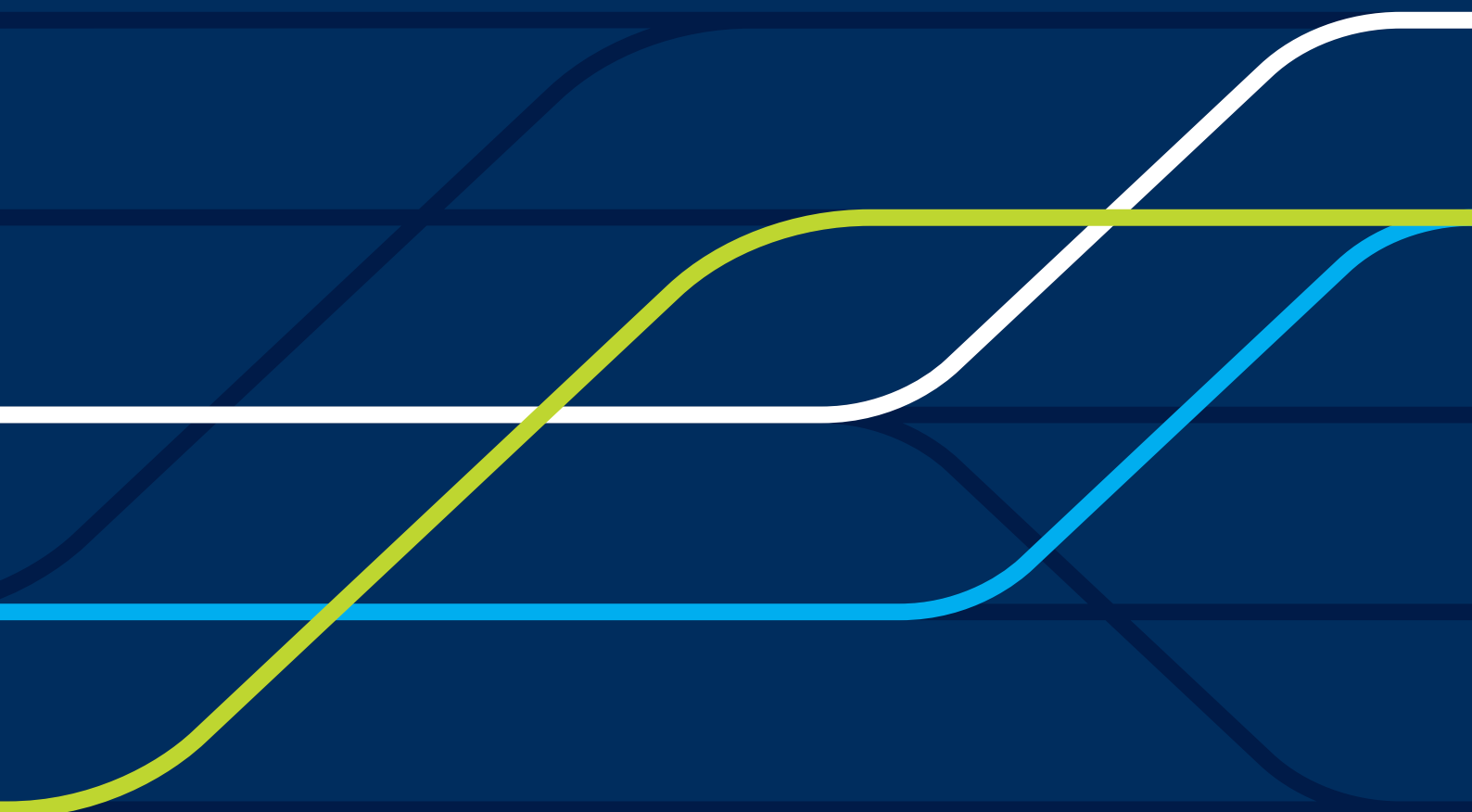


SUSTAINABILITY REPORT **2018**







CSR REPORT

IVU Traffic-Technologies AG

4 COMPANY

- 6 Profile
- 7 Goals

8 CSR STRATEGY

- 10 Initial situation
- 10 Analysis
- 12 Management
- 13 Report

14 ENVIRONMENTAL RESPONSIBILITY

- 18 Green mobility
- 19 Climate protection
- 20 Resource conservation

22 RESPONSIBILITY FOR EMPLOYEES

- 26 Employee rights
- 27 Equal opportunities
- 28 Training
- 29 Employees in transport companies

30 SOCIAL RESPONSIBILITY

- 34 Public transport as development aid
- 34 Human rights
- 34 Community
- 35 Exerting political influence
- 36 Conduct conforming to laws and directives

36 OUTLOOK

NATURALLY RESPONSIBLE

CEO Martin Müller-Elschner talks about the first CSR report by IVU and the spirit of idealism that pervades his employees

Mr Müller-Elschner, why is IVU publishing a CSR report for the first time?

You're right, we could actually have done so earlier because IVU has been practising much of what we describe in this report for a long time already. Practically since the foundation of IVU, it has been part of our identity that we are not solely concerned with doing business and making money, but that we feel a sense of responsibility for the people who work for us and for the society in which we operate. You could say that it is in our genes. The fact that we fell under the remit of the provisions of the CSR reporting obligation in 2018 is therefore a welcome opportunity for us to structure the activities in the various fields in a systematic way.

Where does this identity stem from?

I believe that it results primarily from our special subject area of software for public transport. We always spell out IVU as "Informatik" (IT), "Verkehr" (transport), "Umwelt" (environment). Anyone who is interested in and working in these areas is also always a bit of an idealist, a do-gooder. For our employees, our systems are not just any old software that they program, sell and install, they are also meaningful. The people at IVU care deeply about whom and what they are working for.

How does IVU software contribute to society?

In general, it is fair to say that our systems help make what is already the eco-friendliest mode of transport even better, faster, more resource- and energy-efficient, and even greener. As a rule of thumb, a transport operator that introduces our planning software, for instance, can expect an increase in efficiency of five percent, which is really significant.

"ANYONE WHO WORKS AT THE COMPANY IS ALSO ALWAYS A BIT OF AN IDEALIST, A DO-GOODER."

But surely you don't need a CSR report to communicate this to your customers?

Not necessarily, but our responsibility does not end with the product. For example, in the history of IVU stretching back over 40 years, we have never abandoned a project, we have always stood by our customers and done everything possible to resolve problems whenever they arose in projects. I myself recently had a very different experience with a software vendor, a major company: They delivered and installed the software and then they were gone. They didn't care whether or not the system functioned as desired in everyday use. We think and act differently in this regard, and this aspect of responsibility is something of genuine value to our customers.

Along with your customers, isn't the key target group for the report likely to be employees?

Yes, we are constantly hiring IT professionals and other engineers. In this context, this report presents a very strong argument in favour of IVU as an employer – namely for all young people who on the one hand find complex programming, algorithms, process optimisation and digitalisation exciting and on the other hand want to implement all of this in a socially important area. Added to this is the really positive spirit that prevails at the company.

