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MANAGEMENT BOARD'S REPORT ON THE ACTIVITIES OF XTPL S.A. AND XTPL GROUP FOR 2021

Wrocław, 26 April 2022

LETTER FROM THE MANAGEMENT BOARD PRESIDENT

Ladies and Gentlemen,

We are pleased to share with you this Annual Report for 2021, which sums up and presents many of the Company's achievements. Thanks to the work we have done in previous years, the past year brought a fundamental change for XTPL: transition from an R&D-focused company to a business that continues research and development and that commercializes its solutions for global manufacturers of next generation electronics. We can boldly confirm that the first stage of the Company's growth process has been completed. We are progressively and consistently building our position as a growing firm that – in addition to developing a globally unique technological offer – already today generates and gradually increases its sales revenues, and whose products have won global market recognition. In this letter, I will try to outline XTPL's key milestones achieved last year.

To begin with, let me summarize our successes in the commercialization of our business lines. In order to introduce global manufacturers of next generation electronics to the capabilities of the XTPL technology, we have developed the Delta Printing System (DPS), a device which enables advanced R&D processes and prototype production. Our target last year was to sell five such devices, and we did that. In this respect, more important that the sheer value of the sales are the places where those devices were sent to and the research that they will be used for. DPS sales processes have been very carefully thought out and planned by us. We wanted the first devices to be received by institutions in Poland and abroad where they could play the role of an ambassador for our ultra-precise deposition (UPD) technology. To achieve this goal, we addressed our offer to selected, recognized research, scientific and academic centers that established and maintain relationships with industrial players from the printed electronics industry. Last year, our dedicated team responsible for the commercialization of DPS did significant work identifying several hundred experts from around the world, operating mainly in the microelectronics, microsystems, semiconductors, biosensors and display industries, who highly value the technology developed by the Company and are potential buyers of XTPL products in the following years. Thanks to the cooperation with scientists from the University of Stuttgart, Glasgow, Brescia, the renowned technological institute in Karlsruhe, as well as researchers from the PORT Łukasiewicz Research Network, we have obtained recommendations and confirmation of our technology from opinion leaders who are regarded not only in the scientific community, but also among representatives of microelectronics, microsystems, semiconductors, biosensors and display industries. Importantly, at the end of 2021, a research team from the University of Glasgow, led by Professor Ravinder Dahiya, published a research paper presenting the unique possibilities connected with the use of the XTPL technology and the DPS in the implementation of heterogeneous connections in advanced integrated circuits. This publication was very well received by the global community connected with the development of the microelectronics and semiconductor industry. Since the beginning of 2022, we have been actively working to secure further DPS sales. The information received so far from interested buyers shows that some of them already submitted grant applications that reflect a budget for the purchase of the Delta Printing System.

We also significantly increased the production of our conductive nanoinks: the number of orders for those products more than doubled compared to the previous year. It should be noted that we are constantly expanding our range of nanoinks. In 2021, we marketed the IJ36 ink for inkjet printing and it became one of the products that enjoy the greatest popularity with customers. We are currently working on new nanoink formulations, using other conductive metals, such as gold and copper. As we are expanding this proposition, we take into account the market needs and client expectations. And finally, at the beginning of this year we finalised talks, started in 2021, with the Israeli company Nano Dimension, for which we are already developing a new ink formulation tailored to the company's electronics printing systems. The cooperation agreement with Nano Dimension is a huge success, confirming the possibilities of our technology and products based on it, as well as showing the market need for technologies that will improve and replace the currently used electronics production processes.

Our third and key business line is industrial implementation by integrating the EPSILON printing module with the production lines of global manufacturers. Last year, we carried out nine simultaneous evaluation processes (with their pace adapted to the requirements of our partners) relating to the Company's main project portfolio. The most advanced work concerned the application of the XTPL technology in the segment of repair of high-resolution OLED displays and in the semiconductor industry, in the area of back-end processing of semiconductor chips, as well as in relation to the deposition of metallic inks to create interconnections for high-density packing for advanced PCBs. Our prospective clients who conduct the evaluation processes with us point to the high potential of using our technology to address current production efficiency issues and support the popularization of new products such as micro-LED displays and more efficient integrated circuits. We are aware that industrial implementation is what our investors are looking forward to most, so I would like to assure you that we are working actively on making this happen. We stick to the plan agreed with our partners. However, it should be emphasized that a change in production processes is not something that will take place in a short time. Global suppliers of components and devices dedicated to electronics are bound by contracts ensuring the stability of supplies, and any change in the production cycle requires appropriate planning so as not to disrupt the supply chain.

I would also like to point out that we are very active in seeking potential clients and stimulating their interest in our solutions. In 2021, we started developing an international network of distributors, which already includes five entities. They promote our technology in the Chinese, South Korean, British, Western European and Indian markets and support the processes of its commercialization. As part of our commercialization strategy, we actively participate in many international industry events, focusing on the most important ones, which are an excellent opportunity to showcase the capabilities of our UPD technology and our products to global buyers. Last year, XTPL was present at 22 conferences, shows and exhibitions, held both on-site and online.

All those activities and serious steps towards full commercialization of the XTPL technology allowed us to generate the first significant financial results. In 2021, we achieved PLN 2,086 thousand in revenues from the sale of products and services compared to PLN 64 thousand in the previous year. In addition, we acquired grants totalling PLN 4,455 thousand, including PLN 2,616 thousand recognised as revenue in the income statement, with the remainder presented in the balance sheet as deferred income. For comparison, in 2020, grant proceeds were PLN 2,230 thousand. As we dynamically move on with the commercialization and increase our involvement in grant projects, we maintain strict cost discipline. In 2021, the average monthly operating costs (excluding depreciation/ amortization and the impact of the incentive scheme) were PLN 735 thousand compared to PLN 647 thousand in the previous year. As a result of the commercialization and with PLN 2 million worth of grants, our operating cash flows improved (to PLN -3,803 thousand in 2021 from PLN -5,761 thousand in 2020), and we closed the year with a comfortable cash position (PLN 4,580 thousand). EBITDA was PLN -5.730 thousand compared to PLN -7,632 thousand in 2020. We are not losing momentum, and our efforts will have a significant positive impact on the current year's revenues and results.

As a technology company, in order to remain competitive, we are constantly working on development of our technologies and products. This is part of the DNA of our business. In 2021, we overcame further technological barriers, as we significantly increased the utilization potential of our UPD method. In addition to the above-mentioned work on new conductive ink formulations, we focused on the ability to print nanomaterials on a high step while maintaining high print resolution, the technique of filling microwells in semiconductor structures (including open defects occurring at the production stage) and printing electronic interconnections in advanced integrated circuits with the use of insulating material on the outside. Thanks to our R&D operations, we have the chance of entering new application areas related to advanced electronics or integrated circuits. The use of the UPD technology in this area fits with the strategy adopted by experts from the semiconductor industry (from the United States, Europe, Japan, China, South Korea and Taiwan) laid down in the documents of the National Technology Roadmap for Semiconductors (NTRS). More details about this area are provided later on in this Report.

The last notable part of the Company's operations is the value-building activities designed to expand the industrial and patent protection. Intellectual property is a product and a competitive advantage of XTPL. For this reason, patent cloud development has a major impact on the business value. In 2021 we filed four new patent applications with the United States Patent and Trademark Office to cover further layers of intellectual property protection in terms of ultra-precise printing on a micrometric scale. As at the Report Date, we had 24 patent applications filed in total and 1 patent granted.

Summing up the achievements of the XTPL team in 2021, I would also like to emphasize that the Company has reached a turning point. This means that we have gone through the most difficult stage in the life of many enterprises, especially technological ones. We have a developed and proven technology, we have a base product offer, we have international distributors and most importantly – we have revenues from the sale of products that will support our growth moving forward. Although some changes and processes may not be visible to you at this stage, their positive impact will gradually materialize, demonstrating the strength of our growth model. We are positive that the technology developed by us will soon become one of the most important standards in the production process of next generation electronics in various sectors.

Last but not least, we would like to take this opportunity to thank the entire XTPL team for their daily work and commitment, and the Supervisory Board Members for their constructive and successful cooperation. At the same time, we would like to thank our Shareholders, Bondholders and Investors for their trust, support and active interest in our business. We remain open to dialogue with you, and invite you to join our regular online earnings calls. Please visit our website at <https://ir.xtpl.com/pl/> for participation details.

In the meantime, enjoy reading this Report. We hope that the presented information will help you in making investment decisions relating to our Company. As always, if you have any questions or concerns, please feel free to contact us by email: investors@xtpl.com

Yours sincerely,



Filip Granek, PhD, CEO

TABLE OF CONTENTS

1. INFORMATION ABOUT THE REPORT AND A GLOSSARY OF TERMS AND ABBREVIATIONS	7
2. FINANCIAL HIGHLIGHTS	10
3. MANAGEMENT BOARD'S REPORT ON THE ACTIVITIES OF XTPL S.A. AND XTPL GROUP	13
3.1. INFORMATION ABOUT XTPL S.A. AND ITS GROUP	13
3.2. XTPL'S ACTIVITY AND ACHIEVEMENTS IN 2021	28
3.3. INTERNAL AND EXTERNAL FACTORS IMPORTANT FOR THE DEVELOPMENT OF THE ISSUER'S BUSINESS	51
3.4. FINANCIAL PERFORMANCE	55
3.5. REMUNERATION	61
3.6. OTHER INFORMATION	65
3.7. RISK FACTORS AND THREATS RELATED TO THE COMPANY'S AND THE GROUP'S BUSINESS ENVIRONMENT	73
3.8. SHAREHOLDING STRUCTURE	81
3.9. Corporate Governance	86
3.10. OTHER STATEMENTS	112
a) Management Board's statement	112
b. Information from the Management Board regarding auditor selection	113
c. Statement of the Supervisory Board	114
d. Management Board's opinion	115
e. Assessment by the Supervisory Board	116
f. Approval for publication	117

Information about the report and a glossary of terms and abbreviations

1. INFORMATION ABOUT THE REPORT AND A GLOSSARY OF TERMS AND ABBREVIATIONS

XTPL Spółka Akcyjna, a joint stock company having its registered office at ul. Stabłowicka 147, 54-066 Wrocław, entered in the business register of the National Court Register kept by the District Court for Wrocław-Fabryczna, VI Commercial Division of the National Court Register under KRS No. 0000619674 ("**XTPL**", "**XTPL S.A.**", "**Company**", "**Entity**", "**Parent Company**", "**Issuer**"), NIP: 9512394886, REGON: 361898062.

As at 31 December 2021 ("**Balance Sheet Date**"), the share capital of XTPL S.A. amounted to PLN 202,922.20 and consisted of 2,029,222 shares with a nominal value of PLN 0.10 each ("**Shares**").

This document ("**Report**") contains the Report of the Management Board of XTPL S.A. on the activities of XTPL Group ("**Group**", "**XTPL Group**") and on the activities of XTPL S.A. for the financial year 2021 ("**Management Report**").

The Group includes the parent company and subsidiaries: XTPL Inc. with its registered office in the USA, and TPL Sp. z o.o. with its registered office in Wrocław, fully controlled by XTPL S.A. ("**Subsidiaries**", "**Subsidiary Undertakings**", "**XTPL Inc.**", "**TPL sp. z o.o.**").

Unless indicated otherwise, the source of data in the Report is XTPL S.A. The Report publication date ("**Report Date**") is 27 April 2021.

The consolidated financial statements contained in the Report mean the consolidated financial statements (including the Company and the Subsidiaries) for the year ended 31 December 2021 prepared in accordance with the International Financial Reporting Standards approved for application in the EU. The unconsolidated financial statements contained in the Report mean the Parent Company's financial statements for the year started 1 January 2021 and ended 31 December 2021 ("**Reporting Period**"), prepared in accordance with the International Financial Reporting Standards approved for application in the EU.

"**WSE**" – Warsaw Stock Exchange: Giełda Papierów Wartościowych w Warszawie S.A.

"**CCC**" – the Act of 15 September 2000 – Commercial Companies Code.

"**Regulation on current and financial reports**" – the Finance Minister's Regulation of 29 March 2019 on current and periodic reports released by the issuers of securities and the conditions for equivalent treatment of the information required by the laws of non-member states.

"**Articles of Association**" – the articles of association of XTPL S.A. available to the public at <https://ir.xtpl.com/pl/materialy/korporacyjne/>.

"**Public Offering Act**" – the Act of 29 July 2005 on public offering, conditions governing the introduction of financial instruments to organized trading and public companies.

"**Accounting Act**" – the Accounting Act of 29 September 1994.

Due to the fact that the activities of XTPL S.A. have a dominant impact on the Group's operations, the information presented in the Management Report relates to both to XTPL S.A. and XTPL Group, unless stated otherwise.

Unless stated otherwise, the financial data are presented in thousands.

DEFINITIONS OF INDUSTRY TERMS:

μm means micrometer, i.e. one millionth of a meter (1/1,000,000 m)

nm means nanometer, i.e. one billionth of a meter (1/1,000,000,000 m)

CAD – Computer Aided Design in such applications such as electrical, mechanical and construction engineering

CAGR means Compound Annual Growth Rate – the average rate of annual growth over the period under analysis, assuming that annual increases are added to the base value of the next period

Deposition means depositing a material locally

Ink formulation means precise formulation of the ink, giving it the desired physicochemical properties

FHE (Flexible Hybrid Electronics) means an electronic circuit made on a flexible substrate containing rigid electronic components, i.e. components not susceptible to bending

IP (Intellectual Property) means intellectual and industrial property

Viscosity – a physical property of materials (fluids) that characterizes their internal frictional force during the flow of a fluid (for example, the viscosity of water, is a low-viscosity liquid, is about 1 cP, and the viscosity of honey varies from 2,000 to 10,000 cP)

Hydrophilic material means a material whose tendency is to attract water molecules

Hydrophobic material means a material whose tendency is to repel water molecules

Additive method means adding material to obtain a specific structure; it is the opposite of the subtractive method whereby material is subtracted to obtain a specific structure

micro-LED (uLED, μLED) – flat display technology based on semiconductor electroluminescent diodes (LED), in which each pixel is a microscopic LED diode.

