

## Update Report

December 16, 2020



## New orders from leading players in Europe, Japan and China; Significant pilots for Eye-Net Mobile; Commercial agreement for Rail Vision; Target price unchanged

Stock Exchange:  
NASDAQ /TASE

Symbol: FRSX

Sector: Technology

Sub-sector:  
Software / Internet

Stock Price Target: NIS  
1.9

ADS Price Target: USD  
2.77

Closing Price: NIS TBD  
Market Cap: 323M NIS  
# of Shares: 323M  
Average Daily Trading  
Volume (3M): 1,052  
shares  
YTD Return: 85%

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### Conclusion

**Strategically**, the Company will leverage its business and technology milestones to reach co-development agreements in 2020 and 2021. The agreement with FLIR will offer Foresight the ability to work directly with OEMs and Tier 1's and open new opportunities for its technology. The inclusion in the heavy-duty autonomous vehicle development European consortium and deal with a tier one supplier in this domain is testimony to Foresight's substantial opportunity in this market. We also see the recent agreement with Elbit Systems Ltd. as a positive sign for future sales.

**Foresight has sold several systems for testing to leading OEMs and Tier One suppliers in the US, Europe, China, Israel, and Japan.** For all details see [Initiation Report](#). **Financially**, Foresight Cash and cash equivalents and short-term deposits totaled \$14.5 million as of September 30, 2020, compared to \$13.1 million on September 30, 2019. In October 2, 2020, Foresight submitted a prospectus for sold ADS up to \$8.1. We assume the company has enough funds to support its activity through H1 2022. **We maintain our evaluation for Foresight at an average price of 1.9NIS**

#### Foresight:

- Foresight Received Two Product Orders from Elbit Systems Ltd.: In July, Foresight received two orders for product development and customization from Elbit Systems Land Ltd., a subsidiary of the leading Israeli defense company Elbit Systems. Foresight will supply a QuadSight® prototype system with wide-angle field-of-view detection capabilities to meet Elbit Systems' specific requirements.
- Foresight Initiated Pilot Project for COVID-19 Mass Screening Solution: Foresight announced in July that its COVID-19 mass screening symptom detection solution, which is designed to detect several notable symptoms of the coronavirus, will be tested in a pilot project with one of Israel's largest health maintenance organizations. The screening solution, based on Foresight's experience with thermal and visible light cameras, is designed to detect high body temperature and signs of fatigue.
- Foresight Received Order for Two Prototype Systems from Multi-Billion-Dollar Chinese Technology Company: Two QuadSight® vision system prototypes were ordered in July by the automotive solutions business unit of a multi-billion-dollar global Chinese technology company. The technology company may use Foresight's technology to improve its autonomous vehicle and safety solutions, and the prototype sales could result in future collaboration.
- Foresight Completed Development of Commercial Version of Automatic Calibration Software: In September, Foresight announced the completion of a commercial version of its groundbreaking automatic calibration software. Foresight's software solution ensures stereoscopic sensors remain calibrated regardless of their position on the car. These calibration capabilities are essential to create the accurate stereoscopic 3D perception needed for reliable automotive vision systems. Additionally, Foresight submitted two new patent applications related to multiple-sensor camera systems.
- Foresight announced completion of integration of NVIDIA platforms for use in Autonomous Machines and vehicles. Foresight is now part of NVIDIA Inception, an acceleration platform that offers go-to-market support, expertise, and technology assistance to artificial intelligence (AI) and data science startups.
- Foresight joined the European Commission All Weather Autonomous Real logistics operations and Demonstrations (AWARD) consortium through the Horizon 2020 framework program. The Consortium will develop and operate safe autonomous heavy-duty vehicles in harsh weather conditions in a variety of different scenarios. In the framework of the project, Foresight is expected to receive a grant of approximately one million USD from the European Commission.

#### Rail Vision:

- On October 13<sup>th</sup>, Knorr-Bremse invested additional \$10M in Rail Vision (pre-money valuation of \$50M); Foresight will hold 19.36% (16.49% in full dilution).
- Rail Vision Signed Commercial Agreement to Supply Shunting Yard Systems to Leading European Train Operator (500k Euro) and announced in September that it signed a commercial agreement with an affiliate of Knorr-Bremse AG, a \$17 billion Europe-based group. According to the agreement, Knorr-Bremse will supply Rail Vision's Assisted Remote Shunting (ARS) systems to a leading European train operator for a total potential of 2.3M Euro with an additional option for 3.5M Euro.
- On December 11<sup>th</sup>, Rail Vision Ltd., received an order from an affiliate of Knorr-Bremse AG for two samples of their light rail vehicle (LRV) system. In addition, Knorr-Bremse has ordered customization of Rail Vision's LRV system features according to Knorr-Bremse's requirements.