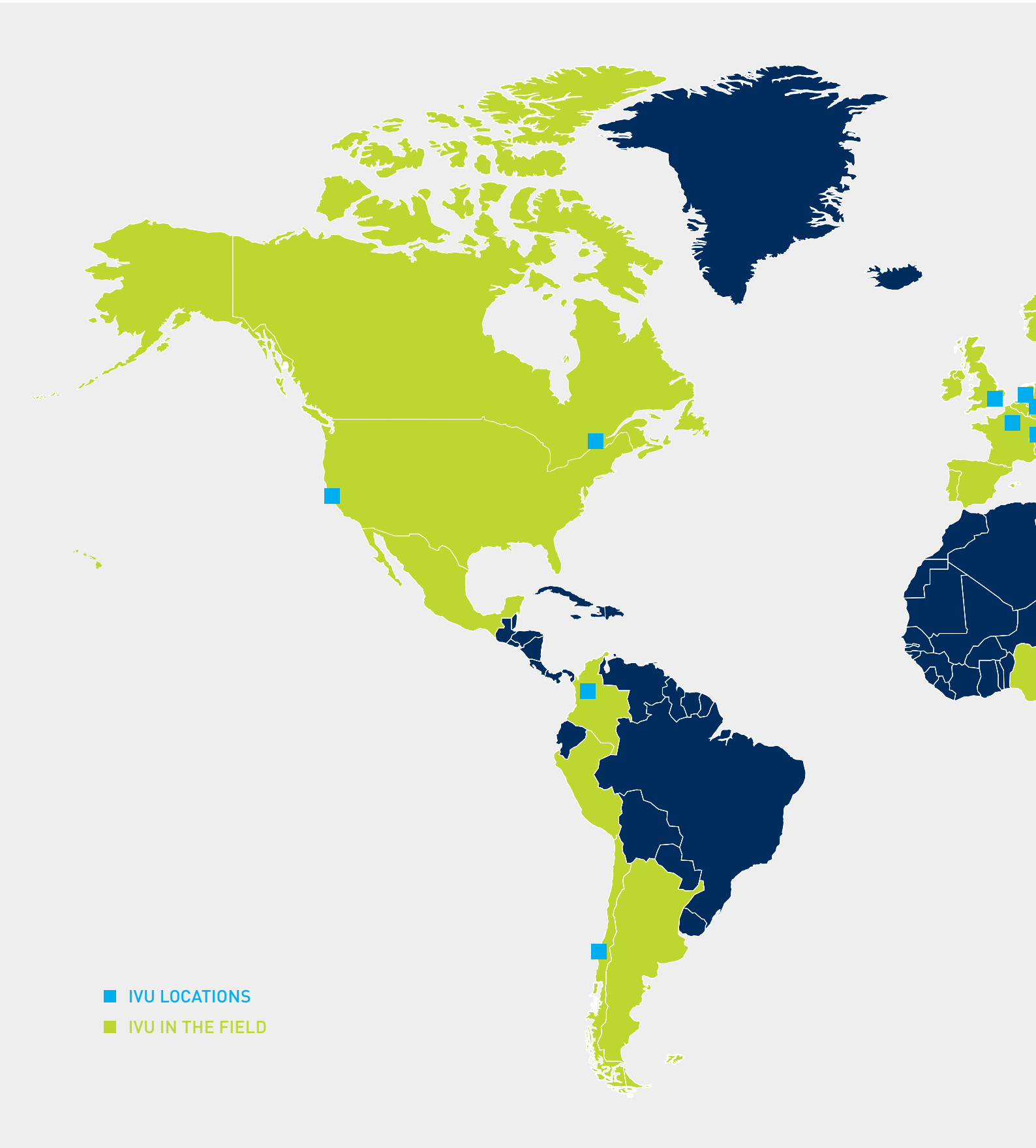
Social responsibility at IVU is an issue for which you take direct responsibility. Why is that?

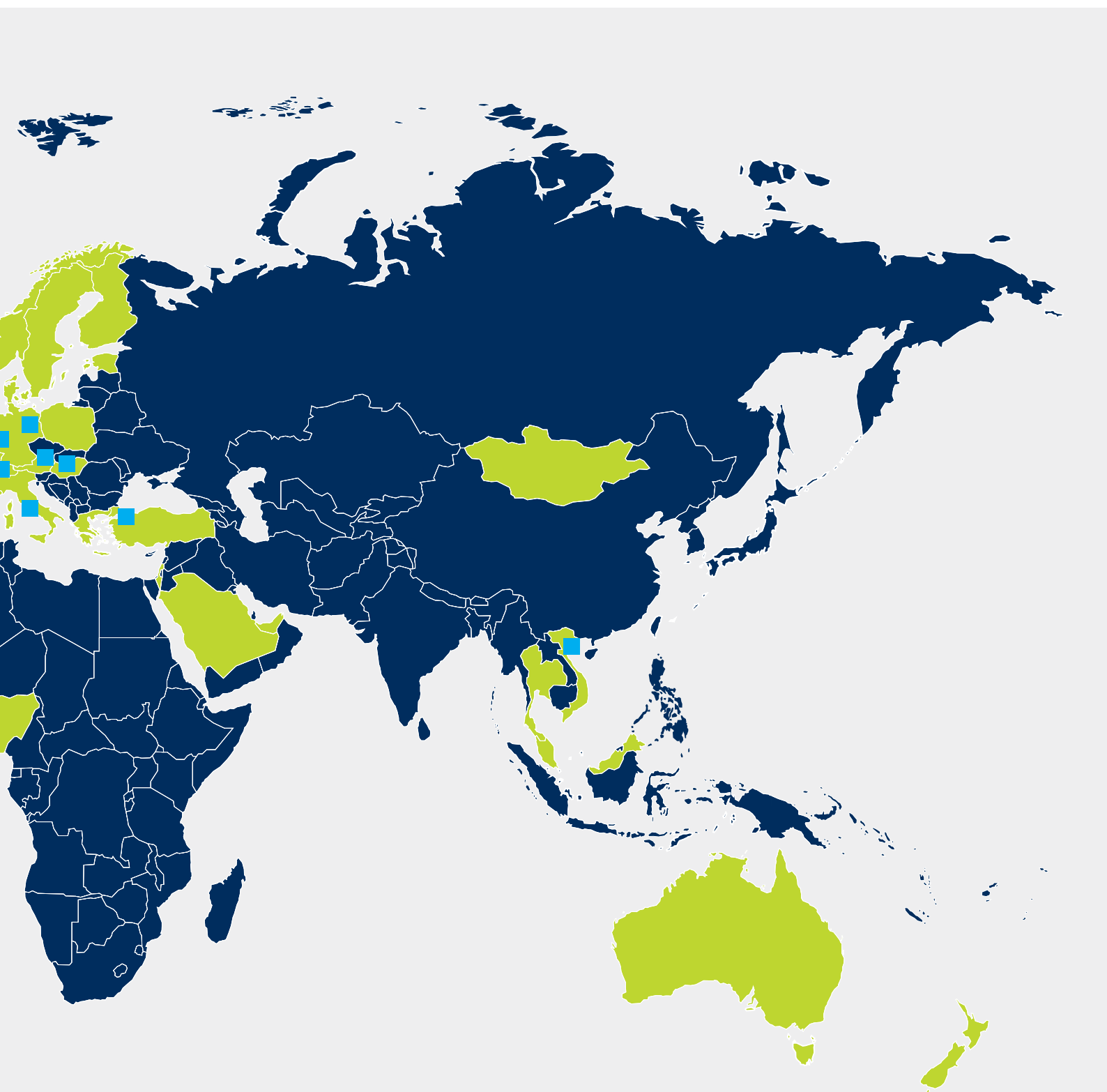
Because it is important to me. And because my role involves me looking into all areas of the company: software development, our projects, the Sales department, Human Resources, Investor Relations. I believe that corporate responsibility cannot be confined to just one particular area. You have to apply it everywhere. For that reason, it should be a matter for the boss.