ODR (Open Defect Repair) means repairing defects in the form of broken conductive paths in the electronic system

OLED (organic light-emitting diode) means an LED based on organic material

UPD (ultra-precise deposition) means a technology of ultra-precise printing of structures developed by the Company

PCB means printed circuit board made of insulating material with electronic connections, intended for assembly of electronic components

Sintering process means mutual binding of particles after heating them to a temperature lower than the temperature needed to melt them

R&D – Research and Development

Resistance means electrical resistance

SEM means scanning electron microscope

Financial highlights

2. FINANCIAL HIGHLIGHTS

Selected standalone data

Figures in PLN thousand	1 January–31 December 2021		1 January–31 December 2020	
	PLN	EUR	PLN	EUR
Net revenue from the sale of products and services	2,086	456	64	14
Revenue from grants	2,616	571	2,230	497
Profit (loss) on sales	-264	-58	-534	-119
Profit (loss) before tax	-6,598	-1,441	-8,182	-1,829
Profit (loss) after tax	-6,598	-1,441	-8,182	-1,829
Depreciation/amortization	585	128	401	90
Net cash flows from operating activities	-3,652	-798	-5,394	-1,206
Net cash flows from investing activities	-2,011	-439	-1,312	-293
Net cash flows from financing activities	-158	-35	12,849	2,872
Figures in PLN thousand	31 December 2021		31 December 2020	
Equity	5,288	1,150	10,737	2,327
Short-term liabilities	5,923	1,288	1,097	238
Long-term liabilities	1,616	351	3,198	693
Cash and cash equivalents	4,473	973	10,298	2,232
Short-term receivables	1,845	401	735	159
Long-term receivables	449	98	33	7

Selected consolidated data

Figures in PLN thousand	1 January–31 December 2021		1 January–31 December 2020	
	PLN	EUR	PLN	EUR
Net revenue from the sale of products and services	2,086	456	64	14

Revenue from grants	2,616	571	2,230	498
Profit (loss) on sales	-80		-534	-119
Profit (loss) before tax	-6,574	-1,436	-8,579	-1,917
Profit (loss) after tax	-6,574	-1,436	-8,579	-1,917
Depreciation/amortization	585	128	401	90
Net cash flows from operating activities	-3,804	-831	-5,765	-1,288
Net cash flows from investing activities	-1,617	-353	-817	-183
Net cash flows from financing activities	-474	-104	12,848	2,872
Figures in PLN thousand	31 December 2021		31 December 2020	
Equity	4,983	1,083	10,386	2,251
Short-term liabilities	5,948	1,293	1,443	313
Long-term liabilities	1,616	351	3,198	693
Cash and cash equivalents	4,580	996	10,478	2,271
Short-term receivables	1,855	403	530	115
Long-term receivables	33	7	33	7

MANAGEMENT BOARD'S REPORT ON THE ACTIVITIES OF XTPL S.A. AND XTPL GROUP

3. MANAGEMENT BOARD'S REPORT ON THE ACTIVITIES OF XTPL S.A. AND XTPL GROUP

3.1. INFORMATION ABOUT XTPL S.A. AND ITS GROUP

3.1.1. Key information about the Issuer

<u>Business name:</u>	XTPL Spółka Akcyjna
<u>Registered Office:</u>	Wrocław
<u>Address:</u>	Stabłowicka 147, 54-066 Wrocław
<u>KRS:</u>	0000619674
<u>NIP:</u>	9512394886
<u>REGON:</u>	361898062
<u>Registry Court:</u>	District Court for Wrocław-Fabryczna, VI Commercial Division of the National Court Register
<u>Share capital:</u>	PLN 202,922.20, paid up in full.
<u>Phone number:</u>	+48 71 707 22 04
<u>Website:</u>	www.xtpl.com
<u>Email:</u>	investors@xtpl.com

The Company has the status of a public (listed) company. Since 20 February 2019, its shares have been listed on the regulated (parallel) market operated by the Warsaw Stock Exchange (WSE Ticker: XTP). Since March 2020, the Company has also been listed on the Open Market at Deutsche Börse in Frankfurt (FRA ticker FRA: 5C8).

As regards financial reporting, the Group and the Company use IASs/ IFRSs.

The Group's and the Company's financial year is from 1 January to 31 December.

3.1.2. Group structure

The corporate group XTPL S.A. was established on 31 January 2019.

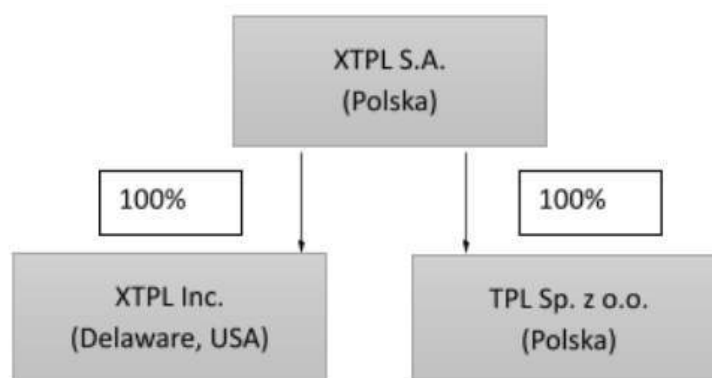
On 31 January 2019, XTPL S.A. acquired all shares in XTPL Inc., a newly formed entity based in the state of Delaware, United States. The share capital of XTPL Inc. is USD 5,000. XTPL S.A. acquired 100% of the stock at the nominal price. XTPL INC. is consolidated using the line-by-line method.

On 3 November 2020, the Issuer acquired all shares in TPL sp. z o.o. based in Wrocław. The shares in the share capital of TPL were acquired without remuneration, but as a donation from each of the TPL shareholders to the Issuer.

Under an agreement with the Issuer, TPL acts as the administrator of the Issuer's employee incentive scheme, which is an important part of managing and motivating the Issuer's employees and collaborators, contributing to the Issuer's business development and value generation.

The Company has no plants or branches.

Structure of XTPL Group as at the Report Date:



3.1.3. History

XTPL was founded in 2015 as a limited liability company. The founders sought to develop and commercialize the ground-breaking technology of manufacturing ultra-thin conductive metallic lines.

2015–2018

During the initial period of the Company's activity, a laboratory with a unique infrastructure was set up. There, within five months of intensive research and development, the Company's team achieved the ability to control the process of printing ultra-thin conductive lines which were several dozen times narrower than those available in the market at that time. This technological breakthrough allowed the Company to submit its first patent application in March 2016 for the XTPL printing method and the nanoink formulation.

On 25 April 2016, the General Meeting adopted a resolution to transform the firm into a joint-stock company (S.A.). The transformation was recorded by the registry court on 1 June 2016.

As its scale of operations expanded, on 1 September 2016 the Company transferred its research infrastructure to modern laboratories in the Wrocław Research Centre EIT+ (currently the Łukasiewicz Research Network – PORT: Polish Center for Technology Development). The team increased, and so the number and quality of the devices necessary to conduct research.

On 21 February 2017, the Extraordinary General Meeting of XTPL adopted resolution No. 02/02/2017 to split the Company's shares without decreasing its share capital, by converting the nominal value of a share to PLN 0.10.

In the first quarter of 2017, another technological barrier was broken. The Issuer's R&D team obtained the width of printed lines below 100 nanometers. Next, in the second quarter of 2017, the Company completed the prototype of the unique XTPL printer, which earned it the Technical Development Manufacturing Award at the IDTechEX Show in Berlin.

In July 2017, XTPL carried out a public issue of shares, which included 155,000 series M ordinary bearer shares. The shares were allocated to 16 (natural and legal) persons in the Institutional Investors Tranche and to 349 (natural and legal) persons in the Retail Tranche.

The Company raised PLN 10,230,000 gross from the issue. One of the investors taking up the shares was Acatis, a German investment fund acting through Universal-Investment GmbH.

On 14 September 2017, the Company's shares debuted on the NewConnect market in the Alternative Trading System. After the debut, another large investment fund from Germany, Heidelberger Beteiligungsholding AG, announced that it had exceeded the threshold of 5% of the total number of votes at the Company's General Meeting.

In subsequent periods, the Issuer consistently developed its unique technology. In the fourth quarter of 2017, the Company started testing new (except silver) nanoparticles – quantum dots and semiconductors and new substrates – silicon wafers.

2019–2021

In the first quarter of 2019, business development activities accelerated strongly as a proof-of-concept (PoC) project was elaborated for the security printing sector and for quantum dots printing. In addition, an advanced PoC project was put together for the open defect repair and semiconductors sector.

On 16 April 2019, the Company's Extraordinary General Meeting appointed Mr Wiesław Rozłucki, the former CEO and co-founder of the Warsaw Stock Exchange, as the Chairman of the XTPL Supervisory Board. Now he actively supports XTPL in its activities related to capital markets and broadly understood corporate governance.

On 23 May 2019, XTPL was awarded for one of the most promising technologies among participants of the I-Zone (the innovation zone) as part of the Display Week in Los Angeles, one of the world's most important conferences of display manufacturers. Other firms awarded during the event were such giants as Apple, LG Display or Sharp.

In subsequent periods, the Issuer registered further patent applications for the XTPL printing method. One of the registered applications concerned the method of increasing the maximum current flowing through a conductive line and improving mechanical capability of conductive lines, while the other registered application focused on the printing substrate, specifically on the adaptation of this substrate to facilitate the printing of long lines with arbitrary shapes.

In the third quarter of 2019, the Issuer carries on its technological development by implementing new printing substrates – smart glass and advanced optical surfaces, and by using new nanoparticles for printing.

In August 2019, the German fund ACATIS decides to re-invest in the Company's shares. The EUR 1 million raised in this way financed the Company's business development in the United States, especially in Silicon Valley.

In September 2019, Heidelberger Beteiligungsholding AG (daughter company of Deutsche Balaton AG Group) also decided to re-invest in XTPL. The fund took up the Company's shares in a private placement. The capital raised (EUR 1.05 million) was used for further strategic strengthening of the process of commercialization of the Company's solutions in the United States and development of its patent cloud.

On 22 November 2018, the CEO of XTPL Filip Granek won the most prestigious award for entrepreneurs in Poland – EY Entrepreneur of 2018. He was awarded for his work on the disruptive technology that has a serious chance to change the world for the better.

On 21 December 2019, XTPL was announced the best investment in the capital market in Poland in 2019. The Company brought investors a net return of almost 110%.

On 9 January 2020, XTPL shareholders appointed Professor Herbert Wirth, the former CEO of KGHM Polska Miedź S.A., to the company's Supervisory Board. He has considerable experience in business development in global markets and unique competences and a network of contacts which will strategically strengthen the Company's business activities, notably in the Chinese market.

On 24 February, German MainFirst Bank AG from the Stifel Group recommends "BUY" with regard to XTPL and valued the company at a PLN 215 price target. XTPL is the first Polish company covered by MainFirst

On 6 March 2020, the Frankfurt Stock Exchange consented to admit XTPL shares to the Quotation Board segment, which is a part of the Open Market. Since that time, XTPL shares have been traded on a dual-listing basis, with the Warsaw Stock Exchange remaining the Company's main trading floor.

In March 2020, the Company finalized its first sales transaction for its nanoink based on silver nanoparticles. The delivery took place for one of the partners operating in the display sector, the first application field commercialized by XTPL.

In June, the Issuer was awarded in the "Issuer's Golden Website" competition in for the "Best IR Service" in the "small companies" category. The competition was organised by the Polish Association of Listed Companies (SEG).

On 30 June 2020, the Supervisory Board of XTPL S.A. appointed Jacek Olszański to the Company's Management Board. Since October 2018, he had served as the Company's financial manager. In addition, Beata Turlejska, Managing Partner in the Leonarto VC Fund, was appointed as a new Supervisory Board member.

On 30 July 2020, the company adopted a resolution on the allocation of 48,648 series A registered bonds convertible into the Company's series U shares at an issue price of PLN 74 per bond. Overall, the Company's proceeds from the issue of shares and bonds were PLN 12,849,951.

In September, the German MainFirst Bank AG from the Stifel Group recommends "BUY" with regard to XTPL and valued the company at a PLN 210 price target.

On 5 November, the Supervisory Board of XTPL S.A. was joined by Andrzej Domański, economist and financial market analyst with experience in managing stock exchange funds.

In November 2020, XTPL signed the first major commercial contract for the UPD technology demonstrator – XTPL Delta Printing System – a device for precise printing of micro-features, including conductive features, with the University of Stuttgart, Institut für Großflächige Mikroelektronik ("IGM").

On 28 December 2020, the Company signed a EUR 2.6 million grant agreement with the Polish National Centre for Research and Development (NCBR) for the project on development of innovative technology of precise deposition of conductive grids for next-generation OLED displays.

In February 2021, Lux Research put XTPL on the list of top young, innovative technology companies disrupting the chemicals and materials industry in 2020 in the category “materials and digital transformation”.

In March, the Company was awarded for the best conference publication “Ultra-Precise Deposition Technology for High-Resolution Flat Panel Displays” at the 27th International Display Workshop (IDW'20) conference.

On 25 March 2021, XTPL established cooperation with Bandi Consortia to support the commercialization of XTPL technology on the Korean market.

On 14 April 2021, XTPL signed a grant agreement of PLN 7.7m with NCBiR (the National Centre for Research and Development) for a project relating to the development of breakthrough printing technology of 3D micrometric conductive structures using an innovative printhead capable of printing on non-planar substrates and compatible ink for printed electronics applications.

Also in April 2021, the Company started cooperation with Yi Xin Technology, which is a distributor of the Company's technological solutions in China.

During the Display & Touch Industry Conference 2021 (DTIC 2021) in May 2021, XTPL was awarded as “The most valuable brand of an optoelectronic product” and “The most valuable brand of materials for the production of optoelectronic components”.

On 2 July 2021, the Issuer signed an agreement with the German Karlsruhe Institute of Technology (KIT) for the sale of the Delta Printing System.

In the same month, XTPL started cooperation with Semitronics Sales Ltd, a specialized distributor for the region of Great Britain and Ireland.

On 3 November 2021, the Company concluded a sales agreement with the Łukasiewicz Research Network – PORT Polish Center for Technology Development for the sale of the Delta Printing System.

On 5 November 2021, XTPL sold another Delta Printing System printer, which is to be delivered to the Bendable Electronics and Sensing Technologies (BEST) research group at the University of Glasgow.

In December 2021, scientists from the Italian University in Brescia bought the Delta Printing System from XTPL S.A. for application in biosensors and bioelectronics for next-generation biomedicine.

2022

Early in 2022, German Metronics joined the group of distributors of XTPL solutions. The new distributor will promote XTPL technology and products in selected European countries, including in Germany, France, Austria and Switzerland.

On 10 January 2022, XTPL announced that it had signed an agreement with Nano Dimension Ltd, an Israeli company listed on NASDAQ. The purpose of the cooperation is to develop a next generation conductive nanoink.

On 18 February 2022, XTPL expanded its international distribution network by starting cooperation with Mumbai-based Vertex Global Solutions.

On 21 March 2022, XTPL received a grant recommendation for the technological project “Manufacture of active, flexible microLED displays using the additive method”. The project will be delivered by an international consortium of seven complementary European partners, including XTPL S.A. The total value of the project is more than EUR 4.29 million, including the recommended grant for XTPL coming in at almost EUR 430 thousand.

On 22 March 2022, the Issuer began strategic cooperation with the Department of Information Engineering of the Italian University of Brescia (UniBS). The purpose of the cooperation is to work together on development of new generation organic and biodegradable biological sensors using the Company-developed electronics printing technology.

3.1.4. Issuer's governing bodies

Management Board:

As at the Balance Sheet Date:	As at the Report Date:
Filip Granek, PhD, CEO	Filip Granek, PhD, CEO
Jacek Olszański – Management Board Member	Jacek Olszański – Management Board Member

• Powers of the Management Board

Filip Granek, PhD – CEO, Shareholder

Co-creator of the technology and founder of XTPL. He is an expert in nanotechnology, printed electronics, solar cells and modern technological processes for the production of semiconductor elements.

For nearly 10 years, he worked for most prestigious international research institutions and Hi-Tech companies, including: Fraunhofer ISE (Germany), ECN (Netherlands), ANU (Australia), Kingstone Semiconductor Company Ltd. (China). He led research work in close cooperation with the largest photovoltaic industry representatives from Europe, Asia and the United States. He has won many awards and distinctions, including the Burgen Scholarship (Academia Europaea) and a scholarship from the Foundation for Polish Science; he is a member of the prestigious Young Academy of Europe; obtained a scholarship from Ministry of Science and Higher Education for outstanding young scientists and from DAAD, Germany. He received the prestigious LIDER research grant financed by the National Center for Research and Development, and was awarded in the ranking of outstanding innovators of new Europe: "New Europe 100 Challengers". Winner of the 16th edition of the 2018 EY Entrepreneur of the Year competition. He was awarded for his work on the disruptive technology that has a serious chance to change the world for the better. He is also the winner in the New Business category, where the award is granted for using own scientific experience to create an globally innovative product. At the Wrocław Research Centre EIT+, he built a new laboratory from scratch and set up an interdisciplinary scientific team which is currently implementing a number of research projects. He has 70 scientific publications and 30 international patent applications and patents to his name.

Filip Granek does not pursue any business activity outside the Issuer that would be of major significance to the Company's business.

His responsibilities at XTPL include supervision over R&D activity, business and sales development and HR, marketing and strategy management.

Jacek Olszański – Management Board Member, CFO

He holds a master's degree in economics from the Poznań University of Economics. He has 25 years' hands-on experience in finance and controlling gained in corporate groups. Previously worked for KGHM Polska Miedź S.A. and Selena Group, where he held a number of managerial functions. He run his own business in the market of controlling services outsourcing. Supervisory Board and Audit Committee member at companies from various sectors, including companies listed on the Warsaw Stock Exchange. Jacek Olszański joined XTPL S.A. in October 2018, originally as financial manager.

