "E. Supplementary information" under "Declaration on Corporate Governance as per Section 315d of the German Commercial Code (HGB)" in the Group management report.

and other elements intended for the annual report with the exception of the audited consolidated financial statements and Group management report and our audit opinion, in particular the report of the Supervisory Board and the Declaration of Compliance with the Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG) and the Responsibility Statement as well as the sections "Key figures", "Letter to the shareholders", "Interview with the Executive Board", "IVU worldwide", "Highlights", "IVU share, key figures" with the exception of the consolidated financial statements and the Group management report. Of this other information, we have obtained a version dated 19 March 2021 up to the date of issue of this audit opinion.

Our audit opinions on the consolidated financial statements and the Group management report do not extend to the other information, and accordingly we do not offer any audit opinion or any other form of audit conclusion on it.

In connection with our audit, we have the responsibility to read the other information and to assess whether the other information:

- contains material inconsistencies with the consolidated financial statements or our findings from the audit; or
- is otherwise materially misrepresented.

Responsibility of the company's officers and the Supervisory Board for the consolidated financial statements and the Group management report

The company's officers are responsible for the preparation of the consolidated financial statements that, in all material respects, comply with the IFRSs as adopted by the EU and the additional requirements of German commercial law in accordance with section 315e(1) HGB, and that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group. Furthermore, the company's officers are responsible for the internal controls that they have deemed necessary to enable the preparation of consolidated financial statements that are free from – intentional or unintentional – material misstatement.

In preparing the consolidated financial statements, the company's officers are responsible for assessing the Group's ability to continue as a going concern. They are also responsible for disclosing matters in connection the continuation of business activities, if relevant. Furthermore, they are responsible for the accounting on the basis of the going concern principle, unless there is the intention to liquidate or discontinue the Group, or there is no realistic alternative.

Moreover, the company's officers are responsible for the preparation of the Group management report that, on the whole, provides a suitable view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and with German legal requirements, and accurately presents the risks and opportunities of future development. Also, the company's officers are responsible for the precautions and measures (systems) that they deem necessary to enable the preparation of a Group management report in accordance with the applicable German legal requirements to provide sufficient suitable evidence for the statements in the Group management report.

The Supervisory Board is responsible for monitoring the Group's accounting process for the preparation of the consolidated financial statements and the Group management report.

Auditor's responsibility for the audit of the consolidated financial statements and the Group management report

Our objective is to obtain reasonable assurance as to whether the consolidated financial statements as a whole are free from material – intentional or unintentional – misstatement and whether the Group management report as a whole provides a suitable view of the Group's position and, in all material respects, is consistent with the consolidated financial statements, audit findings and German legal requirements, and accurately presents the risks and opportunities of future development, and to issue an audit report containing our audit opinions on the consolidated financial statements and the Group management report.

Reasonable assurance is a high degree of assurance, but not a guarantee that an audit performed in accordance with section 317 HGB, the EU Audit Regulation and the German generally accepted standards for the audit of financial statements promulgated by the IDW will always reveal a material misstatement. Misstatements can result from violations or inaccuracies, and are considered material if they could reasonably be expected, individually or collectively, to influence the economic decisions that users make on the basis of these consolidated financial statements and the Group management report.

We exercise due discretion and maintain a critical approach. Furthermore:

- We identify and assess the risks of – intentional or unintentional – material misstatements in the consolidated financial statements and the Group management report, we plan and perform audit procedures in response to these risks, and obtain audit evidence that is sufficient and appropriate to form the basis of our audit opinions. The risk that material misstatements are not detected is greater for violations than for inaccuracies, as violations can include fraud, falsification, intentional omissions, misrepresentation or the invalidation of internal controls;
- We gain an understanding of the internal control system relevant to the audit of the consolidated financial statements and of the systems relevant to the audit of the Group management report in order to plan audit procedures that are appropriate under the given circumstances, but not with the objective of expressing an opinion on the effectiveness of these systems;
- We assess the appropriateness of the accounting policies applied by the company's officers and the reasonableness of the estimates and related disclosures by the company's officers;
- We draw conclusions about the appropriateness of the going concern principle applied by the company's officers and, on the basis of the audit evidence obtained, whether there is material uncertainty about events or circumstances that can give rise to significant doubts about the Group's ability to continue as a going concern. If we come to the conclusion that material uncertainty exists, we are required to refer to the relevant disclosures in the consolidated financial statements and the Group management report in the auditor's report or, if these disclosures are inappropriate, to modify our respective audit opinion. We draw our conclusions on the basis of the audit evidence obtained up to the date of our opinion. However, future events or circumstances can lead to the Group being unable to continue its business activities;
- We assess the overall presentation, structure and content of the consolidated financial statements, including the notes, and whether the consolidated financial statements present the underlying transactions and events in such a way that the consolidated financial statements, in accordance with the IFRSs as adopted by the EU and the additional requirements of German commercial law in accordance with section 315e(1) HGB, give a true and fair view of the net assets, financial position and results of operations of the Group;
- We obtain sufficient, suitable audit evidence for the accounting information of the companies or business activities within the Group in order to issue audit opinions on the consolidated financial statements and the Group management report. We are responsible for designing, monitoring and performing the audit of the consolidated financial statements. We bear sole responsibility for our audit opinions;
- We assess that the Group management report is consistent with the consolidated financial statements and the law, and the view of the position of the Group that it provides;
- We perform audit procedures on the forward-looking statements made in the Group management report by the company's officers. In particular, on the basis of sufficient and suitable audit evidence, we analyse the significant assumptions on which the forward-looking statements are based, and assess whether the forward-looking statements have been properly

derived from these assumptions. We do not issue a separate audit opinion on the forward-looking statements or the underlying assumptions. There is a considerable yet unavoidable risk that future events will deviate materially from the forward-looking statements.