“CORPORATE RESPONSIBILITY MUST BE A MATTER FOR THE BOSS.”



COMPANY







Profile

IVU Traffic Technologies AG has been developing sophisticated IT solutions for public passenger and freight transport for over 40 years. In so doing, the company ensures punctual and reliable transport in towns and major cities across the globe. Besides being a key prerequisite for the proper functioning of urban areas – transport poses a logistical challenge that calls for smart and secure software.

IVU systems plan and optimise the use of buses, trams, trains and drivers. They also provide passengers with real-time information and sell tickets. More than 500 customers worldwide rely on the solutions by IVU, which are based on open standards and can be integrated in different system environments.

IVU was established in 1976 as a spin-off of the Technische Universität Berlin and has grown steadily since then. In 2018, the company employed 558 people – including more than 500 engineers. The company has been listed since 2000 and, in addition to its headquarters in Berlin, operates 15 locations in Europe and further afield. In 2018, IVU generated profits of €77.8 million from revenue of €6.7 billion.



Goals

IVU has set itself three key corporate goals:

- IVU is a global player for IT applications in the public transport sector. This means that the company today with the IVU.suite system already sets the standard for IT solutions for planning and operating public transport and is the market leader across a range of regions and customer groups. This applies in particular to the German domestic market, on which virtually all transport operators use IVU systems. In addition to this, the company is targeting a leading role in Europe as well as in selected international markets.
- IVU is consistently profitable. Only long-term economic success safeguards the company's independence. For IVU, this means profitability greater than 10%, ideally 15%, in every segment. This enables both investments as well as distributions to the owners and employees.
- IVU maintains an attractive corporate culture. It describes the current state of affairs on the one hand but also represents a key objective on the other. For a company such as IVU, it is obvious that its most important asset is the workforce of clever, dedicated, innovative minds with strong leadership qualities. The company must attract and retain them.

CSR STRATEGY





IVU sees itself as a citizen of society that sets high standards of responsibility with respect to its customers, employees, investors, the environment and the society in which it operates. In this context, the CSR strategy of IVU is closely linked to the three corporate goals mentioned above. Both approaches must ultimately act in the same direction to truly place the company's economic activity on a secure footing over the long term. There are two important reasons for this. On the one hand, a company that pursues – or stipulates – different goals in society than it pursues commercially would sooner or later be suspected of misrepresentation or greenwashing, thereby putting its credibility at risk.

At the same time, a company must always be capable of acting responsibly in accordance with ethical basic principles before it can actually do so. An organisation cannot do the right thing if it lacks the ability to do so. In concrete terms, this means that a company must first generate the financial means that will enable it to act responsibly. Therefore, IVU sees its social actions as being closely related to its commercial actions and, based on this strong conviction, attaches the same importance to the non-financial CSR report as it does to the company's management and financial report.

Initial situation

Acting responsibly has always been part of the IVU identity: both with respect to its customers and to its employees and the society in which the company operates. With regard to long-term commercial success, the non-financial services highlighted in this report, some of which have existed in these or similar forms for many years, play a particularly important role as well.

Up to now, however, activities of IVU across different areas had never been presented as a single overview in this way. The fact that the company falls under the requirements of the CSR Directive Implementation Act (CSR-RUG) during the reporting year 2018 is therefore a welcome opportunity for the company management to systematically assess the activities of IVU. This is the primary goal of this report, which will be updated in the years ahead.

One way to meet the reporting obligation in line with the CSR-RUG is to enhance the management report to include the subject areas specified in the directive (environmental, employee and social issues, human rights, combating corruption and bribery). Alternatively, a separate non-financial declaration may be published no later than four months after the end of the fiscal year. In this reporting year, IVU has opted for a separate report in the form presented here, which will be published at the same time as the financial report.

The CSR-RUG does not define a specific standard for a non-financial report. Companies can invoke national, European or international frameworks. With its CSR report for 2018, IVU celebrates the beginning of its non-financial reporting obligation. Therefore, the first priority is to take stock of the various activities and to incorporate them into an overall system. Goals and related concepts in the individual reporting areas will only be derived from this as part of an additional step. For this reason, IVU has decided to report in line with the requirements of the CSR-RUG for 2018. For the subsequent years, a non-financial report based on one of the common reporting standards (German Sustainability Code or Global Reporting Initiative) is targeted.

Analysis

In early summer 2018, Executive Board members and other managers from the different areas of the company held a workshop supported by an external expert to assess the status of CSR activities in the company, develop areas of action and thus lay the foundations for this CSR report. The workshop was supplemented by a series of interviews with IVU managers. The results of the workshops were consolidated and discussed with the Executive Board. After this, a materiality analysis was performed. For this purpose, a list of stakeholders of particular importance to IVU as well as other stakeholders was created.



Key stakeholders

- Customers
- Project partners
- Employees
- Applicants
- Investors

Other stakeholders

- Authorities
- Associations
- The general public

In the second step, a materiality matrix was used to define the topics to be highlighted in this report within the areas mentioned by the CSR-RUG. In this context, materiality derives from the intersection of stakeholder expectations and the relevance of topics for IVU and, for this report, is based on our own assessments as well as regular exchanges of information between the company management and most of the stakeholders. Along with employees, customers, suppliers, investors and journalists, this also includes scientists, politicians, associations and non-governmental organisations. A systematic survey of these target groups has not been carried out for this report.

Key topics

Environment

- Green mobility
- Climate protection
- Resource conservation

Employee matters

- Employee rights
- Equal opportunities
- Training
- Employees in transport companies

Social matters

- Public transport as development aid
- Community
- Exerting political influence

Human rights

- Supply chains

Combating corruption and bribery

- Compliance management

These topics are examined in this report, with the areas of human rights and combating corruption assigned to the heading “Social matters” in the classification. These topics are to be monitored and reported on an ongoing basis going forward. Depending on the company’s development and requirements, topics can be added or omitted in the years ahead.

Management

For IVU, the company’s responsibility in the various areas mentioned in the CSR-RUG 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 four times annually at the meetings of the Supervisory Board and from the members of the newly established Advisory Board at IVU, which is made up of respected managers and experts from the sector. Shareholders also frequently provide impulses. Moreover, the very open corporate culture allows important issues raised by employees to reach the managers and Executive Board members of the company quickly.

Report

This non-financial report by IVU for fiscal year 2018 systematically presents for the first time the current status of the company's activities in the subject areas specified by the legislation (CSR-RUG). Goals and concepts are described, insofar as they are present. Otherwise, their absence should be attributed to the fact that this report marks IVU's first foray into the area of CSR reporting. Additional steps will follow in the next few years and will then be highlighted in the subsequent reports.