His responsibilities at XTPL include managing the Company's financial and economic affairs, shaping the Company's strategy, financial reporting and oversight over the compliance area.

Jacek Olszański does not pursue any business activity outside the Issuer that would be of major significance to the company's business.

Supervisory Board:

As at the Balance Sheet Date:	As at the Report Date:
Wiesław Rozłucki, PhD – Chairman of the Supervisory Board, an independent Supervisory Board Member	Wiesław Rozłucki, PhD – Chairman of the Supervisory Board, an independent Supervisory Board Member
Bartosz Wojciechowski, PhD – Deputy Chairman of the Supervisory Board	Bartosz Wojciechowski, PhD – Deputy Chairman of the Supervisory Board
Andrzej Domański – Deputy Chairman of the Supervisory Board, an independent Supervisory Board Member	Andrzej Domański – Deputy Chairman of the Supervisory Board, an independent Supervisory Board Member
Beata Turlejska-Zduńczyk	Beata Turlejska-Zduńczyk
Piotr Lembas – an independent Supervisory Board Member	Piotr Lembas – an independent Supervisory Board Member

Herbert Wirth – an independent Supervisory Board Member	Herbert Wirth – an independent Supervisory Board Member
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3.1.5. Employment and information about the Issuer's employee team

As at the Balance Sheet Date, the Company employed 35 people.

Our Team:

The development of XTPL ultra-precise printing technology is a success of the Company's entire team, which, using its interdisciplinary knowledge and experience, keeps achieving further technological and business goals. Technological progress is the result of intensive cooperation of engineers and specialists who pool competences of many areas of technology, business and operations.

What distinguishes the XTPL technology team is its interdisciplinary knowledge in fields such as physics, optics, chemistry, mechanics, electronics and programming. The technology team represents 65% of all employees and carries out work in individual laboratories: Application Laboratory, Nanoinks and Nanomaterials Laboratory, Mechatronic Laboratory, Material Characterization and Pre-Post Treatment Laboratory, and Numerical Simulations Laboratory.

The technology team is backed up by an operations team, which provides support in the areas of finance, law, HR, procurement, IT and project management. At the same time, the Marketing Department is responsible for marketing and PR/IR activities. Making inroads into new markets and establishing new customer relations is the responsibility of the Business Development Team.

Women constituted 45% of the XTPL team. In the Technology Team, women made up 35% of the workforce.

Team training and development:

Upskilling training courses are implemented in consultation with the team leaders and the Company's management board. Most training courses are organized on the employees' initiative. The development of the XTPL team is promoted by regular participation in domestic and foreign conferences, as well as in on-site and online industry events. Some of those events were held remotely due to the pandemic.

Benefits:

XTPL offers its employees a benefits package in the form of a non-wage benefits program. XTPL offers: private medical care, health & life insurance, sports program, program of awards for patent applications, the possibility of telecommuting, access to the Company's corporate library and funding for English language courses.

3.1.6. Organizational and capital connections

Except for its affiliation with the subsidiary XTPL Inc. and the subsidiary TPL sp. z o.o., XTPL has no other organizational connections.

3.1.7. Description of operations and basic products and services

XTPL operates in the nanotechnology and microelectronics segment. The Company develops and commercializes its globally innovative platform technology of ultra-precise printing of nanomaterials, protected by an international patent application. The breakthrough nature of the XTPL method is based on the unique combination of features such as additive material deposition, deposition accuracy, inks with high concentration of silver nanoparticles, and no need to use an electric field on the substrate during the printing process. In addition, the method ensures major time and material savings, and uses the traditional advantages of printing such as scalability, cost effectiveness, simplicity and speed. Thanks to dedicated inks, the XTPL method can be used to make prints that have been so far unachievable by means of any other methods. Due to its platform character, the Company's solution will find application in the broadly understood printed electronics industry.

XTPL's strategic goal is commercialization of its platform technology of ultra-precise printing of nanomaterials in the area of advanced electronics.

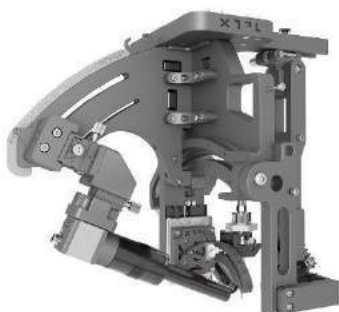
TECHNOLOGY:

The Ultra Precise Deposition (UPD) technology developed and patented by the Company in response to the three market megatrends in the production of modern electronics. The industry is currently strongly focused on further miniaturization of the size and weight of electronic devices, modifying their forms and properties, and moving towards an increased flexibility and three-dimensionality. A critical global trend is also environmental protection based on efficient use of limited resources while reducing the production waste, which is enabled by additive technology.

One of the biggest achievements of XTPL is the innovative Ultra Precise Deposition (UPD) technology. The XTPL printing head, equipped with a special nozzle, applies ink to the substrate to create designed structures with a width as small as 1 μm . For comparison, most of the methods of printing electronic materials available on the market with difficulty reach the value of 20 μm , and only single manufacturers declare that they achieve values around 10 μm . The Company's solution can be used on various types of substrates, including flexible or curved ones. The UPD technology can be used to print both simple lines as well as patterns and microdots. Simplicity, unparalleled precision, speed and versatility are the features that make the Company's solution unique.

PRODUCTS

EPSILON printing module for industrial integration



The EPSILON head developed by the Issuer is a printing module that can be integrated with industrial devices. It can be used by industrial integrators and end users to benefit from new possibilities of printing high-resolution functional features at ultra-high density. This innovative printing head with dedicated nanoinks enables ultra-precise creation of conductive lines on a selected substrate (application field). EPSILON integrates all the functions required by the XTPL[®] UPD technology along with electronic control and the proprietary XTPL[®] UPD Process Control Software package. In terms of commercialization of this business line, the Company is engaged in nine evaluation processes with international, global producers of new generation consumer electronics.



Delta Printing System (DPS)

The Delta Printing System is an independent research and development and prototype system designed to test the capabilities of XTPL's UPD technology on various substrates and with the use of the Issuer's nanoinks. The role of the device is also to promote the Issuer's technology among global opinion leaders from the deep-tech industry – including the best academic and scientific centers as well as R&D institutes of electronics manufacturers.

The Issuer began the commercialization of this business line late in 2020/ early in 2021. The Company sold 5 devices:

- to the University of Stuttgart, Germany (Q4 2020);
- to Karlsruhe Institute of Technology "KIT", Germany (Q3 2021);
- to PORT in Poland (Q4 2021);
- to the Glasgow University, UK (Q4 2021);
- to the University of Brescia in Italy (Q4 2021).

The Issuer is gradually delivering the devices to the buyers.

Highly concentrated nanoinks



Developed by the Company's in-house R&D team, the nanoinks with a unique formulation are one of the elements of XTPL ultra-precise deposition method. They have special physicochemical properties enabling full utilization of the UPD method's potential. In this way, the Company can develop the additive technology comprehensively, with concurrent work on the ink deposition head and constant adaptation of the deposition material. Most of the inks used by XTPL are based on silver nanoparticles. Other elements are also used, including gold, copper and platinum, as well as quantum dots, for example. Owing to the diversity of materials, XTPL can flexibly respond to the needs of the market and individual clients.

The XTPL method can also accommodate many commercially available materials, which may expand the area of its

application in the future, giving customers real technological versatility. With the small size of silver nanoparticles, in the range of 35 to 50 nm, their high stability and high electrical conductivity after the sintering process, the product is attractive for the ongoing development projects in the field of printed electronics.

Thanks to the proven compatibility and highly efficient application of XTPL inks in non-UPD printing method, such as: LIFT (Laser Induced Forward Transfer), Aerosol Jet printing (with pneumatic systems), and high-viscosity ink micro-dispensing techniques, the Company has been able to expand the group of its customers to include users of other commercial technologies. By entering the market of conductive materials and expanding the range of its inks available for other market segments, XTPL has decided to develop its nanoinks proposition as a complementary and stand-alone business line.

APPLICATION:

At present, the Company is focusing on commercialization of its technology in selected application fields. The first field is displays, where XTPL intends to offer open defect repair (ODR) in the first place. Along with the development of displays, increasing their resolution and functionality, the level of their miniaturization and the density of conductive paths also increases. A side effect of this development is a greater likelihood of critical defects, including broken conductive paths. For manufacturers, this means losses generated already on the production line as a result of the need to reject panels that fails quality tests. XTPL stands the chance to be the first and, for the time being, the only market player to introduce a proprietary solution, which will ensure a significant reduction of production losses without compromising the quality of the repaired displays. Next, the Company plans to provide the display industry with solutions that will help achieve a significant increase in the resolution of a new class of displays, also for new, flexible substrate types.

In the long run, the Company intends to develop its solution for new market segments. The XTPL technology may be implemented in the semiconductor industry also as a sought-after alternative for photolithography or in new types of connecting integrated circuits with PCBs, and, for example, facilitate the fabrication of innovative security printing solutions, functional and effective biosensors and high-performance photovoltaic panels. The technological revolution in which the Company is to play a vital role is about enabling the manufacture of complex and complicated electronic devices using cheap and scalable printing methods.

3.1.8. Business model, strategy and development outlook

BUSINESS MODEL:

XTPL is a supplier of advanced ultra-precise technology for nanomaterials printing. It develops and commercializes the technology in a way dedicated to a specific application field, and will rely primarily on the selected model:

- **LICENSING:**
The Company develops a technological solution dedicated to a particular application field, which is licensed to a partner who on its basis builds devices that allow the technology to be used in industry. In this case, the Company generates revenue from license fees related to the sale of devices equipped with the developed technology.
- **STRATEGIC PARTNERSHIP AND DISTRIBUTION AGREEMENTS:**
The Company develops a technological solution dedicated to a particular application field; the solution is then commercialized in cooperation with a strategic partner under a joint venture agreement. In this case,

commercialization tasks are divided between the partners in accordance with their competencies and potential. The Company participates in profits achieved through the joint venture.

Another possible option is to acquire a distributor for the Company's technology and products in a particular geographical region. In this case, the terms of cooperation and contracts will be determined depending on the market, the distributor's position, and the obligations agreed by the Parties.

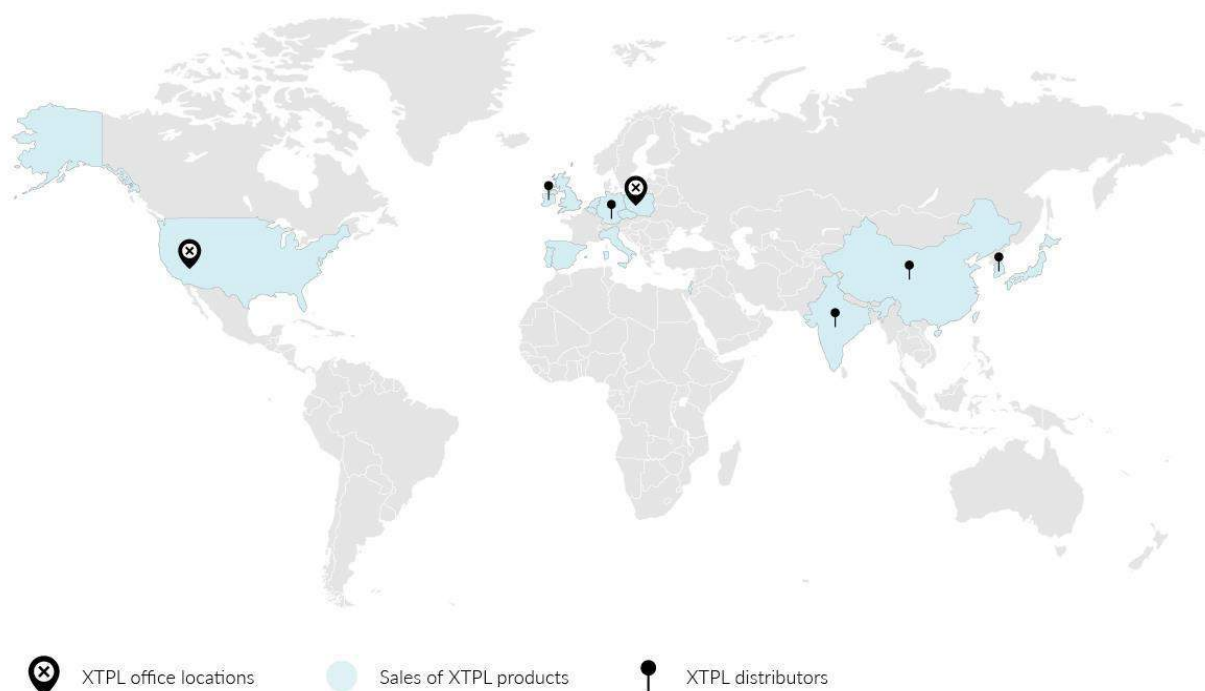
- SALE OF PRODUCTS

The Company also develops sales of its proprietary products: Conductive nano-inks, based on silver nanoparticles, intended for use in printed electronics, and also adapted to other printing methods such as Ink Jet, Aerosol Jet and LIFT, and laboratory and prototyping devices complete with the necessary consumables. The Delta Printing System can be both a revenue source when sold to research institutes and industrial R&D departments, and an intermediate step towards licensing revenue in deals with business partners. Cooperation in the two areas will be based on a mutual exchange of experiences and knowledge, while the device will be delivered on commercial terms. In addition, each demonstrator sold will generate a stream of revenue from consumables, such as inks, cartridges, capillaries, as well as services, including consulting, research and maintenance (for the machines and software).

The choice of the optimal business model depends on the specific customer in the particular application field. Current talks take into account all of the above-mentioned business models, and the appropriate model is selected during the relationship-building process.

International Distributor Network

Starting from 2021, the Company began building a distribution network that will facilitate the promotion of XTPL technologies and products on the Issuer's most important markets. The need for that model of operation arose in 2020, when the coronavirus outbreak derailed the organization of on-site industry events. The difficulties building direct relations with potential buyers of XTPL technology prompted the Management Board to look for an alternative solution. As a result, during 2021 XTPL quickly attracted first five distribution companies to represent it on Asian and European markets. In addition, in 2019, the Issuer also set up a commercial presence in the form of a subsidiary in the United States.



MARKET ENVIRONMENT AND OUTLOOK

With its technology, the Company is targeting the market of electronics, the production of which could potentially be completely replaced by additive printing. The market is growing fast. In 2021, its value exceeded USD 45 billion, with the display market having the highest share in it (USD 40.2 billion), according to IDTechEx. According to the same report, the value of components produced solely by printing methods exceeded the USD 6.5 billion in 2021. Other reports, such as Markets and Markets, suggest that the value of the printed electronics market in 2021 was almost USD 10 billion, and in 2026 it is expected to reach USD 23 billion. According to the authors of the report, the value of that market is driven by the increasing demand for energy-efficient thin and flexible consumer electronics.

XTPL's strategic goal is wide commercialization of its platform technology of ultra-precise printing of materials in the area of advanced electronics. The company seeks to adapt its technology for various application fields, and then offer the technological solution to industrial partners through various mechanisms: licensing, strategic partnerships and joint ventures. The overarching objective of XTPL's operations is to implement nanoprinting solutions adapted to market needs in selected industry sectors.

Value of the R&D equipment market

According to the Issuer's estimates based on available market data, the global annual sales of printers for R&D, rapid prototyping and small-lot production in the area of broadly understood printed electronics amount to approx. 250–500 devices per annum. The price of those printers ranges from EUR 50 thousand to more than EUR 500 thousand per device.

Value of the conductive nanoinks market

According to the data published in the Market and Market – Forecasts from 2020 to 2025, the estimated size of the global market of conductive inks has achieved USD 3.0 billion in 2020 with the prospect of reaching USD 3.7 billion in 2025. The market is buoyed by the growing use of electronics in the rapid urbanization processes, miniaturization of electronic components, as well as by the possibility of reducing production costs while maintaining high electrical conductivity and efficient manufacturing in line with environmental protection standards.