Among other things, we discuss with those responsible for overseeing the audit the planned scope and scheduling of the audit and significant audit findings, including any deficiencies in the internal control system that we identify during our audit.

We declare to those responsible for overseeing the audit that we complied with the relevant independence requirements and discuss with them all relationships and other issues that can reasonably be assumed to affect our independence, and the precautions taken against this.

Of the issues we discussed with those responsible for overseeing the audit, we determine which issues were most significant in the audit of the consolidated financial statements for the current reporting period and that are therefore the key audit issues. We describe these issues in our audit opinion, unless the public disclosure of such issues is prevented by law or other legal provisions.

Other legal and statutory requirements

Report on the assurance in accordance with section 317(3b) HGB on the electronic reproduction of the consolidated financial statements and the group management report prepared for publication purposes

Reasonable assurance opinion

We have performed assurance work in accordance with section 317(3b) HGB to obtain reasonable assurance about whether the reproduction of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the attached electronic file IVU_AG_KA+KLB_ESEF-2020-12-31 and prepared for publication purposes complies in all material respects with the requirements of section 328(1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance only extends to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained in this reproduction nor to any other information contained in the above-mentioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the group management report contained in the above-mentioned attached electronic file and prepared for publication purposes complies in all material respects with the requirements of section 328(1) HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the above-mentioned file beyond this reasonable assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from 1 January to 31 December 2020 contained in the "Auditor's report on the consolidated financial statements and on the group management report" above.

Basis for the reasonable assurance opinion

We conducted our assurance work on the reproduction of the consolidated financial statements and the group management report contained in the above-mentioned attached electronic file in accordance with section 317(3b) HGB and the Exposure Draft of IDW Assurance Standard: Assurance in Accordance with section 317(3b) HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410). Accordingly, our responsibilities are further described below in the "Group auditor's responsibilities for the assurance work on the ESEF Documents" section. Our audit firm has applied the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the executive directors and the supervisory board for the ESEF documents

The executive directors of the company are responsible for the preparation of the ESEF documents including the electronic reproduction of the consolidated financial statements and the group management report in accordance with section 328(1) sentence 4 No 1 HGB and for the tagging of the consolidated financial statements in accordance with section 328(1) sentence 4 No 2 HGB.

In addition, the executive directors of the company are responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of section 328(1) HGB for the electronic reporting format.

The executive directors of the company are also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and audited group management report as well as other documents to be published to the operator of the Federal Gazette.

The supervisory board is responsible for overseeing the preparation of the ESEF documents as part of the financial reporting process.

Group auditor's responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of section 328(1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of section 328(1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls
- Evaluate the technical validity of the ESEF documents, i.e., whether the electronic file containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815 on the technical specification for this electronic file.
- Evaluate whether the ESEF documents enable a XHTML reproduction with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Other disclosures in accordance with Article 10 of the EU Audit Regulation

We were elected as the auditor of the consolidated financial statements by the Annual General Meeting on 28 May 2020. We were engaged by the Supervisory Board on 13 November 2020. We have served as the auditor of the consolidated financial statements of IVU Traffic Technologies AG, Berlin, without interruption since the 2002 financial year.

We declare that the audit opinions contained in this audit report are consistent with the additional report to the Supervisory Board in accordance with Article 11 of the EU Audit Regulation (audit report).

Responsible auditor

The auditor responsible for the audit is Dr Ingo Röders.

Berlin, 24 March 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Dr. Röders	Weinberg
Auditor	Auditor

FINANCIAL CALENDAR 2021

THURSDAY, 24 MARCH 2021
Annual Report 2020

WEDNESDAY, 26 MAY 2021
Quarterly report as at 31 March

THURSDAY, 27 MAY 2021
Annual General Meeting

THURSDAY, 26 AUGUST 2021
Half-year report as at 30 June

THURSDAY, 18 NOVEMBER 2021
Quarterly report as at 30 September

BOARDS

Supervisory Board

- Prof. Herbert Sonntag (Vorsitzender)
- Ute Witt
- Dr Heiner Bente
- Prof. Barbara Lenz
- Benedikt Woelki, IVU
- Axel Zimmermann, IVU

Executive Board

- Martin Müller-Elschner (Chairman)
- Matthias Rust
- Leon Struijk

Advisory Board

- Prof. Manfred Boltze, Darmstadt
- Alain Flausch, Brüssel (BE)
- Bert Meerstadt, Bussum (NL)
- Prof. Adolf Müller-Hellmann, Köln
- Prof. Ronald Pörner, Berlin
- Volker Sparmann, Hofheim am Taunus

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IMPRINT

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The Annual Report 2020 can be downloaded in English and German as PDF file at www.ivu.com.

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