According to the CSR-RUG, the most important risks associated with the actual business activity that are also very likely to have severe negative consequences on the CSR reporting subject areas specified by the legislation must be mentioned. Reference is made here to the interdependence of the CSR goals with the corporate goals. IVU monitors all risks to the company as part of its standard risk management, which is presented in the financial reporting. With regard to the aspects of non-financial reporting, there were no very likely and severely negative consequences identified that are not already mentioned there.

The following section outlines the areas of non-financial reporting mentioned in the legislation, whereby the areas of "human rights" and "combating corruption and bribery" are assigned to the classification heading "Social responsibility". In so doing, IVU meets the requirements of the CSR Directive Implementation Act (CSR-RUG). All information contained in this report that falls within the scope of financial reporting is taken from the 2018 annual report of IVU Traffic Technologies AG.



ENVIRONMENTAL RESPONSIBILITY





The two division managers Bastian Dittbrenner (Public Transport) and Oliver Grzegorski (Rail) discuss by far the most important environmental impact of IVU: that of its systems in service with customers.

Mr Grzegorski, Mr Dittbrenner, you are responsible for the business with public transport operators at IVU – by rail and on the road. What do you offer them?

Grzegorski: Generally speaking, we use our software to make the eco-friendliest mode of transport even better, even more effective, even more attractive and therefore even greener.

The eco-friendliest mode of transport? Is that true even when you see buses, trams or trains travelling around half-empty?

Dittbrenner: The statistics are very clear: Even if you assume an average occupancy of only around 20 percent, a public bus performs almost 50 percent better than the car when it comes to greenhouse gas emissions: 75 grams per passenger-kilometre compared with 139 grams. The aeroplane, in comparison, emits more than 200 grams. Buses, trams and trains also perform far better than cars or aeroplanes in terms of pollutants.

How exactly do you make public transport better?

Grzegorski: The goal is to have fewer buses, trams or trains and more passengers. Our software helps us achieve this. On the one hand, our planning, control and optimisation systems ensure fewer non-revenue trips, less parking time, more effective routes and improved utilisation for the transport operators, which saves them unnecessary costs and further reduces the environmental footprint of public transport. On the other hand, our information and ticketing systems ensure that public transport becomes even more attractive and that even more passengers use it.

Can you quantify the effect that IVU has on the environmental footprint?

Dittbrenner: We would love to but unfortunately it is very difficult to do so because the transport operators vary significantly in terms of size and the composition of their transport services. What our customers measure is first of all their savings in euros and not all of them report these to us. Roughly speaking, one can say that the introduction of IVU.suite will deliver savings of five percent to companies on average. That is quite a lot.

Once or every year?

Grzegorski: Initially, when the system is introduced. However, optimisation is an ongoing process, after all, because traffic also varies from timetable to timetable. Passenger counts have been rising sharply almost everywhere for years, new lines are

appearing everywhere and operating more frequent services. Particularly in metropolitan areas, this can only be managed with the help of smart software, and it is precisely in these scenarios that our software is in demand.

Dittbrenner: And new technologies are continuously emerging, such as today's electric mobility. Electric buses are a major trend with our customers. And they present a real challenge.

In what way?

Dittbrenner: A diesel bus can cover 600 kilometres before it needs to refuel. Depending on the equipment fitted, the average electric bus must recharge after 120 kilometres. Charging takes much longer than refuelling, and both the charging infrastructure and the level of power available are limited. You first have to figure all of this out in your planning and dispatch processes. We are proud that we have taught our system to manage electric mobility and that we can now offer it to our customers with the reliability that they expect.

We are witnessing the emerging trends of car sharing, ride-sharing systems and autonomous driving – do we need public transport at all in these times of digital connectivity?

Grzegorski: Unquestionably, of course we do. These new services will all find their market and provide supplementary offerings, but they will never be able to replace the public transport network. Ultimately, this is also a social question as to whether I can travel where I want at a reasonable price. Public transport is extremely successful today, provided that the quality is right. Our systems also help in this regard by ensuring punctuality and by providing accurate information in real time in the event that something unexpected happens.



**COMPARISON OF AVERAGE EMISSIONS FROM INDIVIDUAL
MODES OF PASSENGER TRANSPORT – REFERENCE YEAR 2017**

	Car	Coach	Railway, long-haul transport	Aero- plane	Public bus	Railway, local transport	Tram, suburban rail and metro
Greenhouse gases	139	32	36	201	75	60	64
Carbon monoxide	0,60	0,04	0,02	0,13	0,05	0,04	0,04
Volatile organic compounds (VOCs)	0,14	0,01	0,00	0,04	0,03	0,01	0,00
Nitrogen oxides	0,34	0,17	0,04	0,51	0,28	0,18	0,06
Particulate matter	0,004	0,003	0,000	0,004	0,002	0,002	0,000
Occupancy	1.5 Pers./car	60%	56%	82%	21%	27%	19%

Green mobility

Public transport using buses, trams and trains is by far the most eco-friendly mode of transport with regard to emissions of greenhouse gases and pollutants – far better than private transport and the aeroplane. The use of public transport services in Germany has been increasing for years. The companies of the Association of German Transport Companies provided transport services covering 95.2 billion passenger-kilometres in 2018. 10.4 billion passengers travelled by bus, tram and train and, in the process, saved 15 million metric tons of carbon dioxide.

With virtually all of these transport operators – and with many others across numerous countries – IVU systems ensure that the public transport services run smoothly and efficiently and attract as many passengers as possible. IVU.suite supports transport operators from planning, dispatching, operational control, ticketing and passenger information through to the settlement of transport contracts. IVU systems plan routes, get buses running, inform passengers, ensure connections, control traffic signals, dispatch drivers, monitor fleets, collect data and ensure efficiency. As a result, IVU systems make a substantial contribution to the positive environmental impact of public transport. More than 500 customers worldwide already use IVU software, and the ten thousandth IVU.box on-board computer was delivered at the end of 2017.

During the 2018 reporting year, IVU presented a series of additional innovations that make public transport even more effective and even more attractive to

passengers at the world's leading trade fair for public transport, InnoTrans in Berlin.

IVU.suite, IVU's standard system for public transport, is now also suitable for the deployment of electric buses, which presents unique challenges with regard to vehicle working scheduling. The system knows the properties of the vehicles, the charging options and the route situations, and assists with suitable suggestions. This ensures maximum utilisation of electric buses and optimises the deployment of employees. There is a particular focus on integrated management: The system combines electric and combustion-engine buses in a single user interface and allows joint planning, dispatching, operational control and passenger information.

Together with the London-based technology start-up UrbanThings, IVU has launched the IVU.ticket.app for mobile ticketing. The app uses Bluetooth to track trips and manage payments. This allows the system to provide a simple and cost-effective solution, allowing passengers to board easily without taking out their smartphones.

IVU.rail, IVU's standard system for railways, detects potential damage on trains promptly and integrates the necessary maintenance of trains in planning and dispatch processes. To do this, the software evaluates data from CBM systems, issues a warning in the event of critical values and automatically determines the optimum maintenance window. Thanks to the seamless connection, IVU.rail also books the right workshop immediately.

Climate protection

IVU contributes in two respects to the reduction of climate-relevant emissions. In operational terms, it makes use of the available possibilities to reduce its CO₂ footprint and that of its employees. In addition, its products promote low-emission and efficient use of vehicles while boosting the appeal of public transport.