DEVELOPMENT DIRECTIONS AND FOCUS AREAS:

An exceptional feature of the XTPL technology is the possibility of its application in many fields of industry. Presented below are applications in the areas that are currently key for the Company:

Displays:

Currently, commercialization is carried out in a subsector of this market, namely the open defect repair. XTPL offers a new breakthrough solution that allows defects in conductive paths to be repaired at low cost, with precision and speed unparalleled to any other existing solution. The technology developed by the Company will help display manufacturers increase production efficiency and reduce costs associated with material losses.

Another area of application of the technology for flat panel displays is the precise printing of electrical connections for LEDs in micro-LED displays. The Company's technology can be used for printing repeatable conductive structures with a diameter of less than 10 μm and a very aspect ratio. These unique properties are much in demand amongst manufacturers of future micro-LED displays.

FHE (flexible hybrid electronic) sector:

Flexible hybrid electronics is another new market that is in the focus of the Company's attention. Companies such as Boeing, Lockheed Martin, Applied Materials and research centers including Dutch Holst Centre, Belgian IMEC and German Fraunhofer have already confirmed their activities in that field. In the United States, Next Flex was formed, an institution bringing together 90 representatives of the industry and 28 representatives of research universities. This is the largest agency investing in the FHE sector. According to an analysis by Mordor Intelligence, the FHE market in 2019 was valued at USD 95 million, but in already 2025 it may reach USD 235 million. According to IDTechEx, FHE is expected to become so "ubiquitous" in 2030, with a value of even USD 3 billion.

Semiconductors market

Another market for the Company's technology is the semiconductor market. Its special application areas include making electronic connections on complex 3D topographies and heterogeneous substrates in advanced integrated circuits or microelectromechanical systems (MEMS). According to an analysis carried out by Mordor Intelligence that takes into account the impact of the COVID-19 pandemic, in 2020, the global market for advanced integrated circuits reached USD 24.93 billion, and by 2026 is expected to grow even to USD 38.62 billion. The size of this market shows great possibilities: not only in terms of potential application of the UPD technology in new areas, but also in the research and prototyping of new systems.

In this area, the Company is conducting active talks (at various levels of advancement) with market leaders.

Moving forward, the growth of the electronics market will be strongly driven by the areas where conventional production methods cannot be applied. By marketing its UPD technology embodied by the Delta Printing System, the Company

promotes the innovative, proprietary solution that is used by pioneering research and scientific centers in their research and development, while at the same time defining breakthrough standards for the production of future electronic devices.

The new, already identified and pre-verified application areas for the XTPL technology include:

- PCB (printed circuit boards) market
- biosensors market
- photovoltaic cells market.

All the Company's R&D work takes place in Poland. Commercialization will be primarily focused on markets of North America (mainly the United States), Asia (China, Korea, Taiwan, Japan) and EMEA.

3.1.9. Protection of intellectual and industrial property

The policy of building a patent family plays an crucial role in the processes of commercialization of the technological solutions designed and implemented the Company. Intellectual property is a product and a competitive advantage of XTPL. For this reason, patent cloud development has a major impact on the business value – the size and appropriate protection of the cloud are key to the market position. XTPL solutions are protected from the moment of patent filing with the appropriate office.

The Company distinguishes five patent groups for its technology and products based on that technology:

1. UPD process – patents describing the ultra-precise deposition process or a device used for this process
2. Nanoinks – patents protecting various nanoink formulations
3. Software – patents protecting the solutions implemented in the software that controls the printing devices
4. Application fields – patents describing solutions to specific technological problems using the UPD method
5. Characterization and quality control – patents related to the characterization and quality control of selected components of the printing head

3.2. XTPL'S ACTIVITY AND ACHIEVEMENTS IN 2021

3.2.1. Calendar of key events in 2021

Period	Event
01.2021	Execution of an order for the production and delivery of the Delta Printing System to the Institute for Large Area Microelectronics at the University of Stuttgart.
02.2021	Execution of another order for Ag CL85 Nanopaste, which is used e.g. for applications in the LIFT (Laser Induced Forward Transfer) technology, for a Western European research center conducting research in the nanotechnology sector.
03.2021	Delivery of the Delta Printing System to the Institute for Large Area Microelectronics at the University of Stuttgart.
04.2021	<p>Recommendation for the Company's PLN 11.62 million worth of project to be co-financed under the 6/1.1.1/2020 – "Fast Track" competition of the National Centre for Research and Development ("NCBR"); the recommended grant value is approx. PLN 7.69 million. Project duration: 01.10.2020 – 30.09.2023.</p> <p>Commencing cooperation with the first distributor of the Company's technologies and products in the Chinese market: Yi Xin Technology Co. Limited.</p> <p>Publication of the 2020 Annual Report.</p>

05.2021	<p>Submitting a patent application with the United States Patent and Trademark Office (USPTO) relating to the Issuer-developed method of checking geometric parameters of a cartridge, a crucial component of the XTPL printing systems. As a nano-ink reservoir and a piece that feeds ink into the printing nozzle, the cartridge must ensure high precision of deposition of micrometric structures. The Company's product is protected right from the moment of filing the patent application.</p> <p>Signing a PLN 7.69 million grant agreement with the NCBR relating to the Company's project that was recommended for the grant in April 2021.</p> <p>Publication of the interim report for the first quarter of 2021.</p>
06.2021	<p>Submitting a patent application with the United States Patent and Trademark Office relating to the XTPL-developed technological solution for precise filling of micrometric cavities with polymer. The method is of particular importance in the production of modern semiconductor devices and its advantage lies in achieving the possibility of filling the microwell in a homogeneous, precise manner, without ink overflow or cracks. The XTPL printing system can be used to perform the filling. The Company's product is protected right from the moment of filing the patent application.</p> <p>Annual General Meeting of the Company.</p>
07.2021	<p>Signing an agreement with Karlsruher Institut für Technologie – Lichttechnisches Institut for delivery of the Company's technology demonstrator: the Delta Printing System.</p> <p>Starting cooperation with UK-based Semitronics Sales Ltd. to distribute the Company's technological solutions in Great Britain and Ireland. Thanks to the cooperation with Semitronics, the Company's technology and products will continue to gather momentum at R&D centers, scientific institutions and technological corporations operating in Great Britain and Ireland.</p>
09.2021	<p>Organization of the Investor's Day as an online webinar.</p> <p>Publication of the interim report for the first half of 2021.</p>

10.2021	<p>Selection by the Łukasiewicz Research Network – PORT Polish Center for Technology Development of the Company’s offer for delivery of a system for integration of raw materials in photonic applications, complete with system launch, personnel training and maintenance support. As part of the offer, the Issuer proposed its proprietary Delta Printing System. The value of the offer was PLN 61 thousand net.</p> <p>Submitting a patent application with the United States Patent and Trademark Office relating to the XTPL-developed technological solution for printing conductive mesh and its transfer to another substrate. The method described in the application concerns printing conductive mesh on a substrate, from where it can be subsequently transferred onto another substrate. The XTPL solution is unique on a global scale and so far unattainable by any available method. The Company’s product is protected right from the moment of filing the patent application.</p>
11.2021	<p>Signing an agreement with the Łukasiewicz Research Network – PORT Polish Center for Technology Development for delivery of the Delta Printing System for the integration of raw materials in photonic applications.</p> <p>Signing an agreement with the University of Glasgow in Scotland for delivery the Company’s technology demonstrator: the Delta Printing System. The printer will be used by the University’s research team of Bendable Electronics and Sensing Technologies [“BEST”] for research and development related to bendable electronics.</p> <p>Publication of the interim report for the third quarter of 2021.</p>
12.2021	<p>Signing an agreement with the Department of Information Engineering/ Dipartimento di Ingegneria dell’Informazione [„DII”] of the University of Brescia in Italy for delivery of the Company's technology demonstrator: the Delta Printing System. The device will be used by a team of experts in the area of integrated electronics and bioelectronics, physics of advanced semiconductor devices and electronic structures using ions as carriers of the electrical signal.</p>

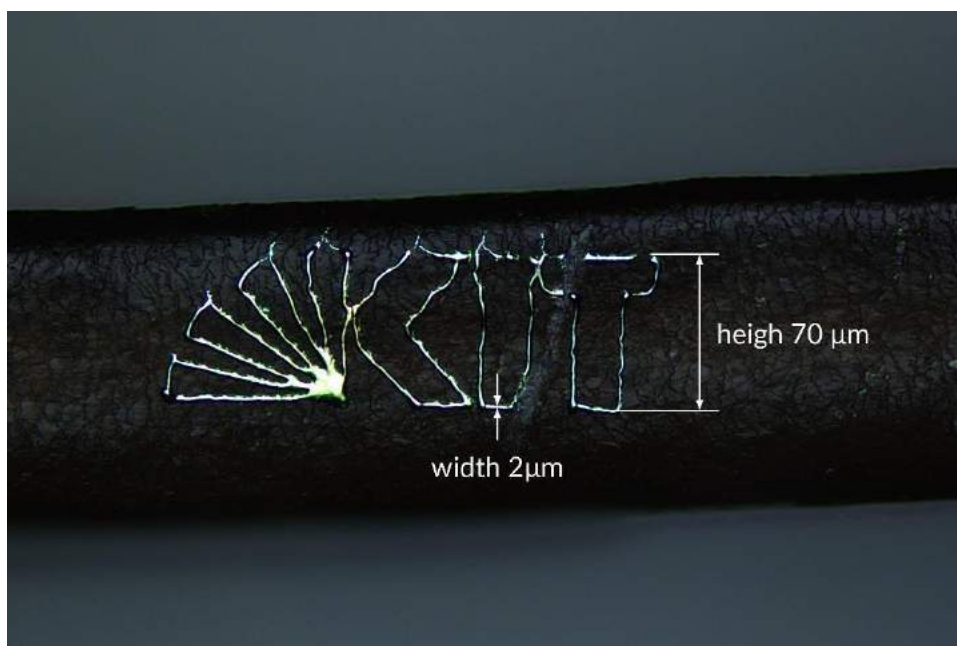
3.2.2. Issuer's progress and achievements in the commercialization of technologies and products

Delta Printing System:

In 2021, the Company achieved the expected milestone as it signed, at the end of the reporting period, the acceptance of an order for delivery of the fifth Delta Printing System – the device intended for laboratory applications and rapid prototyping, which also demonstrates the unique capabilities of the Ultra Precise Deposition technology.

During the reporting period, the XTPL team responsible for the commercialization of the Delta Printing System held numerous talks and engaged in many interactions with potential clients. As a result, a list was put together of over 100 experts from around the world, operating mainly in the microelectronics, microsystems, semiconductors, biosensors, displays and similar industries, who highly value the technology developed by the Company and are potential buyers of XTPL products in the following years.

In the first quarter of 2021, the Company completed the installation of the first Delta Printing System at the University of Stuttgart, Germany. The client shared its positive feedback on the use of the device, which helped generate interest among other potential clients with whom the talks were at an advanced stage. Another order for the Delta Printing System device was received from the reputable technological institute in Karlsruhe, Germany (Karlsruhe Institute of Technology KIT). It was an extremely important event in the context of continued commercialization of the technology as it facilitated talks with other potential clients and opened new outreach paths.



Logo of Karlsruhe Institute of Technology printed on a human hair
(photo courtesy of Georg Gramlich [IHE], KIT).

Later on during the reporting period, the Company conducted further talks with potential clients. Following successful preparation of demonstration samples and visits from prospective clients at the Company's headquarters, new orders were placed by the Łukasiewicz Research Network – PORT Polish Center for Technology Development, University of Glasgow and the University of Brescia.

The unprecedentedly high printing precision, especially when using highly-viscous metallic inks, which is enabled by the Delta Printing System, is the main feature that makes global technological innovators interested in this device. Users of the Delta Printing System appreciate the device also for its ease of use, platform character and the ability of quick start without long prior preparation, and for not having to clean the printing elements once the work is finished. The printed logo of KIT on a human hair is an unusual way of showing the possibilities of the Company's technology and device. Importantly, this kind of printout can be made right after a short user training conducted by the Company's team.

Another application of the Company's technology and the Delta Printing System is the printing of electronic connections for ultra-thin chips on flexible substrates. This is the focus area for a group of scientists led by Professor Ravinder Dahiya from University of Glasgow. Shortly before the end of 2021, they published a research paper presenting the unique possibilities of the Company's device and technology for making heterogeneous interconnections in advanced integrated circuits. This publication was very well received by the global community connected with development of the microelectronics and semiconductor industry (the paper is available at <https://doi.org/10.1002/aelm.202101029>).

Thanks to the Company's efforts to stimulate interest in the Delta Printing System among potential buyers from such areas as microelectronics, biosensors, semiconductors, advanced integrated circuits, displays, etc., 2022 started with many talks that are highly likely to end in successful outcomes. The information received by the Company's Management Board from interested buyers shows that some university clients have already submitted grant applications that reflect a budget for the purchase of the Delta Printing System. In addition, during the reporting period, cooperation agreements were signed with local distributors on the British Isles (Semitronics), South Korea (Bandi Consortia), China and Hong Kong (Yi Xin), which significantly increased the Company's ability to reach new prospective buyers of the Delta Printing System. We expect that in 2022 the Company may receive orders originating from those partnerships. As a result of the positive experience of working with local distributors, after the reporting period, the Company decided to sign further cooperation agreements with local distributors: merconics (Austria, Italy, Belgium, Luxembourg, Denmark, the Netherlands, France, Spain, Germany, Switzerland) and Vertex Global Solutions (India).

The interest of potential buyers of the Delta Printing System is particularly attracted by the Company's activities aimed at direct relationship-building, participation in trade fairs and conferences, cooperation with local distributors and promotion of the device by its current users, who present and publish the results achieved by means of the Company's technology. The possibility of making microelectronic structures that previously could not be achieved using alternative methods is highly noted both by academic and industrial communities.

Metallic nanoinks

The fundamental concepts of nanoinks production elaborated by the Company during the development of conductive materials for the UPD technology have been commanded by representatives of scientific and industrial communities as extremely valuable in terms of production of new types of electronic devices with the use of additive technologies. Those concepts respond to the high requirements of the rapidly growing market for conductive inks, including the need for efficient deposition at a high load of the metallic component. The developed know-how enables the Company to sell its inks to various segments of the printed electronics market, animating further advances along this path of the Company's development.

Growing sales are generated on the back of this business line. The Company has gained recurring clients and the number of completed orders increased more than twofold versus the previous year. Until the end of the reporting period, the Issuer received repeated orders for the purchase of nanoinks from four separate clients. Returning buyers include research institutes as well as industrial producers from Europe and the United States. The unique properties of XTPL inks

have been successfully put to use in the projects of those clients', who operate in the sectors nanotechnology, OLED displays, and smart devices for medical technologies, using inkjet printing techniques, LIFT (Laser Induced Forward Transfer), and micro-dispensing techniques for high-viscosity inks.

In the opinion of the Company's Management Board, the fact that the buyers make repeated orders for nanoinks is a confirmation that the product is of high quality and meets the client's requirements. The key value of the order is that it confirms the commercialization potential of the Company's proprietary technologies. Acceptance of the product by market buyers, the possibility of obtaining credentials, and further development of nanoink sales will have a positive influence on the Issuer's operations, cash flows and future financial performance.

Ag Nanoink IJ36 introduced to the offer in 2021, designed for inkjet printing technique, is currently among the most popular XTPL products. The Company's laboratories are working on new formulations of nanoinks and there are plans to add those materials to the XTPL offer in 2022. In the reporting period, the Company also approached leaders of electronics manufactured by means of the additive method, and is talking to them about the establishment of strategic partnerships in the area of conductive inks. If the negotiations and ensuing business relations are successful, additional distribution channels will be established for nanoinks, and growing revenues will be achieved from the sale of those products.

