



**BERCMAN**®

AS BERCMAN TECHNOLOGIES

## COMPANY DESCRIPTION

### For the public offering of shares and admission to trading of AS BERCMAN TECHNOLOGIES on the First North multilateral trading facility (MTF)

This company description has been prepared for the admission to trading of new shares ('Offer Shares') issued by AS Bercman Technologies (public limited company registered in Estonia under the registry code 14134425, 'Bercman' or 'Issuer') and of all shares of the Issuer on the First North MTF operated by Nasdaq Tallinn AS ('Exchange'). The company description has been prepared in accordance with the rules and regulations established by the Exchange for the First North MTF ('Rules and Regulations'). This company description may not be used for any other purpose without prior permission from Bercman.

The public offering of the Issuer's shares will be conducted only in Estonia pursuant to **Article 3(2)b) of Regulation (EU) 2017/1129 of the European Parliament and of the Council ('the Prospectus Regulation')** and subsection 15 (1) of the Securities Market Act of the Republic of Estonia ('the SMA'), according to which a public offer prospectus does not need to be published if the total consideration of the public offering of securities does not exceed 2,500,000 euros per all the Contracting States in total calculated in a one-year period of the offering of securities. The company description is not a prospectus within the meaning of the Prospectus Regulation nor the SMA. The offering will be conducted only in Estonia and the Offer Shares will not be offered in any other jurisdiction.

The offering will involve the Issuer offering up to 200,000 Offer Shares at a price of 3.4 euros per Offer Share ('Offering'). If interest in the Offering is high and the demand of investors exceeds the number of Offer Shares, the Issuer may increase the number of Offer Shares by up to 20%, i.e. to a maximum of 240,000 Offer Shares.

The Offering is aimed at Estonian retail and institutional investors who are qualified investors as defined in Article 2(e) of the Prospectus Regulation. In addition

to the Offering, Bercman may offer the Offer Shares to institutional investors outside Estonia, provided that such investors can be considered qualified investors within the meaning of Article 2(e) of the Prospectus Regulation.

The period of offering the Offer Shares will commence on 14 June 2021 and end on 22 June 2021 ('Offer Period').

Bercman has filed an application with the Exchange for admission to trading of all of Bercman's shares ('Shares'), including the Offer Shares, on the Exchange's First North MTF, and the trading of the Shares is expected to commence on First North on or at around 12 July 2021.

**Participating in the Offering and subscribing for and investing on the secondary market in Bercman's shares carries certain risks. Potential investors are advised to read the company description fully before making a decision to invest. In particular, we advise reading section 8 'Risk Factors' for information on factors to consider when investing in Bercman's shares. Although Bercman has made all reasonable efforts to ensure that this company description provides an accurate and adequate overview of the company, its operations, and the Offer Shares, the value of an investor's investment in the Offer Shares may be affected to a significant degree by circumstances which had not arisen by the date of publishing this company description or which are not reflected in the company description. The information presented in the company description should not be construed as legal, financial, or tax advice. The company description has not been prepared as investment advice or a recommendation to purchase the Offer Shares. Whether investing in the Offer Shares matches the investor's financial capabilities and investment objectives and whether such investment is in accordance with the rules, requirements, and restrictions to which the investor is subject should be decided by each potential investor independently, engaging the services of a professional legal, financial, or tax adviser where necessary.**

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# 1. PRELIMINARY REMARKS

## Applicable law

This company description has been prepared in accordance with the legislation of the Republic of Estonia and with the rules and regulations, and it is governed by the law of the Republic of Estonia. Any disputes arising from or in relation to the company description shall be resolved in Harju County Court.

First North is a multilateral trading facility (MTF) within the meaning of subsection 3 (3) of the SMA, operated by the Exchange (Nasdaq Tallinn AS), and is not a regulated market within the meaning of the SMA or other legislation.

## Responsible persons

The persons responsible for the information provided in the company description are the members of Bercman's management board. They bear responsibility for the validity and accuracy of the information presented in the company description as of 31 May 2021.

## Terminology and rounding

The capitalised terms in the company description carry the meanings defined in section 10 or elsewhere in the company description.

The figures and quantitative values contained in the company description (e.g., monetary values, percentages, etc.) have been given with a degree of precision deemed by Bercman to be reasonably

sufficient and adequate for the purposes of information, while avoiding excessive detail. Quantitative values have in some cases been rounded to the nearest decimal place or whole number. Due to this, data presented as percentages may not always add up to 100%. Financial data have been presented in euros.

## Auditor

Bercman's auditor is Brokerman Audit OÜ (registry code 12790438). Brokerman Audit OÜ is a member of the Estonian Auditors' Association. The annual reports attached to the company description have been audited by Brokerman Audit OÜ.

## Adviser

Bercman's adviser is Ellex Raidla Advokaadibüroo OÜ (registry code 10344152, ellex.legal), whose main field of activity is the activities of lawyers and law firms. The adviser's representative, who provides advisory services to the Issuer, is Gerli Kivisoo (e-mail: gerli.kivisoo@ellex.ee). Bercman has entered into a contract of indefinite duration with the adviser. The adviser holds no shares in Bercman.

## Accessibility

The company description can be accessed on the website of the Exchange (<https://www.nasdaqbaltic.com/>) as well as the website of Bercman (<https://www.bercman.com/>).



## 2. BRIEF DESCRIPTION OF THE COMPANY

### Background

Bercman is a deep-tech company founded in 2016 and primarily engaged in the development and sale of products and services for increasing road safety. The company's core competency lies in high value-adding and continuously improved software and expertise in the field. In addition to developing software, Bercman also engages in in-house hardware development, but relies on contractual partners for manufacturing operations.

The company's story began when the brother of co-founder Mart Suurkask's best friend died in a car accident, leaving his one-year-old son fatherless. By this time, Mart had become aware of the sad traffic statistics in Europe and was surprised that in the current information age there was still no cost-effective solution for increasing road safety, particularly in obviously hazardous locations such as unregulated pedestrian crossings. In November 2019, for example, a total of 9 fatal traffic accidents occurred on pedestrian crossings in Estonia. Mart believed that the problem could be solved with a smart system that does everything possible to reduce the risk of collisions between road users.

To this end, the company set out to develop its first product, the Smart Pedestrian Crosswalk: a safety system based on machine vision for unregulated pedestrian crossings. The Smart Pedestrian Crosswalk uses sensors to detect pedestrians crossing the road and vehicles

approaching the crosswalk. The system is equipped with LED warning functions and an acoustic alarm to warn pedestrians, and enables vehicle-to-everything communication. In addition to detection, the sensors collect useful data about road users. The set of data collected includes pedestrian and vehicle counts, vehicle travel speeds, and vehicle classes. All collected data are transmitted wirelessly to Bercman's Management Console, through which they can be downloaded in a digital format. The data are also displayed graphically in the Management Console for convenient data analysis.

Bercman's goal is to build a world where no one is seriously injured or, worse, killed, in traffic. The company has recruited and granted a share option package to a team of experts who are motivated to contribute daily to achieving this goal.

**Given the prospects for the increased deployment of automated and autonomous vehicles, the company believes that the time is right to integrate smart solutions into the current and future traffic environment.** All Bercman products and services are in one way or another aimed at achieving the goal discussed above. In addition to internally developed products and services, Bercman also works on various products and projects in collaboration with partners. These include projects for the improvement of safety in the railway industry as well as for implementing on-demand and self-driving public transport.



## Future plans

Bercman is actively looking for opportunities to further develop its core technologies, expand its partner network with new resellers, and increase sales in Europe. The company's preferred target markets in the medium term are densely populated countries in western and central Europe.