#### Eye-Net Mobile:

- Eye-Net Mobile Received Patent Approval for Accident Prevention Solution. The patented technology involves an accident prevention system that predicts collisions between vehicles and pedestrians.
- In August, Eye-Net Mobile announced two pilot projects with leading Japanese multinational companies to test its Eye-Net™ Protect cellular-based accident prevention solution.
- In light of the growing interest in Eye-Net Mobile's technology in Japan, a market characterized by early adopters of new technologies, Eye-Net Mobile signed a distribution agreement with Cornes Technologies, a leading Japanese trading house, in order to increase its presence in Japan.

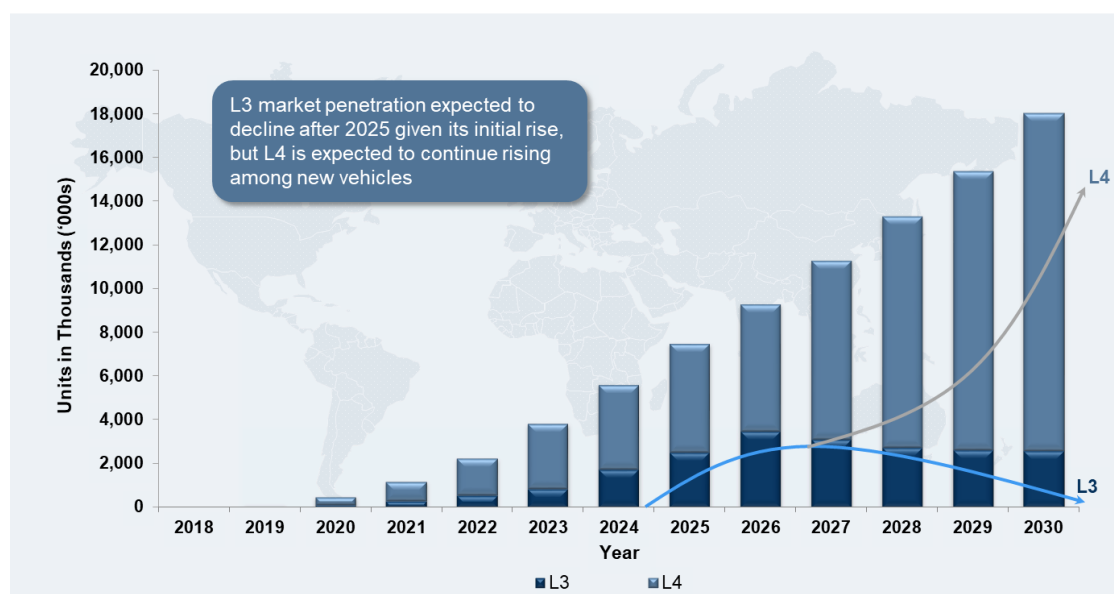
## Executive Summary

### Investment Thesis

Foresight Autonomous Holdings Ltd. (NASDAQ and TASE: FRSX) is a technology company engaged, through its wholly-owned subsidiaries, Foresight Automotive Ltd. and Eye-Net Mobile Ltd., in developing both “in-line-of-sight” vision systems and “beyond-line-of-sight” cellular-based applications. Foresight’s vision sensor is a four-camera system based on 3D video analysis. Eye-Net Mobile’s cellular-based application is a V2X (vehicle-to-everything) accident prevention solution based on real-time spatial analysis of clients’ movement. The company’s systems are designed to improve driving safety by enabling highly accurate and reliable threat detection while ensuring the lowest rates of false alerts. FRSX is also a 19.36% shareholder in Rail Vision Ltd., a leading provider of cutting-edge cognitive vision sensor technology and safety systems for the railway industry.

The autonomous driving market is going through a state of transition, crossing the initial hype cycle into one that is more pragmatic and ROI-centric. OEMs and major investors are re-calibrating their strategies based on identifying technologies that can help address their short-term needs while also fitting in with their long-term vision roadmap for autonomous driving.