Industrial implementations of the Company's technological solutions

As regards the Issuer's third and key business line – implementation of the XTPL technology on the production lines of global electronics manufacturers – work was conducted on nine projects from the Company's project pipeline. These are standalone projects, and the list includes those that are at least at the second stage in terms of the commercialization process leading to industrial implementation. In addition to the reported pipeline, the Company intends to have up to five projects that will be developed to bring them to a higher level of evaluation.

Furthermore, in the Reporting Period the Company maintained its focus on the tasks related to the commercialization of the UPD technology in industrial applications. The most advanced talks and efforts are focused on selected applications related to the precise deposition of functional inks for:

- (a) yield management in the area of high-resolution OLED displays;
- (b) yield management in the semiconductor industry, in the area of back-end semiconductor chip processing; and
- (c) depositing metallic inks to make high density metallic interconnections of the advanced PCBs.
- (d) producing conductive 3D interconnections

At the same time, the Company also engaged in talks with industrial entities regarding the use of the UPD technology to repair other types of advanced devices. This applies to the repair of displays made in micro-LED technology and the repair of defects in advanced integrated circuits. For both described applications, low production efficiency was one of the biggest challenges to further commercialization and to reduction of the unit price of the end product. The technology presented by the Company may solve this problem and help popularize new products (micro-LED displays and more efficient integrated circuits).

Six entities from the EMEA region and two from the North America region that are manufacturers of devices for advanced electronic approached XTPL in order to look into the possibility of integrating the XTPL technology into those devices. The sale of printing modules equipped with the UPD technology, and then the supply of consumables and paid maintenance of the modules are financially attractive for the Company. Increasing the variety of devices in the market will help the Company reach more customers and make inroads into new markets. Due to the diverse needs of individual

partners, potentially contracts could be entered with each of them separately, including for adaptations of the UPD technology in target devices (in each case under separate fee arrangements).

Commercialization activities in the Flat Panel Display sector (ODR)

The Company continues cooperation with manufacturers of high-resolution OLED displays in the area of repairing open defects in conductive trances within the electrical layer, as well as in the area of using precise deposition technology for the production of new types of displays based on OLED technology. At the same time, the Company started talks and began evaluation tests with other display manufacturers in China and South Korea.

Based on talks and market analyses, the Company has also focused on repairing defects in micro-LED displays. These displays use LED diodes as a light source. Due to their size, the diodes can be used as independent pixels. The biggest challenge in manufacturing is to ensure proper efficiency level. If just one in tens of millions of LEDs is not properly mounted, the display will fail the quality test. By using the UPD technology, the micro-LED diode can be mounted again connected to electricity, which will significantly increase efficiency of the manufacturing process.

Commercialization activities in the area of advanced integrated circuits

The Company's technological solution consisting in the possibility of printing using material of very high viscosity on 3D surface topographies has attracted attention from manufacturers of advanced integrated circuits. With the UPD technology, it is possible to make precise electrical connections in SiP (System-in-Package) systems, which bring together two or more integrated circuits in one housing. Entities with whom talks are being held are global top-tier producers in this area, based in North America, Asia and Europe.

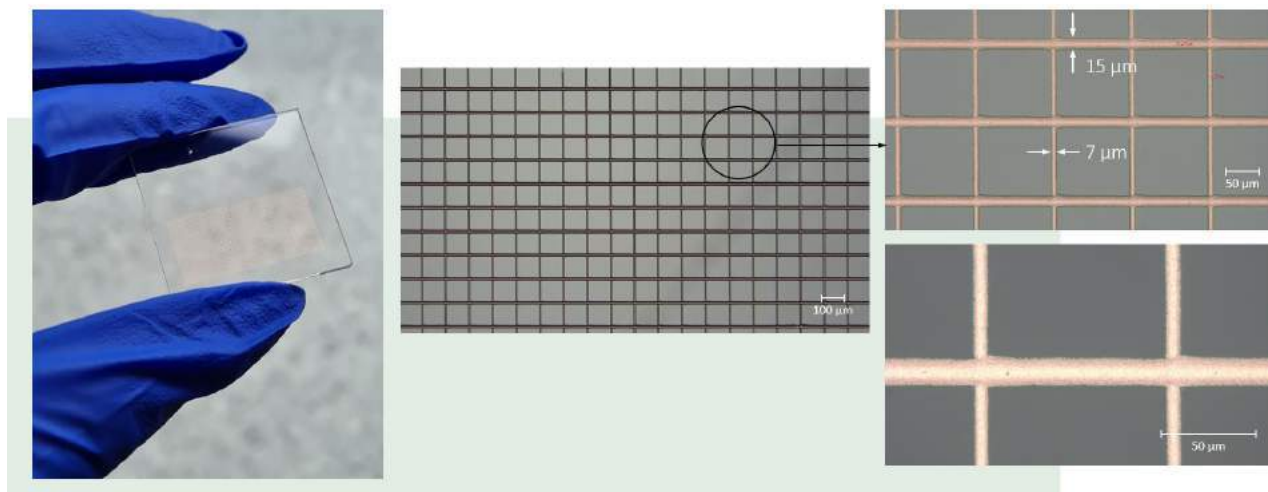
3.2.3. Description of research & development carried out by the Issuer with respect to technologies and products

The key achievements and progress in research & development in the reporting period included: 1) Development of high-concentration inks (pastes) based on copper and gold particles; 2) Printing on high steps (up to 350 micrometers in height); 3) Filling gaps in semiconductor structures using selected materials; 4) Significant automation of printing; 5) Printing of electronic connections in advanced integrated circuits where the connections had structures filled with insulating material on the outside, and with a conductive material on the inside; 6) Making a simple transistor for detecting organic materials; 7) Implementation of new functionalities in the Delta Printing System; 8) High-resolution prints composed of microdots.

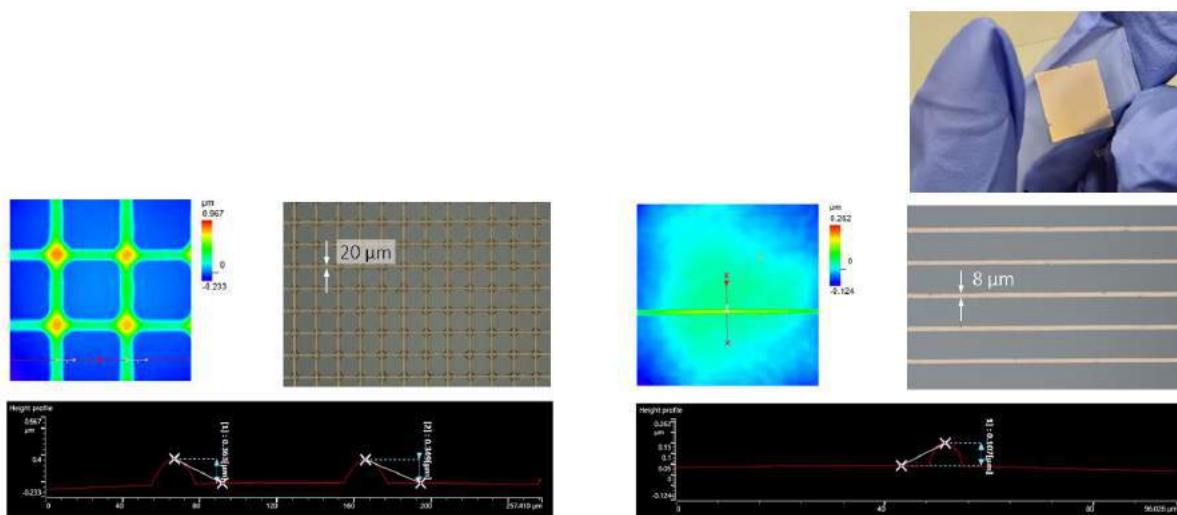
During the Reporting Period, the Company's R&D department worked on further development of the printing technology using highly concentrated conductive ink based on silver nanoparticles. The new nanoink formulation keeps the physicochemical parameters that are key to the UPD technology, associated with, e.g. high homogeneity of nanoparticle size and the prevention of agglomeration (the sticking of nanoparticles) during the printing process. At the same time, due to the high concentration, the printed lines have a very high aspect-ratio, i.e. the height-to-width ratio after the printing head has deposited a single layer of ink, i.e. after a single "pass". This is a distinguishing feature of the Company's technology as in order to obtain a similar result by competitive methods it would be necessary to deposit conductive material multiple times at the same point with multiple "passes", thus extending process duration.

As well as developing the ink based on silver nanoparticles, during the reporting period the Company stepped up its efforts related to the development of ink based on copper and gold nanoparticles. The introduction of these materials is of major importance in the context of achieving optimal parameters for industrial applications and new market areas.

XTPL Cu NANOPASTE DEVELOPMENT – PRINTING PROCESS



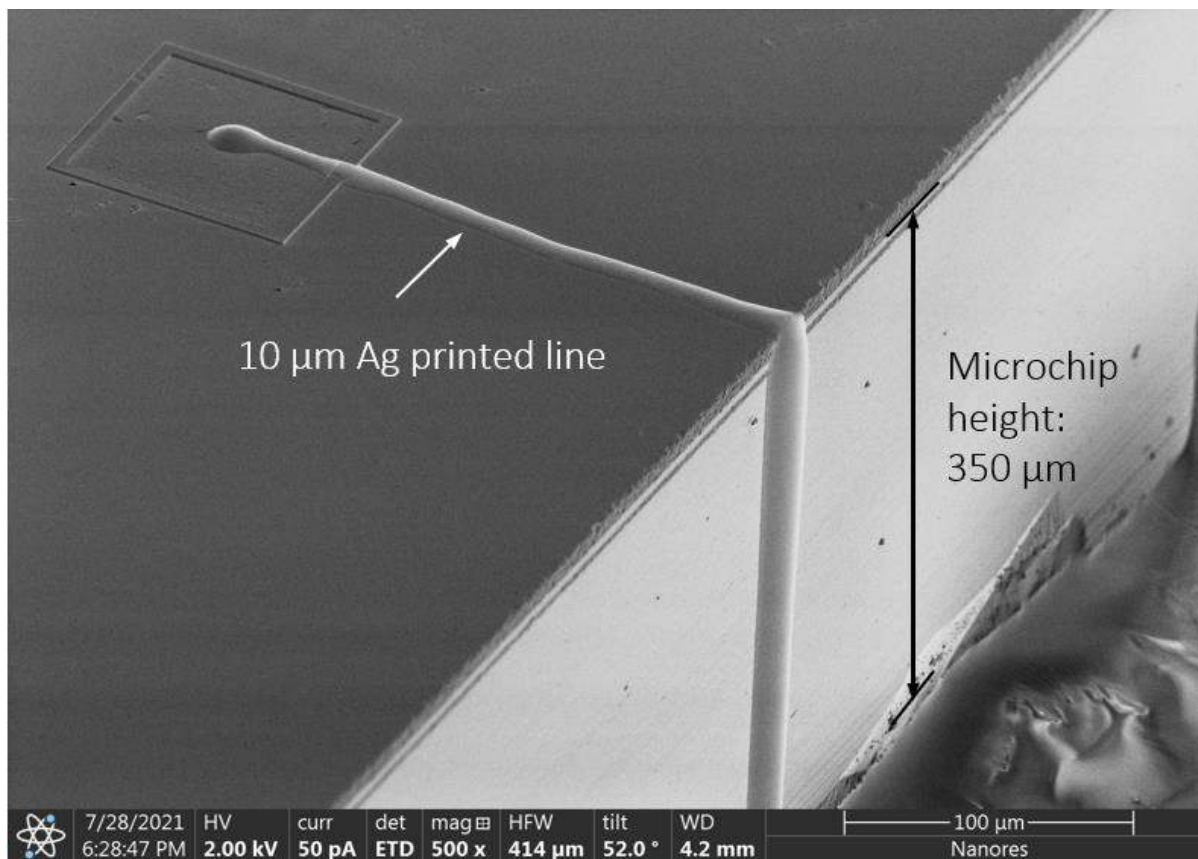
XTPL Au NANOPASTE DEVELOPMENT – PRINTING PROCESS



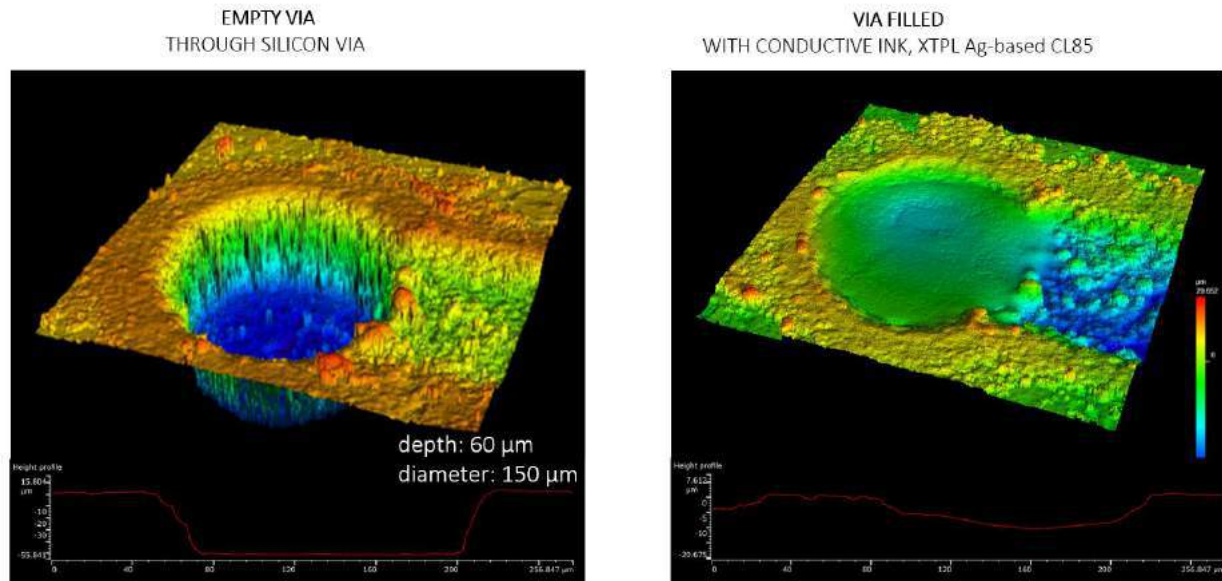
All inks developed by the Company's R&D department, based on silver, copper and gold nanoparticles, are highly concentrated, and thus enable printing on non-planar substrates with a complex topography. It allows the continuity of the structure to be maintained even if it was printed, for example, on a "step", when the substrate is not homogeneous and its layers are at different height levels. An additional advantage of using the ink in question is the negligible influence of the material on which printing takes place.

In practice, this means that whether hydrophobic or hydrophilic material is used for printing, the width and height remain almost unchanged, and so does adhesion. When using inks with a more fluid consistency (inks with a lower viscosity), the shape of the printed features depends largely on the type of substrate on which it was printed. Lower viscosity ink that will be used on a hydrophilic substrate will “spill”, increasing the track width compared with what is achieved with same parameters on the hydrophobic material.

In the reporting period, the XTPL R&D team demonstrated the ability to print precise conductive features that effectively cover a high step, up to 350 micrometers in height, which is much more than the width of printed lines. Additionally, this was done without compromising the high print resolution or the conductivity of the structure. The current research in this area is focused on increasing the repeatability and speed of printing connectors on substrates with advanced topography. This is achieved by optimizing printing parameters, modifying the conductive ink, fully automating the printing process, and using a script for automatic movement in 3D. As a result, the time needed to print a single conductive connection on steep edges was reduced to less than 1 second.