The company's plans for the next four years (2021–2024) do not include the payment of dividends to investors. Bercman's future plans are primarily related to the growth of the company, which is why Bercman considers it necessary to allocate the funds it earns to the development of its business model and products, as well as to the expansion of sales activities.

Bercman wishes to move forward with the development of an automatic emergency call function for its Smart Pedestrian Crosswalk and to focus on adapting the product and finding sales partners in the German market and elsewhere in the world. Progress towards this goal is supported by, among other things, the company's participation in the upcoming ITS World Congress in Hamburg this October, where it will be holding an official demonstration. There,

in the framework of another project, the company will also be demonstrating the vehicle-to-everything communication functionality of the Smart Pedestrian Crosswalk.



Bercman also utilises the machine vision algorithms of the Smart Pedestrian Crosswalk in products designed to control traffic and improve road safety at intersections and other complex traffic junctions.

Bercman's management board has one member: Mart Suurkask. Bercman's supervisory board has three members: Kuldar Leis, Raimond Russak, and Tarvi Thomberg. Bercmanis employs ten people.

Bercman's Articles of Association are attached to the company description as Annex 1.

## Information related to company law

AS Bercman Technologies is a public limited company established and registered on 17 October 2016 in Estonia. The main information for Bercman:

Registry code: 14134425;

Address: Teaduspargi tn 11, 50411, Tartu, Estonia;

Website: <https://www.bercman.com/>

Email: info @ bercman. com;

Phone: +372 372 53402902

VAT number: EE101977472;

Main activity: other manufacturing n.e.c. (32991 EMTAK 2008).

## 3. TERMS AND CONDITIONS OF THE OFFER

### Offering

In the course of the Offering, Bercman will issue and offer up to 200,000 Offer Shares. If interest in the Offering is high and the demand of investors exceeds the number of Offer Shares, the Issuer may increase the number of Offer Shares by up to 20%, i.e. to a maximum of 240,000 Offer Shares.

Assuming that all 200,000 Offer Shares are subscribed for by investors during the Offering, the registered share capital of Bercman immediately after the issuing of the new shares will be EUR 115,847 and the total number of shares will correspondingly be 1,158,471.

The increase of the share capital by the amount of the Offer Shares will presumably be registered in the Commercial Register on or around 29 June 2021 (the date is subject to change).

The shares are freely transferrable and are not subject to any restrictions on trading or pledging.

### Persons eligible to participate in the Offering

Participation in the Offering will be open to legal and natural persons who are based in Estonia and who have opened a securities account through a Nasdaq CSD account operator (bank).

### Offer price

Offer Shares will be priced at 3.4 euros per Offer Share, comprising a nominal value of 10 cents and a share premium of 3.3 euros.

### Offer Period

The Offer Period is the period during which investors eligible to participate in the Offering may submit a subscription order to subscribe for the Offer Shares. The Offer Period will commence at 10:00 on 14 June 2021 and end at 13:00 on 22 June 2021 (Estonian local time).

The indicative schedule of the offer is as follows:

Beginning of offer period:	14 June, 2021 at 10:00 AM
End of offer period:	22 June, 2021 at 1:00 PM
Determination and disclosure of the outcomes of the offer and the distribution of the offer shares:	28 June 2021
Offer settlement:	29 June 2021
First day of trading on First North:	12 July 2021

## Issuance of a subscription order

Investors are obliged to ensure that the information contained in their subscription orders is correct, complete, and legible. Incomplete, incorrect, or illegible subscription orders, subscription orders submitted outside of the Offer Period, and subscription orders otherwise not in conformity with the terms set forth herein may be refused.

Subscription orders may only be submitted during the Offer Period. Investors participating in the Offering may subscribe for Offer Shares only for the offer price. In the event of receipt of multiple subscription orders from a single investor, the orders will be merged into a single order for the purpose of allocating the Offer Shares. Investors participating in the Offering may only submit subscription orders in euros. Subscription orders may only be submitted for a whole number of shares. Investors shall pay all costs and fees payable

in connection with the submission, cancellation, and amendment of their subscription orders according to the price list of the Nasdaq CSD account operator who accepted the subscription order. To subscribe for Offer Shares, the investor must have a securities account with a Nasdaq CSD account operator. Submitted subscription orders will be registered in the Nasdaq CSD.

In order to subscribe for Offer Shares, the investor must contact the account operator managing their Nasdaq CSD securities account and submit a subscription order for purchasing the Offer Shares during the Offer Period using the form below. Investors may submit subscription orders using any method offered by the account operator (e.g., by visiting the customer service office of the account operator in person, via an online banking system, or by other means). Subscription orders must be submitted to the account operator before the end of the Offer Period.

A subscription order shall contain the following information:

Owner of the securities account:	[name of investor]
Securities account:	[number of the investor's securities account]
Account operator:	[name of investor's account operator]
Security:	BERCMAN TECHNOLOGIES ORDINARY SHARE additional 4
ISIN code:	EE3801076409
Number of shares:	[Number of offer shares the investor wishes to subscribe for]
Price (per offer share):	3 euros and 40 cents
Transaction amount:	[Number of offer shares the investor wishes to subscribe for, multiplied by the price per offer share]
Counterparty:	Bercman Technologies AS
Securities account of the counterparty:	99103689847
Account operator of the counterparty:	LHV Pank AS
Transaction type:	subscription
Payment method:	transfer of securities in exchange for payment



By submitting a subscription order, the investor:

- affirms that they have read and understood the company description and that they accept the terms of the offering set forth herein;
- affirms that they are based in Estonia and are not subject to the laws and regulations of any other jurisdiction that prohibit them from submitting the subscription order;
- accepts that the submission of the purchase order does not in itself entitle them to acquire the Offer Shares nor entail the conclusion of a contract of sale for the Offer Shares;
- accepts that the number of Offer Shares indicated by the investor in the subscription order is the maximum number of Offer Shares the investor wishes to acquire, and recognises that the investor may receive fewer, but not more, Offer Shares than indicated in the subscription order;
- undertakes to acquire the number of Offer Shares allocated to them, which shall not exceed the number of Offer Shares indicated in the subscription order, and to pay for them in accordance with the terms set forth herein;
- affirms that they are aware of the investment risk associated with investing in the shares, including the risk of losing part or all of the invested sum;
- accepts and agrees that the Issuer has the right to receive daily information from the registrar of the Estonian register of securities regarding submitted subscription orders;
- authorises and orders the account operator to forward the subscription order as registered to the Nasdaq CSD;
- authorises the Issuer and the Nasdaq CSD to process their personal data to the extent necessary for participation in the Offering;
- authorises the account operator or financial institution managing the investor's securities account or the Nasdaq CSD, as appropriate, to amend the investor's subscription order, including (a) to specify the value date of the transaction and (b) to specify the number of Offer Shares to be purchased by the investor as

well as the total value of the transaction, which shall be calculated by multiplying the offer price by the number of Offer Shares allocated to the investor.

Investors may amend or cancel their subscription orders at any time before the end of the Offer Period. To do this, the investor must contact the Nasdaq CSD account operator through whom the relevant subscription order has been submitted and take the actions required by the account operator for the amendment or cancellation of subscription orders (different account operators and financial institutions may have different processes). The amendment or cancellation shall take effect from the moment of amendment or withdrawal of the transaction order by the account operator.

### **Payment for shares**

An investor may only submit subscription orders if the bank account linked to their securities account with a Nasdaq CSD account operator contains sufficient funds to cover the entire transaction value specified in the subscription order.