**Market Volume of Automated Vehicles, Global, 2018–2030**



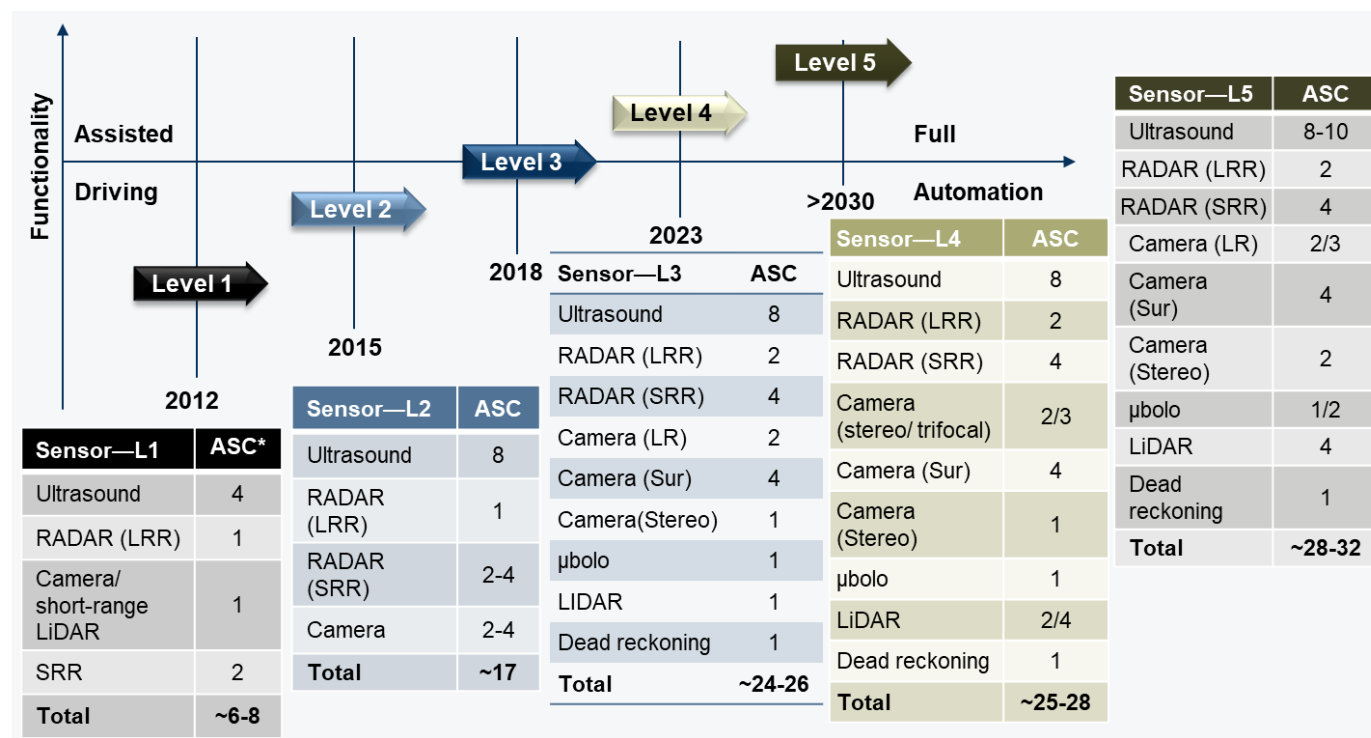
Note: All figures are rounded. The base year is 2018. Source: Frost & Sullivan

In the short term, most major OEMs are looking at business models and use cases that are hyper geo-localized and can bring cost benefits to current operating models that can be displaced. Robo-taxis, shuttles, and urban logistics are expected to be the most lucrative of these geo-localized business models, with Frost & Sullivan valuing these markets at over \$200Bn globally by 2030. While the long-term business models are uncertain, the technology selection for these short-term use cases is now considered with scale and reusability in mind.

**In order to identify the ROI on any of the future business models in autonomous driving, it is critical to understand the technology cost associated with this, and this is where the biggest challenge with the industry resides.** Lack of clear identification of the number of hardware modules required to provide vehicle autonomy along with the growing concern of software costs is mounting the overall estimations of operating autonomous vehicle business models.