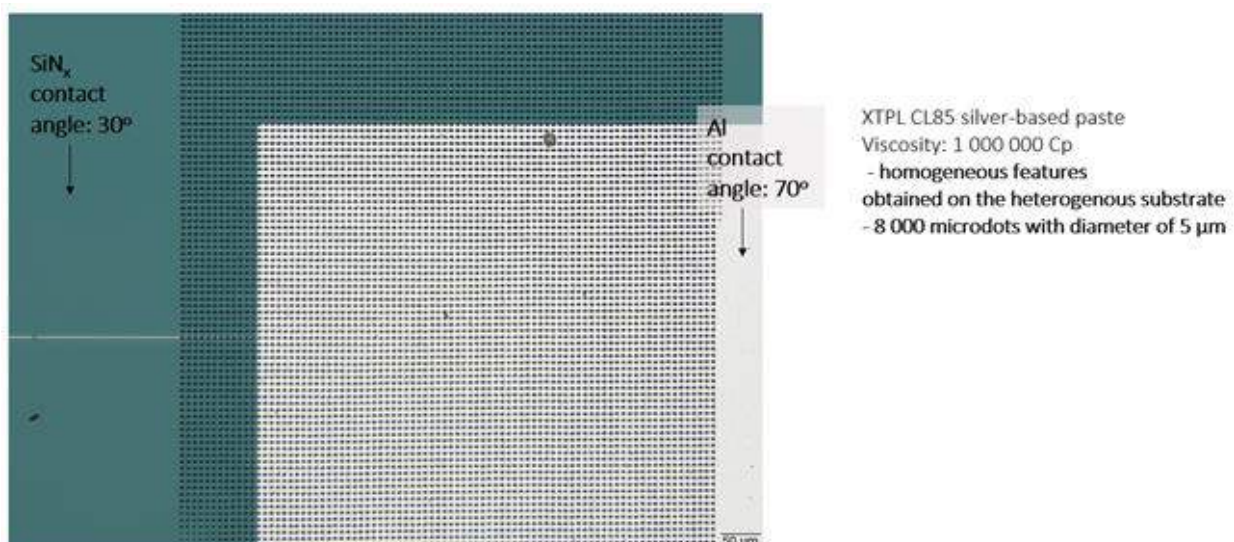


Another research area that has attracted great interest from industrial players and academic institutions is the possibility of filling gaps in semiconductor structures using selected materials. This applies to both making electronic connections between layers in advanced integrated circuits – TSVs (Through Silicon Vias), as well as filling gaps in insulating layers created at the production stage.

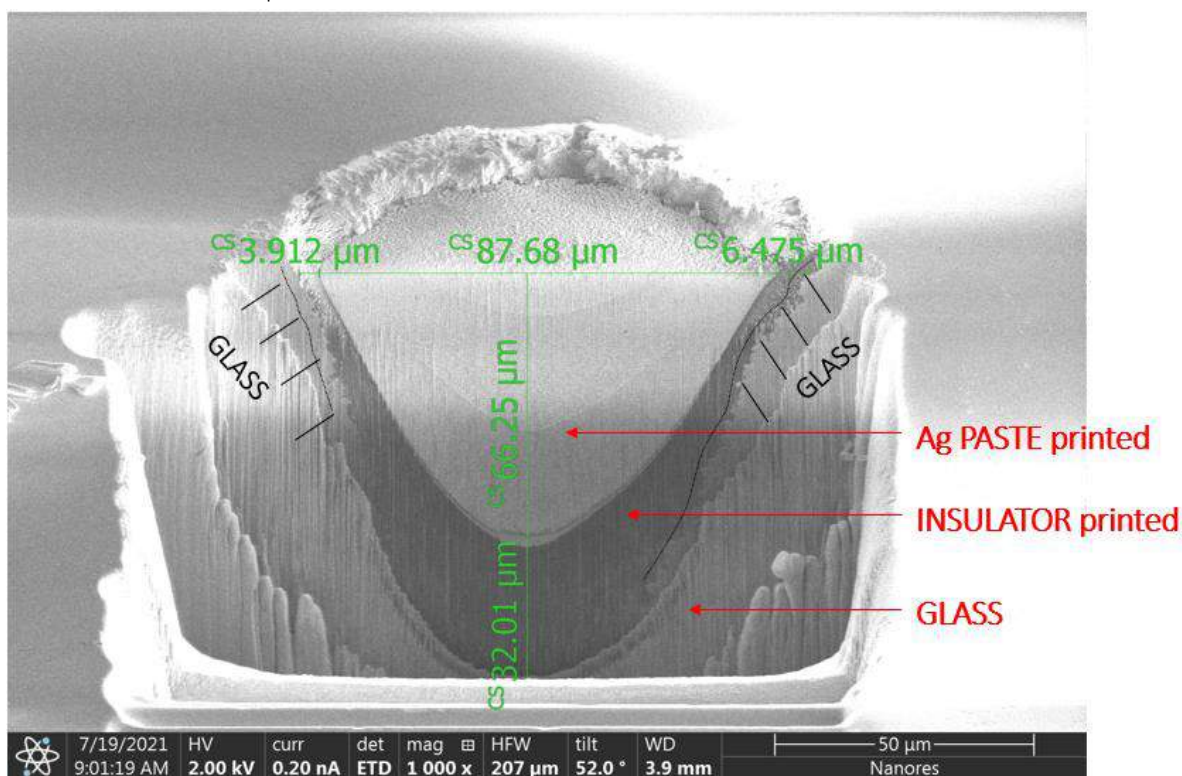


For the Company, this opens further application areas related to advanced electronic circuits or integrated circuits. The use of the UPD technology in these markets fits with the strategy adopted by a group of experts from the semiconductor industry (from the United States, Europe, Japan, China, South Korea and Taiwan) laid down in the documents of the National Technology Roadmap for Semiconductors (NTRS), which provide for integration of individual electronic circuits into one integrated circuit. The precise deposition of material with a high concentration of nanoparticles started to be used in the Company's several new technological and business streams. This is testament to the uniqueness of the developed solution and its potential to be used in new technologies.

In the first half of 2021, the Company also focused on optimizing the printing speed using the UPD method, as well as on increasing the possibility of automatic printing. In this way, it is possible to print advanced features and patterns, as instructed by clients, with reduced or indeed no operator presence during the printing process itself. The introduction of this functionality is of great importance for the use in prototyping or even in small-lot production with the Delta Printing System. Below you can see an example printout made by means of the automatic process, characterized by a very high repeatability of the shape.

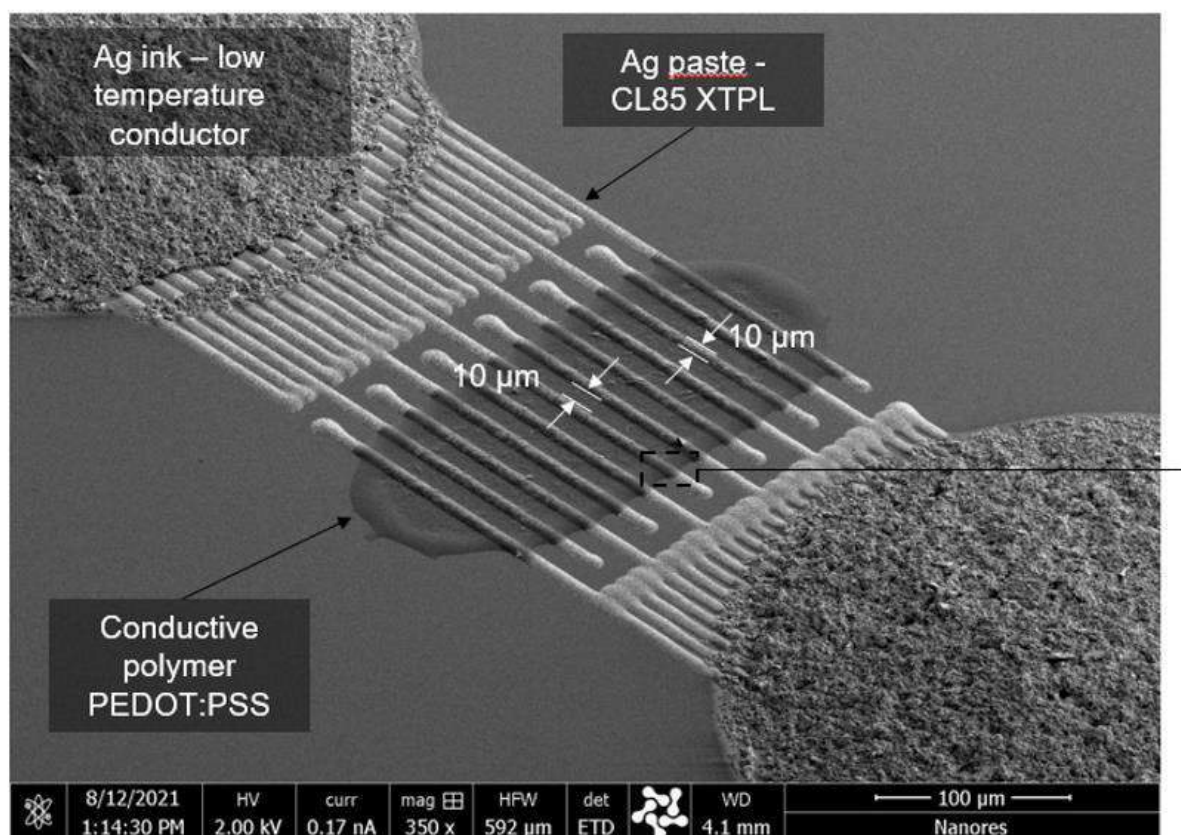


In the third quarter of 2021, the Company's R&D team went a step further in the development of technology for applications in printing electronic connections in advanced integrated circuits, as it presented a structure filled with insulating material on the outside and conductive material inside. In practice, end users of the XTPL technology will be able to isolate electronic connections made on conductive and semiconductive substrates. Until now, such structures could only be achieved by traditional, multi-stage production methods used in the semiconductor industry. The introduction of this technological solution by the Company's customers will allow them to cut the costs of small-lot production of advanced integrated circuits, and once the technology has been scaled to production efficiency, it will help reduce material consumption.



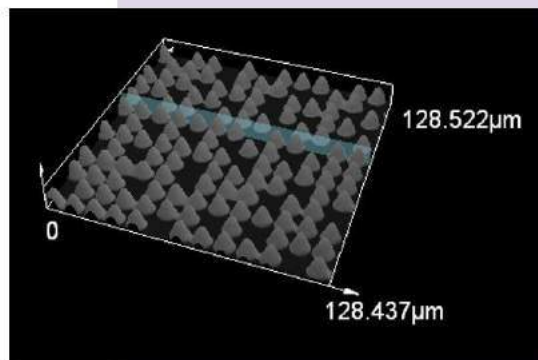
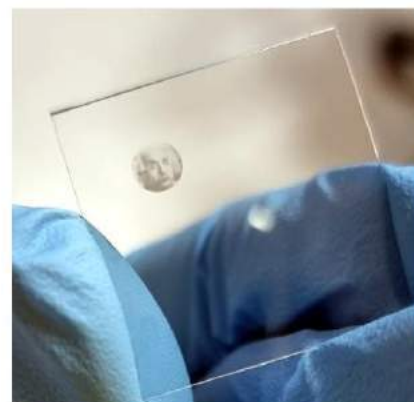
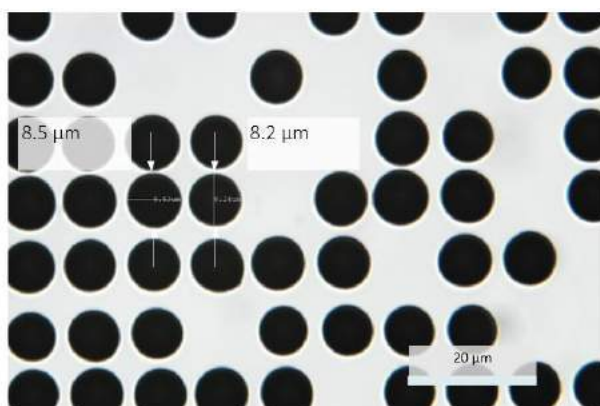
In addition to the above example, the printing of multiple materials one after another allows advanced functional structures to be achieved. This is perfectly exemplified by the implementation of a high-resolution redistribution layer (RDL) for integrated circuits. Ultimately, this will enable the prototyping of the structures whose production using traditional methods is time-consuming and costly.

Another example of printing functional structures composed of multiple materials (the example presented below uses low-temperature conductive ink, and PEDOT conductive polymer: PSS and Ag CL85 nanopaste). This made it possible to make a simple transistor for detecting organic materials. Transistor for detecting organic materials fully printed by XTPL



During the reporting period, the Company continued activities related to the development of the Delta Printing System (DPS), which is a complete device enabling the use of UPD technology in research, prototyping and small-lot production. The installation of the first device at the University of Stuttgart at the beginning of 2021 and its use by the client allowed us to gather valuable input into building the product development roadmap. In the third quarter of 2021, together with the client, new functionalities were developed and implemented, enriching the existing capabilities of the DPS device, including delivery of software that enables automatic conversion of CAD files into a script language that can be read by device drivers. The new improvements and updates of the device are introduced to devices created for new customers. Until the end of 2021, the Company installed a total of four DPS devices in Europe: at the Institute of Technology in Karlsruhe, Germany, at University of Glasgow in Great Britain and at the Polish Center for Technology Development in Wrocław, with the experience gained there being put to use to further improve the Delta Printing System.

- High resolution <10 µm diameter
- Very high repeatability and printing stability
- High aspect ratio (8 µm ø/ 800 nm height)
- Large area covering



R&D progress was also achieved with respect to high-resolution prints composed of microdots of less than 10 µm in diameter. The dots are characterized by a parabolic cross-section (which facilitates deposition of successive layers) and a high aspect ratio (height of 800 nm for a dot of 8 µm in diameter). High repeatability of dot deposition enables printing on large surfaces.

Testing XTPL inks for various printing methods:

XTPL conductive inks based on silver nanoparticles attract the interest of manufacturers from several industry sectors and representatives of the scientific community due to their innovative physicochemical properties. In response to the evident market interest in XTPL nanoinks, protected by patent applications, efforts are being made to add new products to the Company's portfolio.

The Company is currently working with R&D units in Europe and the United States to verify the compatibility and efficacy of using new formulations developed by XTPL's R&D units for specific printing methods, including: LIFT (Laser Induced Forward Transfer), Aerosol Jet printing (with ultrasonic systems) and electro-hydro-dynamic (EHD) printing. It is worth noting that one of the XTPL ink formulations is now being tested by a leading global R&D center for application in the photovoltaic industry for the purpose of advanced metallization in solar cells.