By submitting a subscription order, the investor authorises the Nasdaq CSD account operator managing the bank account linked to the investor's securities account to immediately block off an amount corresponding to the total value of the transaction on the investor's bank account until the settlement is completed or the funds are released. The amount blocked off shall be equal to the amount obtained by multiplying the offer price by the number of Offer Shares indicated in the subscription order.

If the Offer Shares cannot be paid for because the investor's cash account does not contain sufficient funds, the subscription order submitted via the securities account linked to the cash account will be refused and the investor will lose all rights to the Offer Shares specified in the subscription order.

## Allocation rules

Bercman will decide on the allocation of the Offer Shares at its own discretion after the end of the Offer Period, at the latest on or around 28 June 2021. In the allocation, all investors will be treated equally under identical circumstances. In addition to the Offering, Bercman may allocate Offer Shares at its discretion to institutional investors outside Estonia, provided that such investors can be considered qualified investors within the meaning of Article 2(e) of the Prospectus Regulation.

## Settlement of the Offering

The Offer Shares will be registered in the Estonian register of securities and transferred to each investor's securities account presumably on or around 29 June 2021. The transfers will be conducted pursuant to the procedure of 'delivery versus payment', concurrently with the transfer of the subscription amount from the investor's account to that of Bercman. During settlements, the Offer Shares will have the temporary ISIN EE3801076409, which will be swapped for the permanent ISIN EE3100076407 on or around 12 July 2021.

## Release of funds

If the Offering or a part thereof is cancelled, an investor's subscription order is rejected in part or in whole, or the number of allocated Offer Shares is different from the number of Offer Shares subscribed for, the relevant account operator will release the funds blocked off or a part thereof (in the amount exceeding the sum to be paid for the Offer Shares) on the bank account of the investor in accordance with the account operator's terms presumably within one business day. Bercman cannot be held liable for the release of such a sum nor for the payment of interest on the released sum for the period during which it was blocked off.

## Cancellation of the Offering

Bercman may cancel the Offering in full or in part or alter the terms and dates thereof at any time before the publishing of the allocation of the Offer Shares. Among other things, Bercman may cancel the Offering in full or in part or alter the terms thereof if the total volume of the Offering is not subscribed for.

Information regarding any alteration of the terms of the Offering or the cancellation of the Offering will be published on Bercman's website and as an exchange announcement via the information system of the Exchange.

# 4. USE OF THE REVENUE FROM THE OFFER AND PURPOSE OF ADMISSION TO TRADING

Bercman intends to use the revenue from the offer for growth and product development. The estimated revenue from the offer is approximately 680,000 euros, in the case of over-subscription, the offer will amount to 816,000 euros. The cost of preparing the offer is approximately 20,000 euros. The net proceeds from the offer are therefore 660,000 euros. Bercman intends to use the net income to finance the following steps:

(i) investments into the optimisation of our product Smart Pedestrian Crosswalk, including the expansion of the engineering and software team to increase vertical integration;

(ii) expansion of the sales team and increase of export activities through international distributors;

(iii) investments into a project in development – a product that meets the requirements of railway management systems;

(iv) investments into product development in relation to vehicle-to-everything (V2X) communication;

The purpose of applying for admission to trading is to make Bercman more transparent and credible for shareholders, investors, partners, and customers. Nasdaq is a quality label that plays an important role in the company's sales strategy.

## 5. BUSINESS OVERVIEW

### Admission to trading of the Shares

Bercman has filed an application with the Exchange for admission to trading of Bercman's Shares, including the Offer Shares, on the Exchange's First North MTF, and the trading of the Shares is expected to commence on First North on or around 12 July 2021. If the Shares are not admitted to trading according to the planned schedule or if the Exchange decides not to admit the Shares to trading for any reason, investors will not be entitled to seek the repurchase of the issued shares from Bercman.

### History, development, and prospects of the Issuer

Bercman ([www.bercman.com](http://www.bercman.com)) is a deep-tech company founded in 2016 in Tartu, Estonia, and primarily engaged in the development and sale of technologies and products related to road safety and mobility.

The company generates revenue from both the sale of the devices it has developed as well as from periodic fees charged for software use and system updates. Bercman devices are unique because of the software solutions utilised in them, which are developed within the company and which offer unprecedentedly high functionality compared to competing products, at a similar price.

Today, Bercman is a recognised actor in the industry and actively participates in the development of the sector through the co-operation network of ITS Estonia. The company's story began when co-founder Mart Suurkask, due to personal reasons, set out to seek a cost-effective way to increase road safety, initially focusing on obviously hazardous locations such as unregulated pedestrian crossings. Mart believed that the problem could be solved with a smart system that does everything possible to reduce the risk of collisions between road users.

In order to realise his idea, in autumn 2016, Mart founded Bercman Technologies AS, and soon longtime entrepreneur Kuldar Leis joined the development of the company. Since 2018, Bercman has worked on the development of several products, primarily the following:

- **the Smart Pedestrian Crosswalk** – a machine vision-based safety system for unregulated pedestrian crossings. The company is also planning to implement the technology at regulated intersections and other complex traffic junctions. The system has been developed in consideration of the needs of today's traffic environment as well as potential developments in the area of connected, automated, and autonomous vehicles. For this purpose, the Smart Pedestrian Crosswalk can be interfaced with standardised vehicle-to-everything (V2X) hardware and software.

Bercman has faced a number of challenges in the development process, but the greatest challenge across products has been to bring down the cost of production. As a result of the efforts made in the last two and a half years, Bercman has managed to make its technologies more modular and thereby reduce the cost of production of the devices offered by the company more than threefold. This in turn means that the products designed by the company have reached a price level that is competitive for both resellers as well as customers in general.

As of now, Bercman has succeeded in developing optimised hardware for the Smart Pedestrian Crosswalk, which utilises internally developed circuit boards that allow the system to be made more compact. For the daily operation of its devices, the company has created a special digital user environment: the Bercman Management Console. The company's development activities have always centred and will continue to centre on the machine vision algorithms developed for and implemented in the Smart Pedestrian Crosswalk, which are designed to prevent risk situations in traffic. Bercman intends to use its expertise in this area in its future products as well, and it also forms part of the company's digitisation plan. In order to avoid losing its focus too much, Bercman has acquired a contractual manufacturing partner in Hansamatrix AS (HMX1R) for its physical products.

As part of its development activities, the company has carried out several pilot projects to test product prototypes at various technology readiness levels. The Smart Pedestrian Crosswalk has been tested extensively since 2018, in Estonia as well as Finland.

In October 2020, Bercman completed its first updated (more modular) Smart Pedestrian Crosswalks, which have now been deployed in the rural municipality of Viimsi in Harju County, Estonia, as well as Milton Keynes, England. The company has also received additional orders for Smart Pedestrian Crosswalks from Estonia, Latvia, and Croatia. The first of the ordered devices should be installed in June/July this year. Among other things, these projects are expected to include the piloting of the first Smart Pedestrian Crosswalk equipped with 5G hardware, as well as the testing and demonstration of mobile data communication and communication with connected vehicles. The operating principles of the system are described on the next page;

- **the Smart Mobility Hub** – an interactive information system for transport service providers for operating on-demand public transport.

The Smart Mobility Hub has been developed in collaboration with OÜ Modern Mobility, and the first prototypes of the system were piloted as Smart Bus Stops in 2020 in Estonia, servicing the route Ülemiste City – Tallinn Airport, as well as in the city of Lamia in Greece. The system enables on-demand self-driving transport routing in daily life. Smart Mobility Hubs are set to be deployed in several cities across Estonia this year.