Sustainable efficiency for the customer

Correctly used, the IVU solutions help public transport operators in many ways to achieve long-term reductions in climate-relevant emissions. On the planning side, products such as IVU.run and IVU.vehicle make it possible to minimise the number of buses used. Especially with the help of complex optimisation algorithms, it is possible to create vehicle working schedules that are several percent more efficient, resulting in fewer non-revenue trips. Ideally, transport operators can dispense with one or more vehicles yet still provide the same level of service.

Various new functionalities also make it easier for transport operators to switch to local emission-free electric buses. In this respect, IVU was one of the first providers of planning solutions for public transport to introduce the necessary adjustments in its systems.

Assistance systems on board the vehicles also help drivers to adapt their driving style to the traffic situation. Buses fitted with combustion engines produce fewer emissions if, for example, drivers can brake and accelerate in an anticipatory manner. This driving style benefits battery-powered electric buses by extending their range and correspondingly reducing their need for charging.

IVU goes to great lengths to optimise its products for reduced resource consumption. For instance, it has successfully reduced the charging times for the on-board computers by several seconds. This results in shorter vehicle idle times when they are restarted. With more than 10,000 on-board computers installed, this adds up to a substantial reduction in pollutant emissions.

Ecological responsibility in the company

As an eco-friendly company, IVU also takes responsibility for its own greenhouse gas emissions. To this end, we undergo regular energy audits in line with DIN EN 16247-1 with the aim of minimising our energy con-

sumption 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. In accordance with the specifications of the Energy Services Act, the standard describes a standardised approach to analysing a company's energy consumption.

To operate our server infrastructure for our own as well as our customers' hosted systems, we also work with certified IT service providers. Hosting provider e-shelter implements extensive energy management systems at its Frankfurt 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 CO₂ emissions or radioactive waste.

IVU sees itself as a public transport company. The same applies to business trips: IVU employees mainly use public modes of transport when travelling on business. Taxis and rental cars are only used in excep-



tional cases. To limit the need for business travel, all branches are equipped with modern video conference systems that facilitate meetings involving different locations.

IVU also encourages climate-friendly behaviour among our employees in their private lives by subsidising monthly and annual subscriptions for public transport by up to 50 euros per month.

Resource conservation

Natural resources

As a pure software vendor, IVU does not manufacture any devices. Accordingly, IVU does not consume any raw materials for the production of hardware. Devices marketed by IVU under its own name, such as the on-board computers IVU.box and IVU.ticket.box, are manufactured for IVU by PHYTEC Messtechnik GmbH, which is based on Mainz.

As part of its membership of the ZVEI – Zentralverband Elektrotechnik- und Elektronikindustrie e.V., PHYTEC is committed to its social responsibility and applies the association's code of conduct on a voluntary basis. The signatory companies commit themselves, among other things, to act in an environmentally conscious manner and to deal responsibly with natural resources in line with the principles of the Rio Declaration. In keeping with this approach, PHYTEC meets all its electricity needs with renewable energy sources.

PHYTEC is bound by the terms of the RoHS Directive and is a "downstream user" as defined in Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Under normal and all reasonably foreseeable conditions, PHYTEC products do not release any chemicals. The company's products also do not contain any "substance of very high concern" (SVHC) pursuant to the candidate list of the European Chemicals Agency (ECHA) with regard to REACH and the banned list with regard to the Chemical Risk Reduction Ordinance.

Production of IVU devices takes place entirely in accordance with German and European environmental and safety standards at the company headquarters of PHYTEC in Mainz. In addition, certain components are manufactured in Poland. The company has stated that it only uses electronic parts and components from reputable manufacturers and trusted distributors in its products. Furthermore, it does not conduct any direct imports of minerals or "conflict minerals". Neither does it process these directly or indirectly.

Resource management

IVU handles natural resources responsibly and makes every effort to minimise the environmental impact in the company. Consumables such as plastic and cardboard packaging waste are separated on site and sent for recycling. IVU collects electronic waste such as

display screens, lamps, headphones and other small electrical and electronic devices at all locations in special waste containers that are then sent for recycling. At all locations, IVU works with specialist service providers in this field that dispose of the equipment properly or technically recondition PC hardware for use on the second-hand market. IVU separates old furniture based on the materials contained such as wood, metal and plastic and disposes of valuable substances at the local recycling facilities.

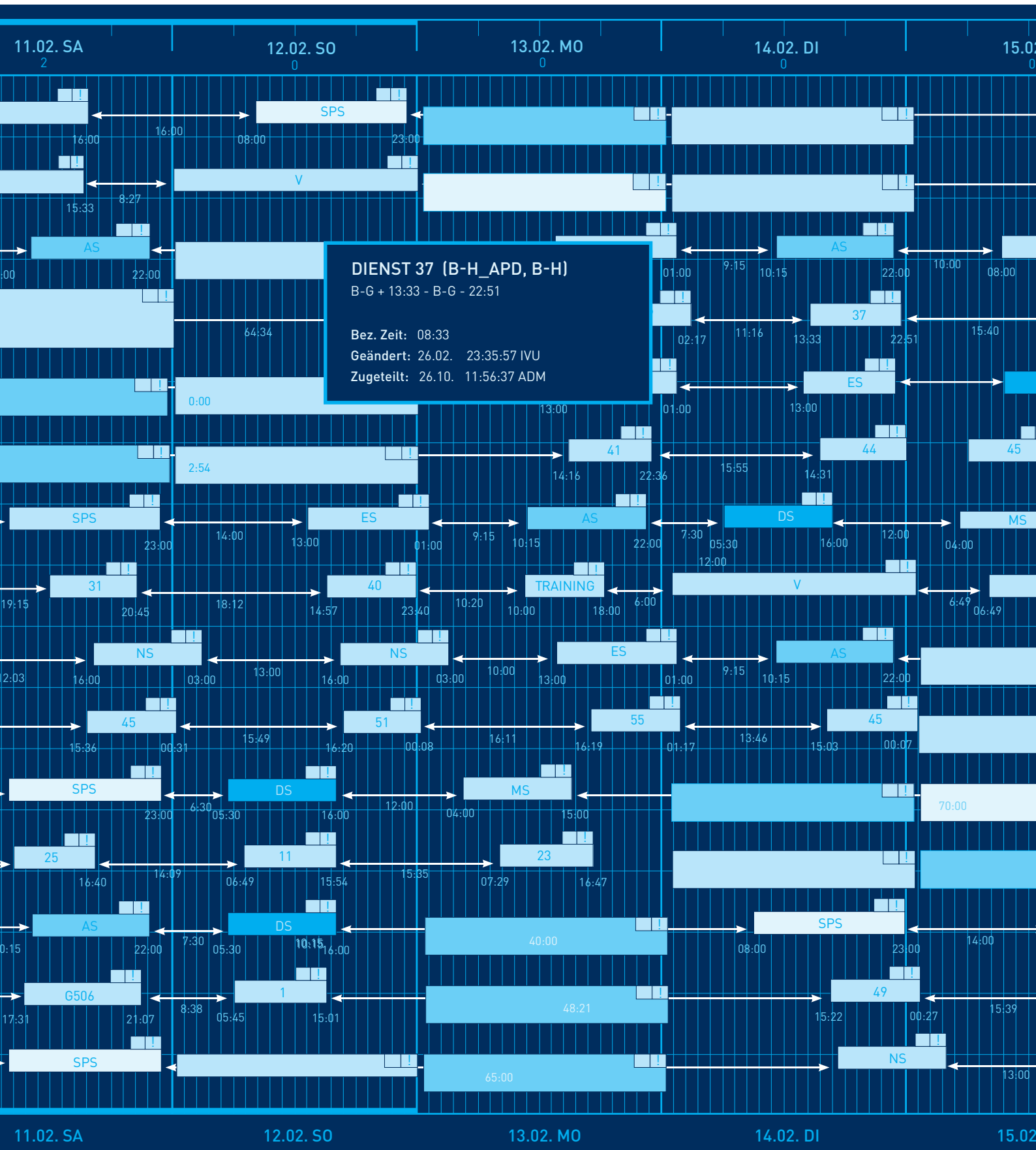
The most important energy source in the company in 2018 was electricity. At its development location in Berlin, IVU makes exclusive use of electricity generated from renewable energy sources.