Achieving further milestones in technology development:

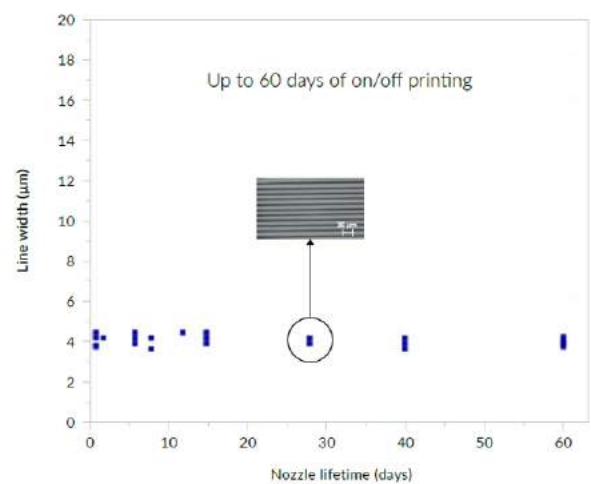
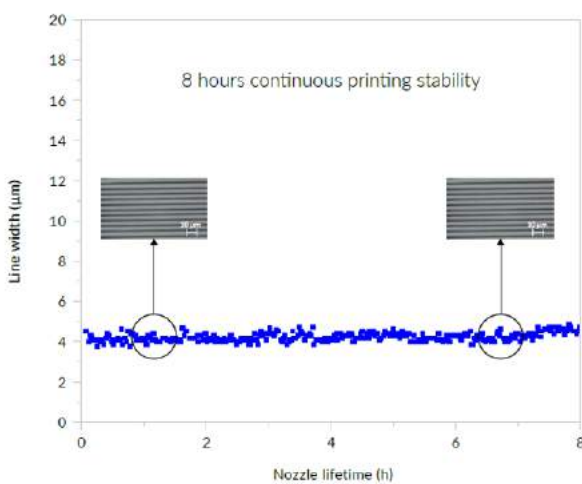
In the reporting period, XTPL achieved further milestones related to the development of the UPD technology:

- 1) Repetitive printing of lines less than 2 µm wide, regardless of the material on which the process is carried out;

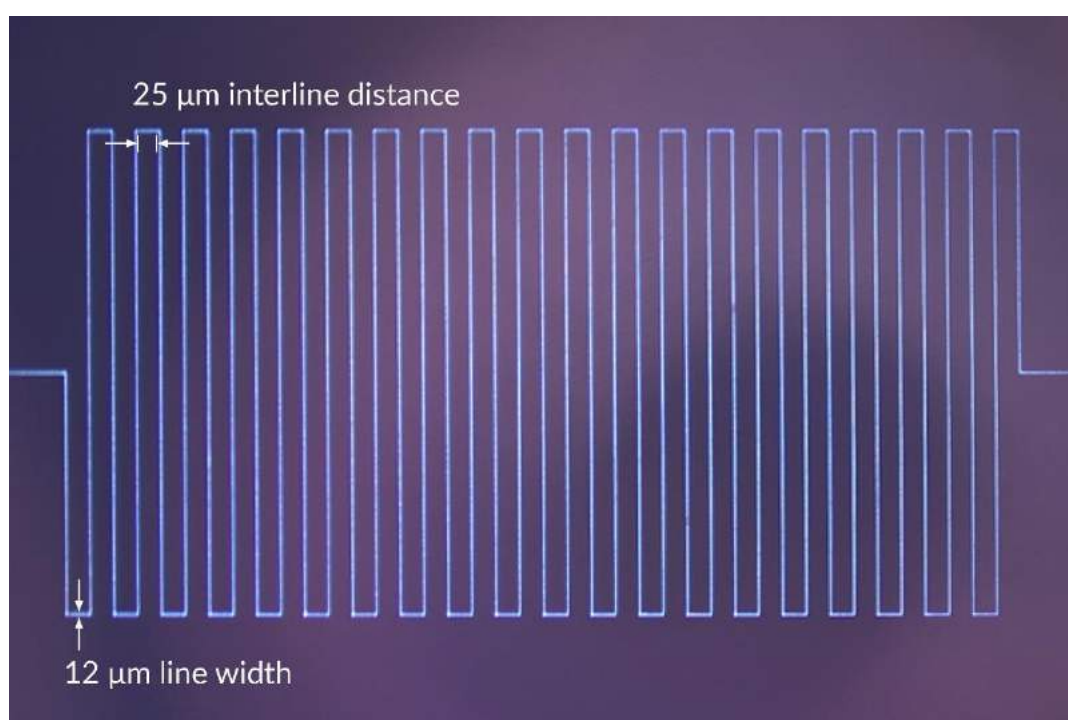
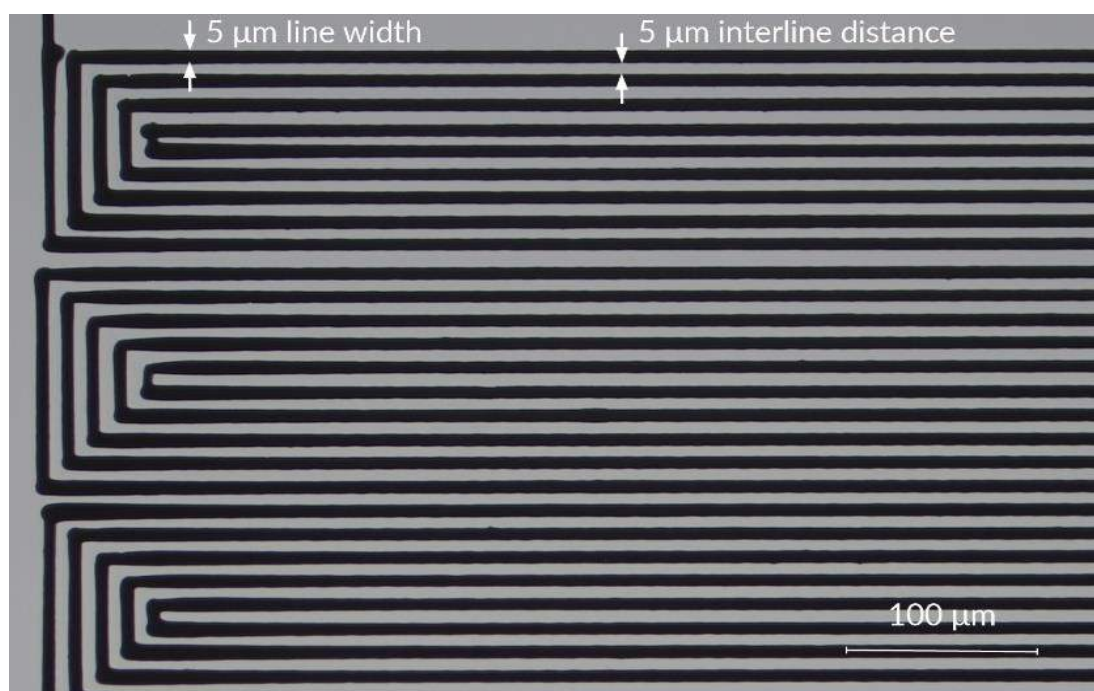
- 2) Extending the life of the printing nozzle to one month;
- 3) Printing of micrometric conductive structures on steps many times higher than the width of the printed line;
- 4) High-definition printing of arbitrary shapes;
- 5) High degree of repeatability of 1 μm wide conductive lines printed on the electrical layer of high-resolution OLED displays;
- 6) High-resolution repeatable printing of dots below 10 μm in diameter;
- 7) Printing of conductive structures on concave and convex substrates.

Printing of lines less than 2 μm wide, regardless of the material on which the process is carried out (printing on hydrophobic and hydrophilic materials), is particularly important in repairing open defects in high-resolution next-generation displays. In this case, in addition to the requirement to print very narrow features, the conductive line may be printed on various elements of the substrate, and so regardless of the material used, it should maintain the same geometrical dimensions.

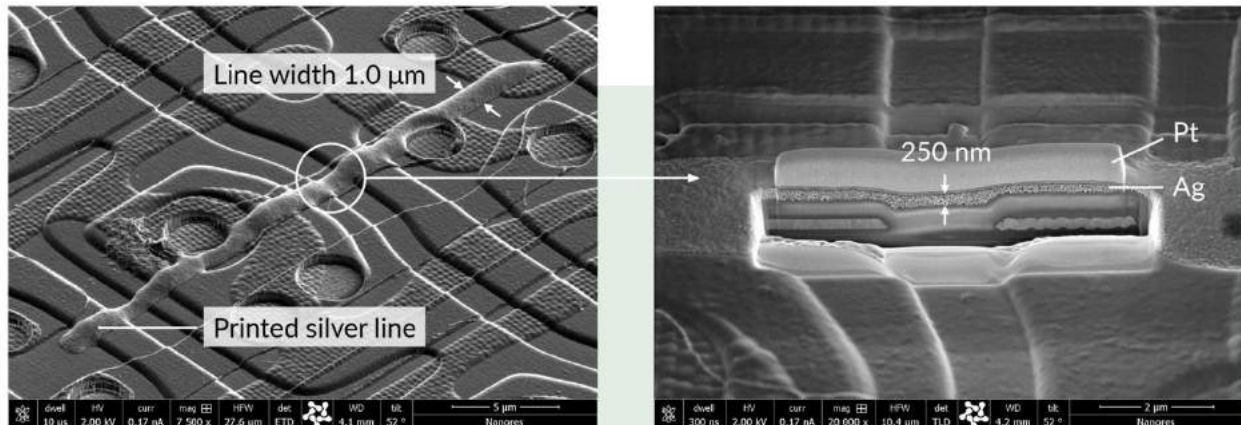
Development of a method of printing precise conductive structures that effectively cover a step whose height is many times bigger than the width of the printed line, e.g. a 10 μm wide line printed on a step 350 μm high. This method allows electrical connections to be created on complex substrates that are fit for use with modern microelectronic devices. Another technological milestone achieved is the extension of the replaceable nozzle life to one month. This printing head element can be easily replaced by the device operator. Below are example graphs showing the stability of deposition in the case of CL85 paste and a printing nozzle with a diameter of 2.5 μm . The stability of deposition means that during the life of the nozzle continuous lines of similar width can be printed (the line width is marked on the y axis). The graph on the left-hand side shows eight hours of continuous printing, while the graph on the right shows on & off printing for 60 days.



The possibility to print arbitrary high-resolution shapes enables thin, high-density conductive lines to be created on client-supplied substrates and based on the client's design. One of the tasks was to print 5 μm wide conductive lines with a 5 μm gap between them. Furthermore, the proposed pattern consisted of five independent paths. This not only made it possible to measure their conductivity, but ensured there was no short circuit between them. Both tests provided highly competitive results, paving the road to further stages of the talks.

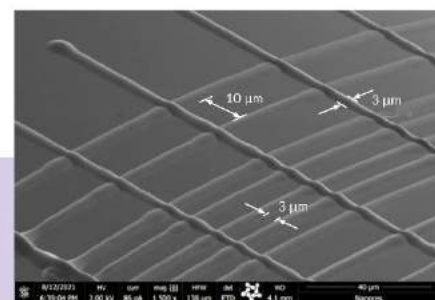
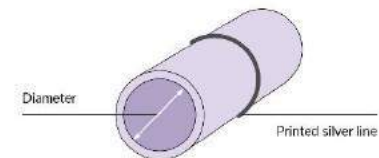
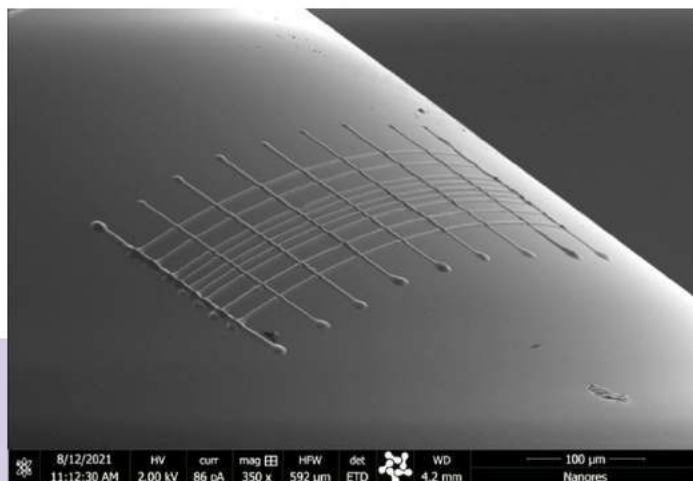


Another technological milestone is the achievement of a very high degree of repeatability of conductive lines printed on the electrical layer of high-resolution OLED displays. These substrates have very complex topography due to the high number of layered conductive paths manufactured during the production process. The confirmed technological capability of depositing thin ($1\text{ }\mu\text{m}$ wide) conductive lines in a repeatable manner increases technological readiness of the Company's solution to repair open defects in electrical structures of new generation OLED displays.



Yet another milestone is the ability to print high-resolution dots with a width below 10 μm. The dots are characterized by a parabolic cross-section (which facilitates deposition of successive layers) and a high aspect ratio (height of 800 nm for a dot of 8 μm in diameter). High repeatability of dots deposition enables printing on large surfaces.

The last milestone mentioned is the development of a method of printing conductive structures on concave and convex substrates, which gives even more freedom in the design and prototyping of microelectronic devices manufactured using the UPD method.



3.2.4. Issuer's activities designed to its intellectual and industrial property

In the period from January to December 2021, the Company filed with the United States Patent and Trademark Office 4 new patent applications and 1 patent application supplementing the previous submission. The patent applications relate to further layers of intellectual property protection in terms of ultra-precise printing on a micrometric scale. As at the Report Date, the Company had 24 patent applications filed in total. As at the Report Date, the Company had one patent approved, covering the territory of Japan, China, South Korea, Germany and the USA. As at the Report Date, the Company had trademarks registered with the Patent Office of the Republic of Poland and the European Union Intellectual Property Office, as well as in China.

The Company has adapted its process of filing patent application to the recommendations of the patent offices cooperating with it and the advisors from the executive board of XTPL Inc. based in the United States. The recommendations concern, *inter alia*, an appropriate combination of new technological solutions and inventions into a single patent application. This is expected to increase the quality of individual submissions and consequently strengthen protection of the Company's intellectual property.

According to ESPI Current Report No. 45/2020 of 23 November 2020, the Management Board expected that by submitting the applications in the model described above, by the end of 2022 the number of all the Company's applications to date would be 26. As at the date of publication of this report, the Company's Management Board does not see any risk to achieving this target.

The Company is gradually increasing its competitive edge by filing further patent applications. Four new patent applications were filed during the Reporting Period. The first of those applications concerns the method of quick printing of micrometric conductive structures on steps. This is a unique ability compared to other printed electronics methods. It allows highly-conductive and strong electrical connections to be created for use in OLED displays and micro-LED displays, among other things. The second patent application concerns the method of precise filling of microwells with polymer. This is of particular importance in the manufacture of modern semiconductor devices. This process can be carried out using the XTPL printing system. The advantage of the XTPL method is that the microwell is filled precisely and homogeneously (without overflow) with no cracks in the filling. The third application relates to the design of the cartridge as a key component of the XTPL printing system, a nano-ink reservoir and a piece that feeds ink into the printing nozzle. When printing micrometric features using the XTPL method, high precision is required in the process of manufacturing individual printer components, including the cartridge. Proper operation of the cartridge is determined by a number of parameters, including its geometry. For this reason, the XTPL R&D team developed a quick and precise method of checking the cartridge's geometric parameters, and built an appropriate measuring system to be able to carry out quality assurance processes for the product. This method turned out to be effective and innovative, so we have decided to prepare a patent application to protect it. Checking the geometrical parameters of the cartridge by means of this method is one of a series of steps to prepare the cartridge for printing. The invention described in the fourth application will afford greater freedom in the design of new generation electronic devices which include conductive mesh. With our solution it will be possible to apply the conductive structure onto solid substrate, glass for example, and then transfer it to the target, flexible substrate. This will streamline and facilitate the process of industrial production of microelectronic devices.

3.2.5. Issuer's participation in industry events

Industry events are an excellent opportunity to showcase the unique XTPL technology to leading representatives of industry and science from around the globe. At the time of the pandemic in 2021, events were usually held online or in hybrid form. The Company attaches great importance to building and increasing awareness of the XTPL's precision printing technology and the technology's capabilities among experts in the microelectronics, displays, semiconductors and printed electronics industries. For this reason, during 2021, XTPL organized and actively participated in many industry events.

On 16–17 February 2021, the Company organized a **webinar dedicated to the presentation of the XTPL technology**, available for participants from various time zones. During the meeting, Filip Granek, the CEO of XTPL, gave a presentation entitled “Rapid prototyping in microelectronic applications”, in which he outlined the approach to prototyping microelectronic devices and components.

On 24 February 2021, Aneta Wiatrowska, PhD, XTPL Technology Director, represented the Company during the event **innoLAE 2021 – Innovations in Large-Area Electronics**. The conference agenda included the most innovative aspects of large-area electronics. As part of the “Manufacturing” session, Aneta Wiatrowska presented a paper entitled “High-resolution Printing of Micrometric Conductive Features for LAE”.

On 22 March 2021, the **LOPEC** conference was held. LOPEC (Large-area, Organic and Printed Electronics Convention) is the world's leading communication platform for research and solutions in the printed electronics industry. The Company was represented by Piotr Kowalczewski, PhD – Head of the XTPL Numerical Simulation Laboratory.

Another event in which XTPL took part was the **Internano Poland** conference held in April 2021. This is an international forum of scientists, entrepreneurs, organizations that support business and students working in the sector of nanotechnology and technologically advanced materials. The Company was represented by Piotr Kowalczewski, PhD, who presented the Issuer's latest technological results.

On 29 April 2021, the **Ceramic Interconnect and Ceramic Microsystems Technologies (CICMT)** conference took place. The Company was represented by Łukasz Kosior, XTPL Sales Department Manager, who gave a presentation entitled “Ultra-precise printing of micrometric conductive structures for use in the integration and merging of MEMS circuits”.