## Mission and vision of Bercman

The activities of Bercman are inspired by **Vision Zero**. Vision Zero is a strategic road safety philosophy which recognises that, in order to eliminate accidents, it is essential to design the traffic environment in such a way that takes into account the fact that humans make mistakes and will continue to make mistakes. Therefore, to increase safety, instead of educating road users, solutions that help completely prevent anthropogenic accidents should be implemented.

Bercman supports the advent of Vision Zero and self-driving vehicles by developing products that are designed in such a way that they are capable of communicating with all parties of the traffic environment. Figuratively

speaking, the company's solutions have to maintain an active dialogue with other infrastructure equipment, vehicles and themselves to ensure the safest possible and eco-friendly traffic environment – why should an autonomous vehicle (self-driving vehicle, parcel robot, etc.) stop at the stop line if a nearby Bercman technology confirms that there are no approaching vehicles and has given the green light to move?

- The **mission** of Bercman is to anticipate and prevent avoidable traffic accidents and to accelerate progress for the widespread introduction of self-driving and connected vehicles to achieve this.
- The **vision** of Bercman is to become the preferred partner on the global market of intelligent transportation systems, while developing smart city, smart road and other innovative mobility products and services, with the objective of increasing road safety and people's quality of life.

## The greatest barriers to growth

Bercman has experienced a number of growth barriers during its period of operation, the main ones are as follows:

- **Due to the limited size of the team**, it is taking Bercman a long time to create a partner network. Due to Bercman's field of operation where the main customer is the public sector, all our current partners wish to protect themselves against all business risks as much as possible. This means that new partnership agreements are very detailed and require constant attention from many team members and continued dialogue with potential partners.
- Lack of sufficient **capital for product localisation restricts entry into markets**. Regardless of the fact that the company only operates in Europe, there are differences within the internal market and it is necessary to adapt the products of the company to be market specific, particularly in the 'old' Member States.
- Due to **lack of sufficient capital, there is often insufficient stock**. So far, the company has usually ordered additional prefabricated equipment in small quantities, which has resulted in a relatively high cost price of the equipment. The low level of stock also means that the company cannot serve urgent projects.

## Bercman products

Bercman product solutions are intelligent transportation systems or modern applications that use information and communication technologies to make the surrounding traffic environment more efficient and safe.

The portfolio of Bercman includes **two main products** – Smart Pedestrian Crosswalk and Smart Mobility Hub. In this respect, the company notes that the Smart Pedestrian Crosswalk is a product solution intended for today's market, whereas the Smart Mobility Hub is a **pathfinder** or a solution for market discovery that is initially and primarily used in a variety of smart city projects.

**The Smart Pedestrian Crosswalk is a safety system designed for unregulated pedestrian crosswalks that monitors traffic with various sensors to reduce traffic conflicts between road users.** The main task of the system is to increase the awareness of nearby road users and notify them of the possibility of a dangerous situation, if necessary. Such situations are identified with the help of machine vision algorithms which monitor the moving trajectories of the road users and detect their overlaps. Therefore, the device has two modes:

- **Normal mode.** The system monitors nearby road users and warns approaching vehicle drivers with a visual signal of pedestrians crossing the road.
- **Emergency mode.** The system monitors nearby road users and identifies the danger when trajectories overlap. An automatic vehicle-to-everything (V2X) message is transmitted to an approaching connected vehicle and, if necessary, the automatic emergency braking system is activated. The system warns vehicle drivers with a visual signal and pedestrians with an audio signal.



Currently, the benefits of the Smart Pedestrian Crosswalk for customer groups are as follows:

- **The direct economic benefits arise from increased road safety.** A study on the effectiveness of Smart Pedestrian Crosswalk which was carried out this year by TalTech found that the Smart Pedestrian Crosswalk reduces the risk of traffic hazards by an average of 37%. Taking into account that traffic accidents cost most countries 3% of their gross domestic product, then every accident prevented holds a high value.\*
- **The indirect economic benefits arise from the additional functions of the system.** The additional functions of the system can be used to gather data. The data gathered can be used to enhance traffic and living environment planning, to implement new business models or for scientific purposes.

\* Den Haag, Ministerie van Infrastructuur en Milieu (IenM), Kennisinstituut voor Mobiliteitsbeleid KiM, 2019, 203 p., ref; KiM-19-A12 - ISBN 978-90-8902-216-5



The development of a Smart Pedestrian Crosswalk is an ongoing process and Bercman wishes to offer even more functionality on the market. For example, we are developing an automatic emergency call function for the Smart Pedestrian Crosswalk which would be able to detect an accident with the help of sensors and inform first responders of an unavoidable accident.

**Smart Mobility Hub** is an interactive information system that enables transport service providers to transmit real-time information and receive demand-responsive transport requests. In particular, the Smart Mobility Hub allows the service provider to remotely update timetables, transmit traffic information and to use the solution as part of a multimodal transportation system. Passengers can order a vehicle to their desired location at the press of a button or send notifications to the driver. The Smart Mobility Hub is designed to operate in both rural and urban areas as it uses solar panels to meet its energy needs and can be installed wherever there is mobile internet access.



Photo credit: FABULOS project

In addition to offering conventional products, Bercman also develops **custom-made solutions for large customers**. A prime example is a product that is being developed for **AS Operail**, an international railway logistics company operating in Estonia, and that meets the requirements of the European Rail Traffic Management System (ERTMS). The first testing of the product prototype will begin in the third quarter of 2021. This product development that conforms to European Union standards (ERTMS) constitutes a long-

term opportunity to contribute to making the rail sector safer which, in turn, supports the mission and vision of the company.

## Future prospects of Bercman

After the initial public offering, the company intends to fully develop the aforementioned product that meets the requirements of ERTMS in the third quarter of this year, and to improve the object detection accuracy and the accident prevention software of the Smart Pedestrian Crosswalk. The focus is also on the real-life implementation with V2X vehicles. Furthermore, the company wishes to bring in further development and sales resources to serve the target markets in the third quarter. As of today, the company has entered or is about to enter six markets – Estonia, Latvia, Germany, Croatia, the UK, and Greece. As the sales capacity increases, Bercman wants to enter other Western and Central European markets (including Belgium, Lithuania, Slovenia, Slovakia, France, Spain, the Netherlands, and Czechia) where negotiations with potential partners are already underway.

In October, the company is participating in the ITS World Congress in Hamburg with official demonstrations, for which demonstrations of the functionalities of Smart Pedestrian Crosswalk will be made with cooperation partners:

- Test track project for automated and connected driving in Hamburg. A test track several kilometers long for automated and connected driving has been built in the city of Hamburg, for which Bercman will supply a device that creates the preconditions for the crosswalk to be able to notify connected vehicles of road users in danger.
- Project NATIX GmbH in cooperation with the University of Hamburg (Hamburger Informatik Technologie-Center e.V.) and Artificial Intelligence Center Hamburg (ARIC) to develop the prediction capability of the crosswalk in edge cases.

In 2022, Bercman aims to develop new product solutions, particularly to implement the machine vision algorithms of the Smart Pedestrian Crosswalk in products that are designed to manage traffic and improve road safety at

crossroads and other complex junctions. Bercman plans to implement this technology in the Smart Intersection Control and Automated Giving Way Detection products which, for the most part, are software solutions.

New technological developments in the world of self-driving vehicles look as if they are going to have the same impact as the first vehicles had when they first appeared next to horse-drawn carriages. Many automotive historians are comparing the current situation with that at the end of the 19th century when the first motor vehicles were invented. Some of them predict that in 20 years non-autonomous vehicles will be banned. The reason why this prospect may become a reality lies in connected vehicles: if all vehicles are connected to each other, the risk of accidents is significantly lower, as 90% of the causes of accidents – human errors – are eliminated.