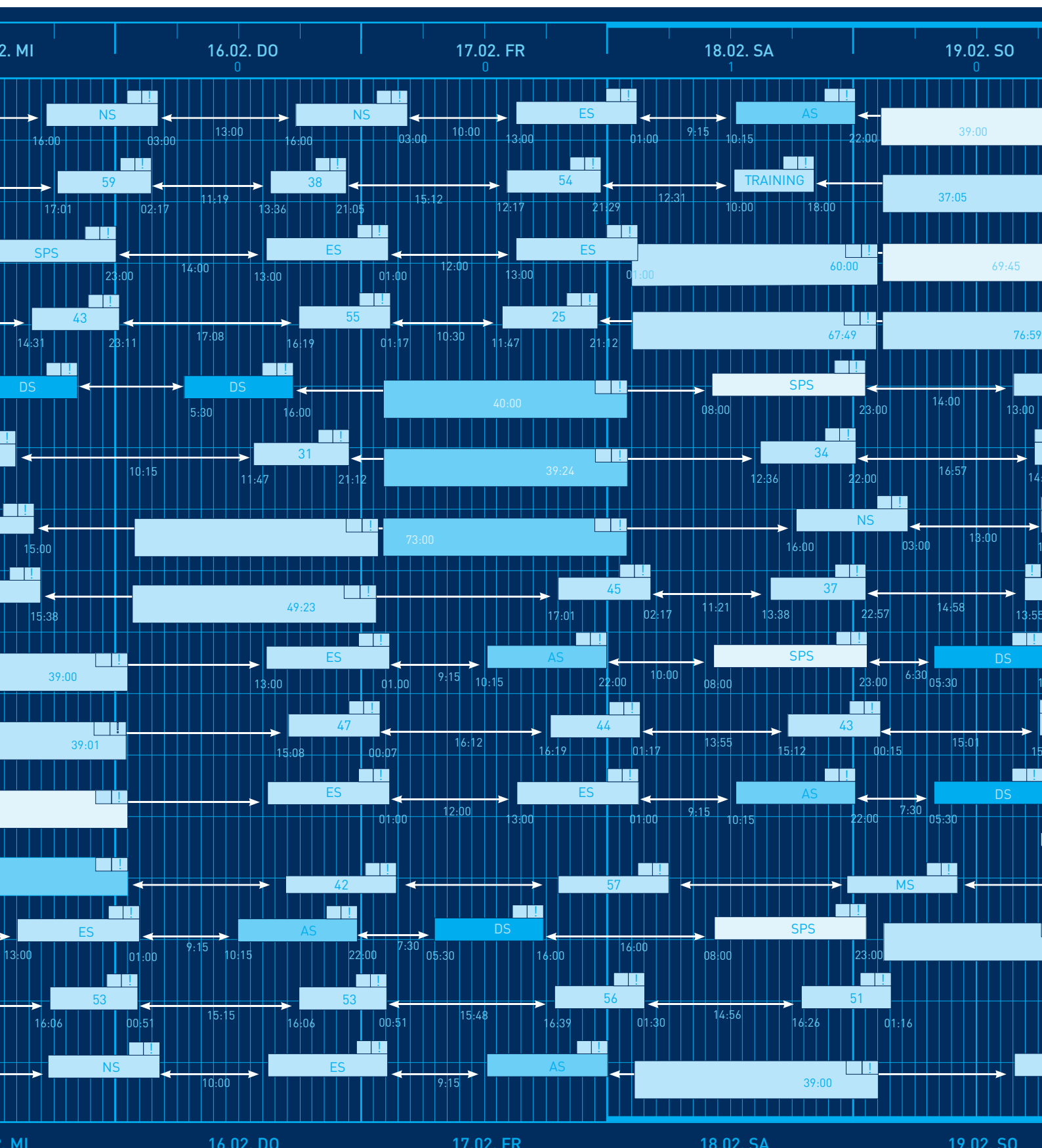
To further reduce energy consumption at the locations, IVU is preparing to make a major changeover to light



companies that use eco-friendly materials that comply with German and European standards. Hazardous chemicals are not used. IVU only uses water-soluble wall paints and eco-friendly acrylic paints.

RESPONSIBILITY FOR EMPLOYEES





IVU Head of Human Resources, Felix Bialdyga, talks about the company spirit, and why he likes to arrive later in the morning.

Mr Bialdyga, you have only been at IVU for three years, how would you describe the corporate culture?

I think the most valuable aspect that defines IVU and sets it apart from many other companies is that we deal with each other very honestly, seriously and appreciatively. That alone is a very unique IVU spirit. We always try to convince with arguments. It sounds like a prepared statement, but there really are no intrigues, no cliques, no hidden power struggles in the company. Working here is really fun.

Why is that?

It takes more than just table football and coffee machines to create a positive climate. On the one hand, the IVU spirit can certainly be traced back to the early years, when IVU was established more or less as a start-up from the Technische Universität Berlin. However, it also has to do with the fact that most of us are academics – scientists, engineers – whose primary focus is on finding solutions.

How does IVU manage to preserve this spirit?

It is the task of managers to practise this spirit in their teams on the one hand, but also to pass it on to the many new colleagues that come to us and to the next generation of managers on the other. To encourage this, we operate a complex training programme. At an annual seminar lasting several days, we train almost twenty young employees in our concept of leadership, which is based on substance rather than fear.

This is also likely to argue in favour of IVU on the labour market?

The unique IVU spirit was also there before the labour market became so competitive. But it's true, I have signed over 100 new employment contracts in the past year alone. We are experiencing strong growth and are competing for the brightest and best that the labour market has to offer.

What do you offer them?

An exciting task that allows them to make the world just that little bit better. A really wonderful company and very attractive workplaces that offer a great deal of freedom.

What do you mean by that?

For example, we don't record people's working hours. Every employee keeps track of them, and we trust them to do so. Overtime is always paid for with free time. We also do without

“IT TAKES MORE THAN JUST TABLE FOOTBALL TO CREATE A POSITIVE CLIMATE.”

core working hours. Where the company requirements permit, you can come in very early or late, or stay longer in the evenings. Alternatively, you can go jogging for an hour at midday. However, everyone has their own daily rhythm, and if you can also maintain it while at work, that is truly something very special. I enjoy a hearty breakfast in the mornings and read the paper at home. I always show up relatively late at the office.