Below we present current and future technologies and where Foresight is positioned:

## Sensor Fusion Strategies: Levels of Autonomous Driving with Sensors Requirements, Global, 2019-25



It is now a critical point for OEMs and other service providers to identify systems that are robust yet cost effective and capable of operating in varying environments. Beyond these hardware requirements, OEMs will also require a level of flexibility at the software and supply chain level due to the lack of maturity of this value chain. **The need of the hour is to have software modules that are cross functional with other sensors in the vehicle while having the flexibility to be procured either as processed information blocks from sensors or as raw data points depending on the overall data fusion strategy of the OEM. In essence, to create software that the OEMs can adapt to their needs and not a “black box” solution.**

**Addressing the confluence of these two challenges faced by the automotive industry of needing robust and cost effective sensors, along with flexible and cross functional software would be a key value proposition for any autonomous driving technology supplier, and this is where Foresight positions itself as a strategic fit to a diverse set of potential clients.** Their combined stereo visible-light and infrared (IR) sensor-based system meets a wide range of vision-related requirements by OEMs that include object detection under diverse driving conditions from fair to harsh weather and provides a 3D point cloud of data that is critical for aspects like localization and object classification. Furthermore, by offering three diverse engagement models, from software licensing, to a system on a chip, as well as a fully integrated model, Foresight provides the desired flexibility to the value chain enabling them to work with a diverse array of clients from OEMs, to chip providers.

**Thus we view the investment in Foresight Autonomous as a unique opportunity to invest in a game-changing start up firm in a relatively old school eco-system with three different investment opportunities: autonomous cars, trains, and cellular-based accident prevention solutions.**

## Timeline of Foresight Automotive significant milestones

### Upcoming Potential Catalysts

	Event	Significance	Timeline
<b>Foresight Automotive</b>	1. Commercial order from Elbit to implement Foresight's technology into Elbit's solutions and products	High	H2 2020✓
	2. Initiate a POC with an OEM/ Tier One for tailoring the QuadSight system to the customer's requirements	High	Q1 2021
<b>Rail Vision</b>	3. Rail Vision 1 <sup>st</sup> commercial order	High	H1 2020✓
	4. Rail Vision 1 <sup>st</sup> commercial agreement	High	H2 2020✓
<b>Eye-Net Mobile</b>	5. SDK development completion for Eye-Net	Med	Q1 2020✓
	6. Two pilot projects with leading Japanese multinational technology companies	High	H2 2020✓

## Appendices - Financial Statements

	As of September 30, 2020	As of September 30, 2019	As of December 31, 2019
<b>ASSETS</b>			
Current assets:			
Cash and cash equivalents	\$ 9,395	\$ 5,070	\$ 4,827
Short Term Deposits	5,142	8,068	5,233
Marketable equity securities	19	36	23
Other receivables	446	773	613
Total current assets	15,002	13,947	10,696
Non-current assets:			
ROU Asset	1,127	1,340	1,278
Investment in affiliate company	4,730	7,400	6,729
Fixed assets, net	487	668	631
	6,344	9,408	8,638
Total assets	\$ 21,346	\$ 23,355	\$ 19,334
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>			
Current liabilities:			
Trade payables	\$ 188	\$ 675	\$ 498
Operating Lease Liability	401	413	411
Other accounts payables	1,158	892	1,130
Total current liabilities	1,747	1,980	2,039
Non-current liabilities:			
Operating Lease Liability	832	1,068	1,007
Total liabilities	2,579	3,048	3,046
Shareholders' equity:			
Common stock of NIS 0 par value;	-	-	-
Additional paid-in capital	79,478	65,330	65,681
Accumulated deficit	(60,753)	(45,023)	(49,393)
Total Foresight autonomous holdings LTD. Shareholders' equity	18,725	20,307	19,334
Non-Controlling Interest	42	-	-
Total equity	18,767	20,307	16,288
Total liabilities and stockholders' equity	\$ 21,346	\$ 23,355	\$ 19,334

	Nine months ended September 30,		Three months ended September 30,	
	2020	2019	2020	2019
Research and development expenses, net	(6,374)	(7,007)	(2,157)	(2,547)
Marketing and sales	(973)	(1,616)	(307)	(519)
General and administrative expenses	(2,212)	(2,666)	(918)	(893)
<b>Operating loss</b>	<b>(9,559)</b>	<b>(11,289)</b>	<b>(3,382)</b>	<b>(3,959)</b>
Equity in net gain (loss) of an affiliated company	(1,999)	(168)	(655)	(184)
Financing income (expenses), net	198	388	57	212
<b>Net loss</b>	<b>(11,360)</b>	<b>(11,069)</b>	<b>(3,980)</b>	<b>(3,931)</b>

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