In accordance with its mission, Bercman aims to contribute to the spread of self-driving vehicles through smart solutions that can communicate with

vehicles and provide them a static perspective from the infrastructure to ensure safety. For example, at the end of 2020, in cooperation with the Autonomous Driving Lab of University of Tartu, who is developing a self-driving vehicle for Bolt, Bercman installed a roundabout sensor which identifies the presence of vehicles on the roundabout and communicates this to the self-driving vehicle. Thanks to the Bercman sensor and infrastructure-to-vehicle communication, the safety of the self-driving vehicle improved when entering the roundabout which in turn also ensures a smoother traffic flow.

As a result of this and other pilot projects taking place in 2021, Bercman intends to further increase its competence and knowledge to communicate with self-driving vehicles and to find solutions for complex traffic junctions. Even though the exact time of the widespread use of self-driving vehicles is still an estimate today, all signs suggest that the vehicle-to-vehicle and vehicle-to-infrastructure connectivity is something that will become more widespread in the next five years.



## MAJOR MILESTONES OF BERCMAN

**2016**

- The founder Mart Suurkask realises that road safety has stagnated and progress has slowed down. The idea of the Smart Pedestrian Crosswalk is born.
- Bercman Technologies AS is established on 17 October 2016.

**2017**

- The company conducts a study on the technical feasibility of the smart pedestrian crosswalk solution. A physical prototype is created as part of the study and it is tested in the laboratory of TalTech.
- A patent application for the protection of the design of Smart Pedestrian Crosswalk is submitted. The application cannot be continued because it is apparent that the device should be made more modular.

**2018**

- Two developers with a background in hardware join the company with the aim of developing the first testing prototype of the Smart Pedestrian Crosswalk.

**2019**

- The idea of the Smart Mobility Hub is born.
- Bercman participates in the acceleration programme of BuildIT, the aim of which is to bring the Smart Pedestrian Crosswalk solution closer to the market. Bercman completes the accelerator and BuildIT Pre-Seed Fund invests in the company (€50,000).
- Bercman receives funding from Archimedes NUTIKAS (€70,514) to research the possibilities of combining real-time sensor datasets. The project ends in the first quarter of 2020.
- In the background, there is continuous work to reduce the cost price of the solution and develop the technology. A more capable and affordable prototype of Smart Pedestrian Crosswalk is born.

**2020**

- Installation of Smart Pedestrian Crosswalk prototypes with limited functionality for Estonian and Finnish pilot customers.
- Submission of the Horizon 2020 project application. The application is successful and Bercman receives 50,000 euros for the economic feasibility analysis of the Smart Pedestrian Crosswalk. In the framework of this analysis, the strategy on intellectual property of Bercman was prepared.
- Four new employees, who are involved in hardware development, business development and business management, join the team. The team now has eight members.
- The development of the Smart Mobility Hub prototype.
- Bercman begins cooperation with the University of Hamburg and technology companies of Hamburg (including ARIC), and plans common projects.
- In cooperation with Modern Mobility OÜ, a future mobility company, the Smart Mobility Hub pilot project is conducted in Tallinn and Greece.
- The beginning of cooperation with the Autonomous Driving Lab of University of Tartu and

2021

- Bolt to develop communication between a self-driving vehicle and infrastructure.
- Assembling and delivery of the optimised Smart Pedestrian Crosswalk to the first customers in Estonia and the UK.
- Conclusion of a resale contract with A1, the largest telecom company in Croatia.
- Conclusion of a resale contract with Clearview Intelligence, a large-scale player in the field in the UK.
- Bercman joins the Impulse Partners accelerator. Impulse Partners is a French accelerator that connects corporate groups with innovative startups to cooperate on the French market. So far, Oracle, Toyota Tsusho and Via ID have been interested in the technology of Bercman.
- TalTech publishes a study that confirms that the Smart Pedestrian Crosswalk reduces the risk of traffic hazards on unregulated pedestrian crosswalks by an average of 37%.
- Bercman as a subcontractor wins the first procurements for the testing of the hardware and software of Smart Pedestrian Crosswalk on regulated intersections.
- Bercman applies for a patent to protect the intellectual property of the Smart Pedestrian Crosswalk.
- Reio Orasmäe, former sales manager of Cleveron, joins the company part time and together we start planning and implementing the sales strategy.
- In addition, a machine vision specialist and a mechanical engineer join the company.
- There are plans to apply for the H2020 Phase 2 funding, the first phase of which was completed successfully.

## Markets and competition

In 2020, the total size of the global intelligent transportation systems market was close to 15 billion euros. It is a fast-growing market that is expected to double by 2025, with a projected compound annual growth rate of more than 15%. Bercman is active in the largest – **advanced traffic management systems** – market segment, which represents 38% of the total market.

Geographically, the three largest markets are North America (40.2%), Asia-Pacific (24.1%), and Europe (22.4%). The market share of Europe is expected to increase as the European Union has set itself the goal of becoming the leading producer and user of the services of intelligent transportation systems in the world.

In Europe, the **main growth factors** of the market are:

- **The increasing number of motor vehicles.** There are 300+ million vehicles in Europe and this figure is increasing annually by 1.4%.
- **Infrastructure solutions with poor safety.** An average of 20,000 people die annually on European roads.
- **The desire to reduce negative impacts on the environment.** Intelligent transportation systems enable the reduction of location-based greenhouse gas emissions by approximately 4%.
- The largest customer group of intelligent transportation systems is the public sector, more precisely **city governments**, who are interested in the ability of these technologies to make traffic more efficient. When choosing an intelligent transportation system, customers are primarily interested in their (1) ability to collect traffic environment data, (2) low operating costs, and (3) long service life.



Bercman considers the target markets for its products and services to be Baltic and Western and Central European countries where there are problems with road safety or where the implementation rate of new road safety technologies is above the average. As of today, the company has entered or is about to enter six markets – **Estonia, Latvia, Lithuania, Croatia, the UK, and Greece**. As the sales capacity increases, Bercman wants to enter other Western and Central European markets (including Belgium, Germany, Slovenia, Slovakia, France, Spain, the Netherlands, and Czechia) where negotiations with potential partners are already underway.

The product solutions of Bercman are primarily targeted at cities with more than 50,000 inhabitants and where the local authorities have a firm plan for renewing the infrastructure solutions of the city over the coming years. In Europe, approximately 250 cities meet this criterion. Bercman estimates that per 50,000 inhabitants there are about 60 unregulated crosswalks in each city, which means that in the case of Smart Pedestrian Crosswalk, the serviceable addressable market of Bercman in the target countries is more than 450 million euros.

To reach customers, Bercman seeks potential resale partners in target markets, negotiates terms and conditions, and selects the most suitable candidates. Generally, Bercman concludes with the reseller an ambitious agreement which determines the obligations of both parties, in order for Bercman and the selected partner to be able to serve customers as efficiently as possible and maintain the good image of the trademark in the public sector. Bercman only performs direct sales in Estonia.

Solutions for the intelligent transportation systems market are primarily offered by manufacturers of traffic management systems of an international calibre, such as Denso (JP), Kapsch TrafficCom (AT), Swarco (AT), Siemens (DE), Thales (FR) and many others. Globally, the intelligent transportation systems market is divided quite evenly between these manufacturers; however, in the advanced traffic management systems segment, the biggest manufacturer is Kapsch TrafficCom.

Kapsch TrafficCom operates in 25 countries and its sales turnover in 2020 was more than 500 million euros, of which 53% originated from Europe. Kapsch estimates that those who can stand out from the competition and offer solutions based on data will benefit in the next 7 years on the advanced traffic management systems market.