And you're the boss?

Yes, that's possible here and if you want this type of culture in the company, you must also practise it yourself.

That sounds rather relaxed.

Well, naturally we also have our corporate goals, and they are challenging. And we always work very hard on the projects. What sets our culture apart is that we focus first of all on the results and less so on formalities. The fact that our employees value this greatly is reflected in the most recent employee survey, in which we scored far higher across all categories than the average for German companies. That makes me very happy and proud of IVU.

“THE MOST VALUABLE ASPECT THAT DEFINES US IS THAT WE DEAL WITH EACH OTHER VERY HONESTLY, SERIOUSLY AND APPRECIATIVELY.”



Employee rights

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.

This is very popular with the employees: In an employee survey conducted by Great Place to Work in 2016, IVU scored significantly above the average in all survey criteria – credibility, respect, fairness, pride and team spirit. In the survey, more than 90% of employees praised the friendly working atmosphere and 80% enjoyed coming to work. No less than 86% of employees also valued the possibility of taking time off.

Flexible working time models

Different situations in life cannot be forced into a standardised framework. The work must allow people to balance it with their daily routines. 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.

There are no general core working hours at IVU. As long as deadlines are met and tasks are completed within the specified time-frame, employees can plan their presence within this framework as they see fit. In this case, trust-based working times are used: Hours worked are recorded by the employees in a flexitime account.



IVU pays attention to balanced work times. If overtime is unavoidable for operational reasons, the accumulated hours of overtime can be offset in the form of individual hours or, following consultation with the direct supervisor, in the form of days. To ensure that the contractually agreed work time is not regularly exceeded, the HR department monitors the number of work hours completed and advises the employees and their HR managers of the current status every month. A traffic light system prevents the excessive accumulation of overtime.

Working from home can be another alternative in consultation with the relevant manager. IVU also supports requests for part-time work and facilitates the search for suitable individual solutions. In the past year, 17.6 percent of employees used this opportunity.

Free time is important

Generally speaking, 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. After working at the company for 10 years, they receive an additional day. After 20 years of service, they are entitled to 32 holiday days each year. IVU also guarantees special holidays for personal matters such as weddings or the birth of a child. Since even 30 days of holidays are sometimes not enough for certain plans, IVU has 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 of up to 100 euros towards the cost of accommodation, care and meals for children below school age. Some 80 employees used this option in fiscal year 2018. 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. Among other things, this includes the option for all employees to request ergonomic standing desks. An occupational safety commission meets four times during the year to discuss the latest de-



velopments 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 encourage the general health of its employees, IVU provides numerous health and sports offerings. Besides free fruit and water at the workplace, these include partnerships with gyms in Berlin and Aachen where IVU employees can work out at favourable terms. Furthermore, every location has sports groups in which IVU employees can exercise together, from beach volleyball to football to the weekly table tennis training at IVU's Berlin offices. At the annual company runs, the IVU teams regularly achieve high rankings.

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.

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. In total, employees from 30 nations work at IVU.

Compared with the proportion of female graduates in the STEM subject group of engineering of relevance to IVU of 23.1 percent (in 2017), IVU employs an above-average number of women throughout the company: In 2018, the proportion of women across all departments was 30 percent. Of the new hires at IVU in the past year, 36 percent were women. IVU is also working hard to increase the proportion of women at top management level. With the appointment of Ms Ute Witt to the Supervisory Board on 1 July 2018, one third of the Supervisory Board and Executive Board are women.

This trend has yet to be carried over to the management, which included no women in the past year. IVU is striving to rectify this deficit and is therefore selectively encouraging qualified women to take on leadership roles. This is particularly evident in the lower management levels of departmental and team leaders, where the proportion of women was 25 percent in 2018.

The disproportionately low numbers of women in mathematical and scientific professions in general is often cited as the reason preventing 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 program 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 then can engage more intensively with individual tasks.

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.

Outside its own premises, IVU promotes, not least through its products, the inclusion of people with physical disabilities. Its developments allow transport operators and associations, for example, to record floor plans and site plans of structures such as stops and stations and to communicate these using connected information systems, for instance, to enable accessible app-based passenger guidance.

Training

IVU encourages and supports its employees in their ongoing training and education. In the context of employee development, for example, it already set up a

dedicated trainee program for managers several years ago. It uses targeted training courses to prepare prospective team leaders to take on management duties. A total of 6 women and 13 men took part in the two rounds completed in 2018.

In the annual employee appraisal at the start of the year, employees discuss their individual training needs together with their managers. On this basis, a decision regarding individual training courses is taken. In this context, there are no restrictions concerning the number of training hours permitted in a single year.

The annual Developer School is aimed specifically at developers. Here, IVU employees engage with current software development issues in collective workshops. Presentations on specialist technical topics by external speakers supplement the internal exchange of expertise. The skills acquired are then put to the test in a final 'hackathon' and put into practice. Last year, around 80 IVU developers took part in the three-day event at the Aachen location. One of the key topics was the current progress and technologies used in the development of artificial intelligence.

New IVU employees often face the challenge of having to find their feet in extremely complex systems and



products within a very short space of time. To facilitate their induction, we run an extensive induction programme three times annually, during which developers and project engineers who are either new to IVU or have taken on new roles internally undergo intensive familiarisation with IVU products and processes within six weeks.

These measures are supplemented with internal short-term training courses during which employees can be introduced to specific topics. 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.

Employees in transport companies

With its systems, IVU helps its customers, the transport operators, ensure that drivers of buses, trams and trains in particular can enjoy a much-improved work-life balance. IVU systems synchronise and optimise preferred duty schedules. This not only makes duties much more transparent to the drivers, but also allows more drivers to have time off simultaneously – for in-

stance on sought-after evenings such as at Christmas or on New Year's Eve. All in all, employees of public transport operators are better able to plan their lives. They also benefit from an improved work-life balance. Added to this is the fact that IVU systems also increase the share of paid time in the overall duty time of the drivers through better coordination and optimisation of waiting and rest periods. Apart from this, split and staggered duties arise less frequently.



SOCIAL RESPONSIBILITY





Division Manager for Public Transport Bastian Dittbrenner discusses IVU projects in developing countries that also help people to escape from poverty.

Mr Dittbrenner, you claim that IVU provides development aid with its systems, how so?

Particularly in developing countries, cities are the engines of economic growth and social development. However, the dramatic growth in traffic volumes presents most of them with enormous challenges: exhaust gases and traffic congestion. It is clear that private transport will massively impede these emerging major cities if it is not diverted and public transport significantly expanded and much better organised.

But in what way does public transport help lift people out of poverty?

Unfortunately, the poorer social classes are often forced by high land prices or rents to move to outlying areas or slums, which are usually poorly served by public transport. The costs and time spent travelling to the city centre, for example, or to the nearest secondary school are often prohibitively high for these people. As a result, most have no opportunity to improve their lives in the area where they live. Public transport can ensure that these areas benefit from better, more regular and faster connections to the centres.

What does this mean for the people?

That they can attend secondary schools, for example. Or that they can take a well-paid job in the city centre. What sounds self-evident to us is however often impossible in these countries due to the traffic situation.

**“PUBLIC TRANSPORT CRE-
ATES OPPORTUNITIES FOR
PEOPLE IN THE SLUMS TO
IMPROVE THEIR LOT.”**

“OUR SYSTEMS PROVIDE DEVELOPMENT AID!”