To the best knowledge of Bercman, competitors have not informed the public about their plans to launch product solutions similar to the Smart Pedestrian Crosswalk. This was also confirmed by queries about competitors in European patent databases. Since this is a nascent field and potential patent applications may have been submitted recently, we cannot rule out the existence of a so-called blind period. A blind period means that from the date of priority until the publication of the patent application, the applications are not visible in the database.

Compared to competing solutions (including automatic pedestrian crosswalk warning systems), the Smart Pedestrian Crosswalk offers unprecedented functionality at a comparable price. The greatest technological advantage of the Bercman solution is machine vision algorithms which exclusively enable the local prevention of situation-based conflict situations.

## Important agreements

On 4 October 2018, Bercman Technologies AS concluded an investment loan contract with Swedbank. As of 30 May 2021, the outstanding principal amount of the investment loan is 45,651.66 euros. The deadline for reimbursing the loan is 15 September 2022. The loan contract has been concluded on market conditions and both parties perform the contract in accordance with its terms and conditions.

The core shareholders of Bercman have concluded a shareholders' agreement, the objective of which is to agree on the cooperation of the parties as the shareholders of the issuer. However, the shareholders' agreement does not include voting agreements and the decisions of the general meeting of the issuer are adopted in accordance with the statutes and legislation. The most important condition of the shareholders' agreement is the agreement according to which **Hasenberg OÜ, the key shareholder of the issuer, and undertaking under the control of the founder and board member, undertakes not to dispose of its shares within a 12-month period** from the conclusion of the agreement. The agreement does not contain any agreements or conditions that could damage the rights of a shareholder who is not a party to the agreement.



## **Key assets**

### **Strategy on intellectual property**

Bercman protects its intellectual property ('IP') against unauthorised use. In the framework of the Horizon 2020 programme, a feasibility study was conducted, during which the company's strategy on IP was also prepared. The strategy on IP of Bercman is heavily based on business secrets; however, the company has an increased interest in patenting its technology both in Europe and America (see next subchapter 'Intellectual property'). The company plans to submit a patent application for the protection of their intellectual property. More details will be available on our website [www.bercman.com](http://www.bercman.com) under the tab 'Investor Relations'.

The company has appointed a person responsible for the management of intellectual property of Bercman (including for ensuring that the source code would always be the property of the company) and who conducts periodic freedom to operate searches and stays informed about the intellectual properties of competitors.

### **Related-party transactions**

There are no related-party transactions.

### **Proceedings**

Bercman has no ongoing legal proceedings and has had no tax or other disputes in previous reporting periods. No bankruptcy claims have been filed against Bercman and no bankruptcy proceedings have been initiated.

## **Intellectual property**

The intellectual property of Bercman is represented by a German patent law firm Stellbrink & Partner Patentanwälte mbB. The patent attorney of the company is Axel Stellbrink, who has some 30 years of experience in patenting start-up inventions. Axel has also performed several times at the seminars of Enterprise Estonia as a representative of Starship Technologies OÜ.

### **Trademark**

The European Union Intellectual Property Office has included the term 'Bercman' in relevant classes in the European Union trademark register. The number of certificate of registration is 016235418. As the fields of activity expand, the classification of goods and services will be supplemented to protect the term.

## 6. MANAGEMENT

### Management bodies

Bercman has a two-level management structure. The management board is responsible for the regular activity and management of Bercman, the management board has the right to represent Bercman in accordance with the law and the statutes. Bercman is managed by a single-member management board.

The supervisory board of Bercman is responsible for strategic business planning and oversees the activities of the management board. The supervisory board of Bercman consists of three members.

The highest supervisory body of Bercman is the general meeting of shareholders. Shareholders can participate in the management of Bercman through the general meeting of shareholders which has the competence to decide on certain important corporate matters, such as amendment of the statutes; increase or decrease of share capital; issue of convertible debenture; election and removal of members of the supervisory board; selection of auditor; conduct of a special audit; approval of annual report and distribution of profits; decision on the dissolution, merger, division and transformation of Bercman; decision on performing a transaction with a member of the supervisory board; determination of the terms of the transaction; decision on having a legal dispute and appointing a representative of Bercman in that transaction or dispute; and other matters prescribed by law or the statutes of Bercman.

### Management Board

**Mart Suurkask is a member of the Management Board** of Bercman. Mart Suurkask was born in 1989. He graduated from the Estonian Entrepreneurship University of Applied Sciences Mainor in 2011 with a degree in business administration, majoring in logistics. Mart owns nearly 40% of Bercman's shares through the holding company Hasenberg OÜ. Mart has been in business for almost 8 years, during which time he has acquired diverse knowledge and the skills to successfully take the company to an international level. Mart is a co-founder and visionary of Bercman and is fully committed to the development and success of the company.

### The Supervisory Board

As of the date of the company description, the Supervisory Board of Bercman includes three members: Kuldar Leis, Raimond Russak, and Tarvi Thomberg.

**Chairman of the Supervisory Board Kuldar Leis** was born in 1968. He graduated from the School of Economics of the University of Tartu. Kuldar has been Bercman's shareholder and a member of the Supervisory Board since 2018. He has more than 25 years of experience in business management and entrepreneurship. Among other things, he has been involved in listing two companies: adding Premia Foods to the main list of Nasdaq Tallinn as Chairman of the Management Board and admission to trading of Linda Nektar on First North as a member of the Supervisory Board. Kuldar is a member of the supervisory board of both listed companies and also operates in several other companies. For the last four years, Kuldar has been a business consultant in South-East Estonia and, since June 2021, a member of the management board of the Tartu 2024 Foundation (European Capital of Culture Tartu 2024). He owns approximately 17% of Bercman's shares through the holding company OÜ Rododendron.

**Raimond Russak, a member of the Supervisory Board**, was born in 1970. He graduated from the Estonian Agricultural University with a degree in economics and business in 1997. Raimond has worked in more than ten different companies, mostly in financial management, most recently in TV3 as a member of the management board and CFO. He has also been a co-founder of Kids Network Television OÜ, one of the most successful media companies in the Baltics, which was just sold to the large group MM Grupp. Today, Raimond is building a greener future in Roofit Solar Energy OÜ as co-founder and CFO. Raimond Russak owns approximately 1.7% of Bercman's shares through the private limited company Finantsvara OÜ.

**Tarvi Thomberg, a member of the Supervisory Board**, was born in 1982. Tarvi has been a member of Bercman's Supervisory Board and investor since 2020. He completed a master's degree in electrical engineering from Tallinn University of Technology in 2007 and an MBA from the Estonian Business School in 2014, and has

also acquired knowledge in business administration in the London Business School in 2013. Tarvi has worked at Elektrilevi as a member of the Management Board and the head of customer management and is now the head of the enhancement service at Eesti Energia and the head of Enefit Outotec Technology. Tarvi Thomberg owns approximately 9.6% of Bercman's shares through the private limited company Wrap OÜ.

## Board approval

To the best of the Management Board's knowledge, no member of the Management Board, members of the Supervisory Board or any of the key personnel of Bercman

have been criminally convicted or convicted of fraud or fraudulent conduct in the previous year. To the best of the Management Board's knowledge, no member of the Management Board, members of the Supervisory Board or any of the key personnel have been a member of the governing body of any legal entity at the time of initiating bankruptcy, reorganisation or liquidation proceedings in the previous five years. The Management Board confirms that Bercman has no ongoing legal proceedings and has had no tax or other disputes in previous reporting periods. No bankruptcy claims have been filed against Bercman and no bankruptcy proceedings have been initiated.

## OUR TEAM

Bercman has a young team of 10 members that is characterised by great ambition and determination. All team members are united by the desire to make the current traffic safer, and rapid developments in

technology lets them believe that visible changes will occur in the coming years. Bercman's team culture is focused on taking responsibility, thinking outside the box and being results-oriented.



**Mart Suurkask**, CEO



**Triinu Hansen**, COO



**Werner Ruul**, Business Development Manager



**Mohamed Abdelmomen**, Mechanical Engineer



**Hans Leis**, Sales Lead



**Mikk Kinsiveer**, Major Account Manager



**Jaan Kristjan Lepp**, Engineer



**Martin Körvel**, Senior Developer



**Niyi Adebayo**, Machine Vision Specialist





**Kuldar Leis**  
Chairman of the  
Supervisory Board



**Tarvi Thomberg**  
Member of the  
Supervisory Board



**Raimond Russak**  
Member of the  
Supervisory Board



**Reio Orasmäe**  
Business Consultant

The Bercman team currently includes ten members. Each team member joined the company because they were inspired by the company's mission and possible developments in the field of intelligent transport systems and mobility. The team values the desire to be a part of a positive change and to work towards making innovation in road safety a reality. Since the company has great ambitions, the creative contribution, accountability and results-orientation of each team member is important.

Bercman is committed to ensuring a balance between the professional and personal development of team members and supporting the pursuit of goals. The company values mutual support, openness, honesty and a cheerful and tight-knit attitude. Great emphasis is placed on recruiting new people in order to maintain a sense of unity and the unique organisational culture even as the company grows.



## 7. SHARE CAPITAL, SHARES, AND SHAREHOLDERS

### Share capital and shares

Bercman's share capital is 95,847.10 euros. Bercman has issued 958,471 shares of the same class with a nominal value of 10 cents.

### Shareholders

The following shareholders have a holding of more than 5% in Bercman.

Shareholder	Holding	Beneficiary/beneficiaries
Hasenberg OÜ	40.5436%	Mart Suurkask
Rododendron OÜ	17.3714%	Kuldar Leis
Wrap OÜ	9.6310%	Tarvi Thomberg
Lutsu Turismitalu OÜ	6.0315%	Leander Konks
Swedbank AS Clients	5.5376%	BuildIT Seed Fund

### The rights of shareholders

In summary, the shareholders have the following rights:

- to buy, sell, pledge or otherwise dispose of the Shares;
- to participate in the distribution of Bercman's profit in accordance with the decision of the general meeting of shareholders and the number of shares, if Bercman decides to distribute the profit;
- to participate and vote at the general meeting of shareholders in accordance with the provisions of Bercman's Articles of Association, based on the number of shares owned by the shareholder;
- to receive information on the activities of the issuer to the extent and pursuant to the procedure provided by law;
- to nominate candidates for members of the Supervisory Board.

### Employee stock option plan

The general meeting of Bercman's shareholders held on 21 May, 2021 decided to approve the stock option plan for Bercman's executives and key employees under the following conditions:

- volume of the stock option plan: 67,993 shares;
- term of the stock option plan: 3 years as from the conclusion of contracts;
- price to realise stock options: 10 cents per share;
- principles for determining the persons eligible to receive stock options: full-time key employees of the company, up to 10 first employees of the company, part-time employees who bring high added value to the company.



## 8. RISK FACTORS

### Introductory remarks

Investment in the offer shares and Bercman's activities in general is subject to various risks that, either individually or in combination, may adversely affect Bercman and the value of Bercman's shareholders' investment or affect the ability to realise the shares. Any potential investor should carefully consider all of the information provided in the company description, including the risk factors described below. In addition to the following, there may be risks that are not currently known to Bercman or that Bercman currently considers to be insignificant but which may also affect Bercman or the price of the shares. Investors may lose a part or the entire value of their investment if the risks are realised.

The management board finds that the following reflects the most significant risks related to investing in offer shares.

### Risks related to the issuer's business

#### Risk stemming from the short operating history and forecasts.

Bercman is a young company that does not have a long operating history, which is reflected in the issuer's current modest sales revenue, especially compared to the forecasts provided in the company description. There is no way to ensure that the forecasts are realised and if the results negatively differ from the forecasts provided in the company description, it may have a negative impact on the issuer's financial results.

#### Market risk

There is no guarantee that the issuer's products have or will have a market. The issuer primarily operates in the development of software for traffic monitoring based on machine vision and the development of equipment for its implementation. The market for such products is still evolving and can change rapidly, and a significant increase in competition cannot be ruled out as the field of machine vision develops. Practical experience in applying machine vision in traffic speaks in favour of the issuer, which reduces possible hesitations related to the introduction of innovative solutions in the public sector.

### Risk related to technological developments

The company's development activities may take longer than expected and there is no guarantee that the development activities will lead to new technologies that can be used in the issuer's future products.

### Risk related to the location

Bercman and its main partner are located in the Baltics, a region with rising labour costs (according to the European Commission, in 2020, the increase in labour costs in Estonia and Latvia was nearly threefold compared to the average of the euro zone (8.4% and 7.4% vs. 2.8%). This may have a negative impact on Bercman's competitiveness in entering new markets in the medium term.

### Risk related to financing

There is no assurance that the issuer will be able to raise capital to the extent necessary to finance the company's growth and operations.

### Risk related to partners

As Bercman does not have a production unit, the company depends on partners for the production of its equipment. The ability of its partners to fulfil Bercman's orders and comply with the terms of the contracts concluded with Bercman may have a negative impact on Bercman's growth opportunities and financial results.

## Legal and economic risks

### Changes in legislation

Bercman is a company operating under Estonian law and the legislation of the Republic of Estonia applies to Bercman's shares. Relevant legislation may change if new acts are adopted or current legislation is amended or interpretative practices change. Changes in legislation could adversely affect Bercman's business, financial situation, performance and/or prospects. Changes in tax legislation may increase the tax burden of shareholders and affect the return on investment. The aforementioned may have a negative effect on the price of the shares.

Personal data protection requirements applicable to the issuer's activities (especially the use of machine vision to increase road safety in urban areas) could become more stringent, which has an adverse effect on the issuer, as the issuer has to incur unforeseen expenses, which in turn restricts financial results.

### Fluctuation in the prices of components required for production

If the prices of components used in Bercman's products significantly increase, primarily as a result of problems with global supply and more expensive raw materials, it is likely that the issuer will be unable to reflect this price increase in the final price, as customers may not be willing to accept it. However, if the issuer does increase prices, customers may reduce order volumes, which in turn decreases the issuer's turnover and financial results.

### Unfavourable economic developments

Bercman's development and economic and financial performance are significantly affected by the regional and global economic environment. The impact of the health crisis caused by COVID-19 on the global and regional economy remains unclear. Although the downturn in spring 2020 was followed by a rapid upswing in the second half of the year, the health crisis

has disrupted and continues to disrupt the normal functioning of markets, both in terms of movement of labour and goods, as well as the production of goods and services. The global financial crisis that began in 2008 led to economic downturn, higher unemployment rates and decrease in the value of assets in Estonia. The economic downturn caused difficulties for entrepreneurs operating in all fields in the Estonian market. A similar economic downturn could have a negative impact on Bercman's business, primarily due to reduced demand and higher input prices. Bercman constantly monitors developments in both the domestic and international markets. However, it is not possible to accurately predict the timing or extent of economic or political conditions, especially with relation to the COVID-19 crisis.

### Contractual risks

The issuer's activities depend on the validity and enforceability of transactions and contracts concluded by the issuer, some of which may be affected by foreign law.