Fleets of minibuses have opened up access to outlying districts and slums almost everywhere, surely this has long since qualified as public transport?

No. Many of the emerging major cities are trying to banish minibuses from their centres because they are clogging up the city centres almost as much as private transport. Reliable public transport is the only remedy.

IVU has implemented a range of projects in developing countries. What insights have you gained from these?

That we must plan with the motivation of the people, not against it. They all want a better education for their children and a better livelihood for their families. The people there have so much energy. That is a challenge – for the traffic in these countries and cities as well – but above all an ideal prerequisite for development.



“THE DRAMATIC INCREASE IN PRIVATE TRANSPORT IS IMPEDING DEVELOPMENT IN MANY MAJOR CITIES.”

Public transport as development aid

The expansion and optimisation of public transport are key prerequisites that will enable rapidly expanding major cities in developing countries to overcome their traffic problems. Particularly for inhabitants of outlying districts and slums, reliable public transport makes it possible for them to use distant educational or work opportunities, thereby improving their economic situation. In this respect, improvements to public transport networks constitute very effective development aid. Added to this is the goal of reducing the air pollution caused by minibuses in these cities.

IVU has already installed its IT systems in several major cities in developing countries. The Bus Rapid Transit (BRT) system in the Nigerian capital Lagos has been kitted out with a brand-new planning and traffic control system, including on-board computers for more than 400 buses. With a population of around 21 million, Lagos is the largest city in Africa and one of the fastest-growing cities worldwide. In 2009, Africa's first BRT entered service here in order to get a grip on the dense and chaotic traffic. Buses convey around 180,000 passengers daily to the city's key transport hubs along 22 kilometres of traffic lanes that are largely separate from the main road traffic. However, frequent congestion at the stops repeatedly led to irregular operations and long waiting times for passengers. Since then, the IVU.suite products ensure that everything runs smoothly.

In the Columbian city of Santiago de Cali, the country's third largest with approximately 2.5 million inhabitants, an IVU system has been managing the planning, dispatch and fleet management for a fleet of 1,000 buses since 2009. IVU software also controls the information displayed to passengers at the stops. The goal was to reduce traffic congestion and to cut journey times.

In Hanoi, Vietnam, IVU together with the University of Transport and Communications (UTC) there is training managers and operators for Vietnamese transport operators. Vietnam is preparing to comprehensively overhaul and upgrade its transport infrastructure in the next few years. With its specialist knowledge and experience gained in hundreds of projects worldwide, IVU is making an important contribution in preparing the country's transport companies for the challenges of growing mobility. Vietnam Railways (VNR) is already using the IVU.rail system for planning, dispatching and control of all its operations.



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. In selecting our predominantly European project partners, we make sure that the principles of human rights are respected. The devices that we market under the IVU name are manufactured by PHYTEC Messtechnik GmbH, which is based in Mainz, which is also the location of its production facility. PHYTEC is committed to observing European minimum standards of occupational health and safety.

Community

IVU sees itself as an active member of society. Its declared goal is to promote social progress and to work towards sustainable human cohabitation. This is expressed in particular in the IVU products that enable transport operators worldwide to offer simple and eco-friendly mobility.

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 bal-



Exerting political influence

IVU does not actively exert political influence. However, members of the Executive Board do take part in political delegations from time to time.

IVU is also represented in a range of national and international associations that promote public transport and information technology both politically and socially:

- Allianz pro Schiene e.V.
- APTA – American Public Transport Association
- Berlin Chamber of Industry and Commerce
- CUTA – Canadian Urban Transit Association
- DVWG – Deutsche Verkehrswissenschaftliche Gesellschaft
- GEOkomm – Verband der Geoinformationswirtschaft Berlin Brandenburg e.V.
- German Committee on Eastern European Economic Relations
- Gesellschaft für Informatik e.V.
- HOLM – House of Logistics and Mobility
- InGeoForum – Information and Cooperation Forum for Geodata of ZGDV e.V.
- Kontiki e.V.
- Mofair e.V.
- OAV – German Asia-Pacific Business Association
- REGINA e.V. –
Regionaler Industriecenter Informatik Aachen
- RTIG inform – Real Time Information Group
- SdK – Schutzgemeinschaft der Kapitalanleger
- UITP – Union Internationale des Transports Publics
- VDB Verband der Bahnindustrie in Deutschland e.V.
- VDV – Verband Deutscher Verkehrsunternehmen e.V.
- VÖV – Verband öffentlicher Verkehr (VöV)

ance 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. It has successfully done this twice in recent years: as part of the 2014 financial statement, IVU distributed a total of €886 thousand (€0.05/share) to its shareholders. For fiscal year 2017, investors received a total dividend of €1,772 thousand (€0.10/share), which was paid in June 2018.

As a member of Förderverein des Chores Berliner Bach Akademie e.V., we support the work of the Berlin Bach Academy.

As a member of the Berlin Chamber of Industry and Commerce, IVU participates in committee work on an honorary basis. Martin Müller-Elschner, CEO of IVU, has been vice-chairman of the External Trade Committee there. In addition, he is an Executive Board member of the not-for-profit heureka foundation for the environment and mobility, which aims to promote sustainable and eco-friendly mobility.

Conduct conforming to laws and directives

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 15 February 2019. In this declaration, they agree that the need to establish an institutionalised compliance management system does not arise due to the size and structure of the company and due to the lack of danger and risk potential for compliance-related violations. Such a system would be associated with disproportionately high costs relative to its benefit to the company.

In reality, 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.

IVU has not established a whistle-blower system. The Executive Board and Supervisory Board are of the opinion that compliance within the company is guaranteed even without establishing such a system. In addition, establishing such a system can have a negative impact on the positive working environment of the company.

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.

OUTLOOK

This CSR report by IVU Traffic Technologies meets the requirements of the CSR Directive Implementation Act (CSR-RUG) pertaining to non-financial reporting. It is the company's first report of this type and presents the current state of affairs with regard to the topics mentioned in the legislation. For IVU, it also represents the prelude to the company's continued non-financial reporting in the coming years. For this purpose, the persons responsible have defined three key areas of action based on this CSR report:

- Development of concepts in the individual topic areas with specific objectives
- Definition of preferably quantifiable parameters
- Reporting based on one of the common reporting standards (German Sustainability Code or Global Reporting Initiative)

IVU will report on the company's progress in these areas of action in its non-financial reports in the next few years. Readers who have suggestions or comments about this report are welcome to contact Dr Stefan Steck at the e-mail address: **stefan.steck@ivu.de**.





Imprint

Publisher

IVU Traffic Technologies AG

The CSR report 2018 can be downloaded as PDF file in English and German at www.ivu.com.

Contact

Corporate Communications
T +49.30.85906-0
F +49.30.85906-111
contact@ivu.com

Editorial

Dr. Stefan Steck,
IVU Corporate Communications
Gerd Henghuber, Munich

Layout

Eckhard Berchner
IVU Corporate Communications

Print

Ruksaldruck, Berlin

IVU Traffic Technologies AG

Bundesallee 88
12161 Berlin
Germany

T +49.30.85906 - 0
F +49.30.85906 - 111

contact@ivu.com
www.ivu.com