## Risks related to shares, their offer and admission to trading

### Payment of dividends is not guaranteed

Bercman has no obligation to pay dividends. Bercman cannot guarantee the regular payment of dividends in the future. In the future, Bercman plans to invest profits into the company and is not planning to pay dividends to shareholders in the foreseeable future. The management's recommendations for profit distribution are based on financial results, working capital requirements, investment needs, and strategic considerations. They may not coincide with the short-term interests of all shareholders. The payment of dividends and their amount depends on the decision of the general meeting of shareholders.

**New issues and share dilution**

In the future, Bercman may issue new shares for a variety of reasons, including to finance the company's development or reduce debt. If the current shareholders decide not to subscribe for additional shares within the offer of new shares, the issue of new shares may result in the dilution of shares of the existing shareholders. This may reduce the proportional holding and voting rights of shareholders in Bercman.

**Cancellation and under-subscription for an offer**

Although Bercman will make every effort to ensure that an offer is successful, Bercman cannot guarantee the success of an offer or that investors will receive the offer shares that they subscribed for. Bercman has the right to cancel the offer until the distribution is decided. The offer may also be cancelled in the part of the offer not subscribed for. In the event of under-subscription and partial cancellation of an offer, Bercman will need to find alternative sources of financing for the planned growth strategy published in the company description or make the growth strategy more conservative, reduce the volume of investments, or extend the investment schedule.

**Risk related to admission to trading**

Bercman has applied for the admission of shares to trading on First North and will take all appropriate measures to act in accordance with the rules and regulations and applicable law for the exchange to satisfy Bercman's application. Despite Bercman's actions, Bercman cannot guarantee that the shares will be admitted to trading on First North.

**Liquidity risk**

First North MTF is more volatile and less liquid than the regulated market. Bercman cannot guarantee that an active secondary market for the shares on First North will be established after admission to trading. Therefore, the liquidity of the shares on First North may be limited or insufficient. Relatively low market capitalisation and liquidity may restrict the investors' ability to sell or buy shares on First North or increase the volatility. Due to the low level of investor activity in the market, the impact of individual transactions may have a significant impact on the market price of a security and the difference between purchase and sale prices may be greater than usual.

## 9. SELECTED FINANCIAL INFORMATION

Consolidated balance sheet of Bercman	2019	2020
<b>CURRENT ASSETS</b>		
Cash	8,743	9,727
Receivables and advance payments	12,251	11,313
Inventories	105,633	68,884
<b>TOTAL CURRENT ASSETS</b>	<b>126,527</b>	<b>89,924</b>
<b>FIXED ASSETS</b>		
Tangible fixed assets	40,151	32,161
Receivables and advance payments	37,566	0
Intangible fixed assets	93,301	103,164
Total fixed assets	171,018	135,325
<b>TOTAL ASSETS</b>	<b>297,545</b>	<b>225,249</b>
<b>LIABILITIES AND EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Loan commitments	103,706	59,307
Payables and advance payments	163,357	199,565
Provisions	4,168	4,168
<b>TOTAL CURRENT LIABILITIES</b>	<b>271,231</b>	<b>263,040</b>
<b>NON-CURRENT LIABILITIES</b>		
Loan liabilities	96,048	0
Government grants	23,310	23,310
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>119,358</b>	<b>23,310</b>
<b>TOTAL LIABILITIES</b>	<b>390,589</b>	<b>286,350</b>
<b>EQUITY</b>		
Share capital at nominal value	75,000	75,000
Unregistered share capital	0	100,592
Profits brought forward	-47,324	-168,044
Profit for the financial year	-120,720	-68,649
<b>TOTAL EQUITY</b>	<b>-93,044</b>	<b>-61,100</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>297,545</b>	<b>225,249</b>

Consolidated income statement of Bercman	2019	2020
Sales revenue	70,359	124,731
Other commercial revenue	35,548	89,018
Goods, raw materials, supplies, and services	-48,241	-72,597
Miscellaneous operating expenses	-79,998	-33,460
Labour costs	-61,104	-123,086
Depreciation of fixed assets	-27,286	-41,625
Other operating expenses	-824	-2,357
<b>Operating profit (loss)</b>	<b>-111,546</b>	<b>-59,377</b>
Interest income	1	0
Interest expenses	-6,100	-7,314
Other financial charges	-3,075	-1,958
<b>Profit (loss) before income tax</b>	<b>-120,720</b>	<b>-68,649</b>
Income tax	0	0
<b>Profit for the financial year (loss)</b>	<b>-120,720</b>	<b>-68,649</b>

## Economic forecast

Year	2021	2022	2023	2024
Sales turnover	-309,921	-1,005,075	-2,313,750	-4,457,125
Other commercial revenue	42,928	0	0	0
Goods, raw materials, supplies	-155,551	-502,155	-1,438,318	-2,675,750
Other operating expenses, including marketing	-81,316	-83,820	-144,118	-205,078
Labour costs	-161,289	-235,087	-344,493	-371,489
Depreciation of fixed assets	-40,533	-77,485	-161,103	-268,450
Other operating expenses	-7,942	-2,400	-7,200	-12,000
Operating profit	-93,783	-104,129	-218,518	-924,357
Financial expenses	-3,596	-6,000	-6,000	-8,400
<b>Profit for the financial year</b>	<b>-97,379</b>	<b>-98,129</b>	<b>-212,518</b>	<b>-915,957</b>



In 2021, the main focus will be on developing the B2B sales strategy of the foreign market. To achieve this, business consultant Reio Orasmäe has recently joined the Bercman team. In 2021, we are planning to sell a total of up to 16 pedestrian crosswalks in Estonia and abroad. Active sales negotiations are currently underway in Latvia, Croatia, Greece, Spain, the United Kingdom, Slovenia, Slovakia, and the Czech Republic. At the same time, development of the software and hardware of the Smart Pedestrian Crosswalk will continue to enhance the machine vision capability within the company and to optimise the hardware solution. Cooperation with Operail AS and Modern Mobility OÜ will continue. The objective of the company's development activities is to patent the added value and outsource production.

In 2022 and 2023, the main focus will be on active sales on the foreign market to increase sales volumes and expand to new countries. In 2022 and 2023, software development of the Smart Pedestrian Crosswalk and the development of possible new product features, as well as cooperation with strategic partners will also be important. To achieve this, we plan to strengthen our team by recruiting new employees. The product range will be expanded.

In 2024, we are planning to increase sales further through entering new countries and finding new partners and strategic partners. Software developments for the Smart Pedestrian Crossing and product developments for other products will be continued to fulfil the company's mission. More emphasis will be placed on the marketing of software products and services and licence-based resale.

## 10. DEFINITIONS

<b>Shares</b>	Bercman shares
<b>Bercman</b>	AS Bercman Technologies, a public limited company registered in Estonia with registry code 14134425
<b>Exchange</b>	Nasdaq Tallinn AS
<b>Issuer</b>	Bercman
<b>Financial statements</b>	The issuer's audited annual reports for 2020 and 2019
<b>IO</b>	Intellectual property
<b>Nasdaq CSD</b>	Estonian register of securities, the registrar of which is Nasdaq CSD SE (Latvian registry code 400003242879)
<b>Offer share(s)</b>	New shares issued by Bercman to be offered to the public under this offer
<b>Offer Period</b>	From 14 June, 2021 to 22 June, 2021, during which the offer shares will be publicly offered
<b>Prospectus Regulation</b>	Regulation (EU) 2017/1129 of the European Parliament and of the Council
<b>Rules and regulations</b>	Rules and regulations of exchange of First North MTF
<b>SMA</b>	Securities Market Act

## 11. ANNEXES

Annex 1 – Articles of Association of Bercman – available at <https://www.bercman.com/investor-relations/>

Annex 2 – Financial statements – available at <https://www.bercman.com/investor-relations/>