On the same day, XTPL took part in one more event: the **Smart Systems Integration** conference. During the conference, Aneta Wiatrowska, PhD, made a presentation “Ultra-precise printing of micrometric conductive features for integrating intelligent systems”.

Another event with the Company's participation was the **“Printed, Flexible, Hybrid, & InMold Electronics”** conference held on 11–12 May 2021 via the TechBlick platform. The Company was represented by Filip Granek, who outlined XTPL's latest technological achievements.

On 17–21 May 2021, the **Display Week** was held. The Company took part in both the conference and exhibition part of the event. XTPL designed a virtual stand complete with information about the Company and its technological achievements. The virtual stand allowed the Company to make contact with giants from the deep-tech sector. In addition, during the conference part, Aneta Wiatrowska gave a presentation on “Ultra-precise printing of conductive micrometric connections for high-resolution micro-LED displays”.

In Q2 2021, the Company also took part in the **International Conference on Display Technology**, an event held in on 30 May–2 June. The conference topics covered a wide range of new display technologies. The Company was represented by its CEO Filip Granek.

In June 2021, the Company organized further webinars on XTPL technologies and products. **The first webinar was held on 16–17 June** for different time zones. The meeting was conducted by Ludovic Schneider, R&D Manager. During the webinar, Ludovic presented the properties and key information about the conductive inks produced by the XTPL laboratory. **Another from the series of June webinars was held on 23–24 June** also for different time zones. During the webinar, Łukasz Kosior presented the most important information on the XTPL ultra-precise deposition technology for use in microelectronics or flat panel displays.

After the Balance Sheet Date, the Company took part in the **Nanotextology 2021** conference – an event focused on nanotechnology, organic and printed electronics and nanomedicine. During the conference, Filip Granek gave a presentation “Ultra-precise deposition of materials for flexible organic electronics”.

On 27 August 2021, XTPL took part in the **International Meeting on Information Display** conference. During the event, Filip Granek presented the Company’s latest technological achievements in the presentation “Ultra-precise deposition for the production of displays: from rapid prototyping to mass production”.

Another event on the Company’s calendar was the **Connecting Heterogeneous Systems Summit**, which took place on 3 September 2021. During this event, Łukasz Kosior gave a presentation “Ultra-precise deposition of nanomaterials for heterogeneous integration”.

Next, on 8 September 2021, at the invitation of the Polish Investment and Trade Agency, Filip Granek took part in a debate during the **30th Economic Forum in Karpacz**. The debate concerned foreign investments and investors’ cooperation with the SME sector and the scientific community.

The **Pro Flex 2021** conference was the last industry conference in which XTPL took part in Q3 2021. The event’s agenda included topics related to processing and coating of flexible materials, like polymer films, metal foils, ultra-thin glass, membranes, and textiles.

Furthermore, in the third quarter, the Company made preparations to contribute to the creation of Poland’s exhibition zone at Expo 2020 in Dubai: “**Poland. Creativity Inspired by Nature**”. The exhibition was officially opened on 1 October. Information about XTPL can be seen in the materials promoting Polish technology companies in the Polish Pavilion.

In the fourth quarter of 2021, the Company took part in 5 industry events. The biggest and most influential one was **Flex China 2021** – a prestigious show taking place in China, during which nanotech companies showcased their products, exchanged technical information and explored market expansion opportunities. At the event, Filip Granek gave a presentation “Ultraprecise deposition of micrometric conductive structures for flexible electronics”.

Another event in which XTPL took active part was the **Techconnect Europe Innovation** conference, held on 17 November in Malmö, Sweden. The purpose of the conference was to connect the best of applied research and early-stage technology from universities, laboratories and start-ups with industrial and investment end-users and best-practice seekers. During the event, Łukasz Witczak, an R&D engineer at XTPL, gave a speech “Ultra-precise deposition of nanoinks in printed and flexible electronics” in a session devoted to nanomaterials.

The **International Meeting on Information Display (iMiD) 2021** is an event that was aimed at promoting the development of new products and technologies by exchanging information about new solutions and market trends. During the event on 26 November, Filip Granek, PhD, CEO of XTPL S.A. gave a presentation “XTPL technology for open-defect repair”.

On 3 December 2021, the Company took part in **The 28th International Display Workshops (IDW ‘21)**. The event attracted experts from the global electronic display industry. The Company was represented by Filip Granek.

The last event in which the Company took part in 2021 was the **China Hi-Tech Fair** held on 27–31 December. China Hi-Tech Fair is the largest and the most significant scientific and technological fair in China, with a reputation for being “no. 1 technology show in China”. Every year, about 3,000 people and exhibitors from over 50 countries participate in it. XTPL designed a virtual stand whereby it could interact with potential clients.

In 2021, XTPL actively participated in 22 international industry events, both on-site and remotely.

At the same time, the Company keeps track of industry events and scientific conferences planned for the coming quarters, in which it could present its technology and products.

3.2.6. Issuer's participation in events dedicated to capital market investors

The Company attaches great importance to communication with capital market participants. In order to implement the corporate governance and communication standards and to ensure constant and equal access to information about the Company for all stakeholders, and to meet their needs, the Company undertakes numerous activities in the area of investor relations. Below is a description of the key events and activities addressed to the capital market in 2021.

In connection with the publication of the 2020 Annual Report on 27 April 2021, two earnings calls were held with the Management Board of XTPL S.A. The first meeting took place on 28 April 2021, and was in Polish. The second meeting was held on 29 April 2021 in English. During both calls, the Company's Management Board presented and discussed the financial results and the key events and achievements of the previous year.

Further investor videoconferences attended by the Management Board of XTPL S.A. were held in connection with the Q1 2021 report published on 27 May 2021. The meetings in Polish and English took place on 27 May 2021 and 28 May 2021, respectively. During the conference with investors, the Company's Management Board presented the key events and achievements, as well as financial results for the first quarter of 2021.

After the publication of the H1 report, on 28 September 2021, the Management Board of the Company again met with investors to discuss the most important events and financial results for the period. The first meeting was held on 29 September 2021 in Polish. Next, an English session took place on 30 September 2021.

The last financial report published by the Company in 2021 was the Q3 report published on 25 November 2021. On the same day, a videoconference with investors was held in Polish, followed by an English session on 26 November.

At the same time, in 2021, the Company took part in several important international conferences with the participation of investors and analysts. Those events are summarized in the table below.

Event	Date	Description
VIRTUAL ZÜRS	12–14.04.2021	A conference organized by Raiffeisen Bank International, during which XTPL representatives held a series of meetings with foreign institutional investors.

Equity Forum Spring Conference	17-19.05.2021	One of the largest capital market conferences in Germany, which is an opportunity to engage in dialogue on market developments, innovations and future trends. The event focuses on presentations by companies showcasing their activities, achievements and business strategies. During the three days of the conference, the XTPL Management Board met with investors, analysts and journalists.
GPW Innovation Day	22–24.06.2021	This was the seventh edition of the highly popular meeting of Polish investors with innovative companies listed on the Warsaw Stock Exchange. During the event, the XTPL Management Board presented the key information about the Company to a wide group of investors.
Equity Forum Fall Conference	6–7.09.2021	Fall edition of the annual conference focused on the capital market in Germany. During the event, the XTPL Management Board held meetings with investors, analysts and journalists, presenting the Company's latest technological achievements, business model and financial results.
Investor Day	14.09.2021	An online meeting organized at the initiative of the Company with the XTPL Management Board. During the meeting, investors could not only find out about the Company's operations, but could also see the laboratories where the Issuer's technology and products are developed. In total, nearly 200 investors participated in the meeting.

The Company has planned more investor events for 2022, during which it will be able to actively present its achievements with respect to technology and commercialization, financial performance and prospects. Events planned for the first half of 2022:

- Earnings calls for Polish and foreign investors, held each time after the publication of interim results – the dates of the meetings will be set in due course before the publication date
- Institutional Investors Conference Zürs, Raiffeisen Bank International – April 2022

In addition, the Company focuses on regular communication with the capital market, including through a constantly updated website with a separate investor relations section where current information materials are posted (press releases, presentations, newsletters, answers to frequently asked questions from investors), publication of short information from

the life of XTPL in social media channels (Facebook, LinkedIn, Twitter), and publication of selected video materials on YouTube. Furthermore, the Company tries to provide fast and reliable answers to the questions received from individual investors. In order to facilitate contact with the Company, the “Contact” tab on the investor relations site contains contact details for individual investors, institutional investors, analysts and journalists.

Scheduled international investor events

The Company is planning to organize further online events for investors.

After publication of the 2021 results, two earnings calls will be held with the Management Board of XTPL S.A. The two meetings – the first in Polish and the other in English for foreign investors – have been scheduled for 27 April. During both videoconferences, the Company’s Management Board will present the financial results for 2021 and the key events and achievements in the previous year.

Another scheduled event is the Equity Forum Spring Conference, which will be held on 23–25 May 2021 in Frankfurt. One of the largest capital market conferences in Germany, which is an opportunity to engage in dialogue on market developments, innovations and future trends. The event focuses on presentations by companies showcasing their activities, achievements and business strategies. During the three days of the conference, the XTPL Management Board will meet with investors, analysts and journalists.

3.2.7. Other events

New Chairman of the Audit Committee

As required by the Best Practice for GPW Listed Companies 2021, on 26 May 2021, the Company’s Supervisory Board changed the Chairman of the Audit Committee. Piotr Lembas was appointed to this role, replacing Wiesław Rożłucki. In accordance with Principle 2.9 of the Best Practice 2021: “The chairman of a supervisory board should not combine his function with managing the work of the supervisory board’s audit committee”. Wiesław Rożłucki remained a member of the Audit Committee.

Annual General Meeting of Shareholders of 30 June 2021

On 30 June 2021, the Annual General Meeting was held. Among other things, it approved the financial statements and reports on activities, and held a discussion about the remuneration report. Details are specified in ESPI Current Reports Nos. 9/2021 and 13/2021.

3.2.8. Information on signing an NCBR grant agreement

During financial year, XTPL worked on two R&D projects co-financed by the National Center for Research and Development (NCBR):

1. Agreement with the NCBR signed on 28 December 2020 as part of competition 1/1.1.1/2020 – “Fast track”, under the project: “Innovative technology for precise deposition of conductive mesh for application in new generation

OLED displays". The main objective of the Project is to develop an additive printing technology of ultra-precise metallic structures designed to reduce resistance of the transparent cathode in new generation TE-OLED displays.

- The total cost of the Project is: PLN 16,003,028.33;
- Grant: PLN 11,673,831.24;
- Implementation period: 01.07.2020 - 30.06.2023.

- 2 The agreement with the NCBR was signed on 31 May 2021 as part of competition 6/1.1.1/2020 – “Fast track” under the project: “Development of breakthrough printing technology of 3D micrometric conductive structures using an innovative printhead capable of printing on non-planar substrates and compatible ink for printed electronics applications”. The project relates to development and implementation of a new technology for precise printing of ultra-thin conductive structures on 3D substrates for applications in printed electronics.

- Total Project value: PLN 11,615,569.56;
- Grant: PLN 7,695,844.09;
- Implementation period: 01.10.2020 – 30.09.2023.

3.3. INTERNAL AND EXTERNAL FACTORS IMPORTANT FOR THE DEVELOPMENT OF THE ISSUER'S BUSINESS

3.3.1. External factors:

Macroeconomic factors:

In accordance with the adopted strategy, XTPL carries on its business in international markets, particularly in the United States, Southeast Asia and Western Europe. Accordingly, the macroeconomic situation in these areas will have an impact on the Company's results and the degree of achievement of its development strategy.

Trends in printed electronics:

The market of electronics, the production of which could potentially be completely replaced by additive printing techniques, exceeded USD 45 billion in 2021. According to information from IDTechEx, the display market, worth USD 40.2 billion, had the biggest share in this market. According to the same report, the value of components produced solely by printing methods exceeded the USD 6.5 billion in 2021. Other reports, such as Markets and Markets, suggest that the value of the printed electronics market in 2021 reached almost USD 10 billion, and in 2026 it is expected to reach USD 23 billion. According to the authors of the report, one of the key drivers of the value of that market is the increasing demand for energy-efficient thin and flexible consumer electronics. Currently, the most pronounced year-on-year growth is noted for OLED panels. Even though organic material can be used in printers, it is subtractive methods that continue to be used most often. This is for the following reasons: first, the technology of electronics printing is relatively new. Manufacturers of devices for the production of e.g. displays, promote known subtractive methods. They are quite well optimized and ensure a very high speed of production of modules. The limitations of the previously available printing technologies seriously affected their efficiency. The second factor is that the optimum structures that can be obtained using inkjet printers available in the market have a minimum diameter of approx. 30 μm , except that the precision of drops is $\pm 15 \mu\text{m}$, and $\pm 5 \mu\text{m}$ in the XY axis (i.e. in the plane on which the dot is printed). For this reason, due to *inter alia* the insufficient control of the deposited amount of material, modern electronics is still waiting for a technology that will successfully replace the existing subtractive methods and offer at least comparable production parameters. The XTPL technology may provide such an alternative.

Trends related to the miniaturization of consumer electronics:

Miniaturization has been the prevailing trend in electronics for several decades. As devices are reduced in size, the packing density of discrete components increases, resulting in a significant increase in performance of the devices. Certainly, the trend in miniaturization is visible in most electronic devices. At the same time, it enables production of completely new, previously unattainable products. Thanks to miniaturization, new medical instruments are devised which make treatment less invasive and allow the patient to recover faster. The biosensors sector is developing rapidly, where the key challenge is to find a solution with the highest efficiency, both in terms of precise and simple detection, and a unique size-reduction capability, while allowing production using inexpensive and scalable methods. The telecommunications market generates less costs due to light, small and at the same time very efficient satellites. Precise deposition of ultra-thin conductive lines and new active materials, such as light-emitting organic compounds or quantum dots, is the only way of cost-effective and easily scalable implementation of such projects. And this creates a potentially attractive application field for XTPL, which can offer here an absolutely groundbreaking solution, much awaited by the market.

Trends related to flexible electronics:

The introduction of flexible electronics is now of key importance for the manufacturers who want to meet customer expectations and offer them new generation devices. These devices are intended to be ready for bending, folding or wearing, e.g. on clothes or directly on the skin. Although it is still a growing market, the consumer market has already seen an influx of new devices based on flexible materials (e.g. phones with foldable screens). Experts note that as the cost of these products decreases and their durability improves, the size of this market can reach a very high value in a short time. The XTPL technology has every potential to play a very important role in this trend.

Trends in the displays sector:

Although very much mature, the display market continues to see technological innovation, not only that resulting from miniaturization trends, but also in the area of higher efficiency of light emission. This in practice means thin, very bright, high-contrast displays. Currently, the most intensive technological changes relate to the type of substrate on which the display is to be created. IDTechEx expects that as early as at the end of 2020, 40% of AMOLED displays will be plastic-based, with this proportion growing to nearly 60% in 2026, at the expense of glass substrates. This trend opens up development opportunities for another type of displays – flexible ones. Judging by the great interest attracted by this technology and the first products from this segment, in the coming years the technology will undoubtedly stand out in terms of its visible development and popularity. However, this will require a solution to the problems that can already be seen in the production processes. These include, for example, the fact that OLED screens are fabricated using an organic material deposited by FMM (fine metal mask) methods. Two main approaches are used here. The first one is intended for small displays such as telephones or watches – it consists in separate deposition of red, green and blue pixels. The process uses three different FMMs, and any material not deposited in the pixel is wasted. As well as being suboptimal, the process has technological limitations – it does not allow pixels to be deposited on large substrates. Due to the amount and weight of the organic material, the distance between the FMM and the substrate must be increased, which produces a “shadow” effect. Another approach, which is used for e.g. fabricating large displays, is to embed WOLED (White Organic Light Emitting Diode) on the whole substrate in the first place. Next, a color filter is applied, the deposition of which is much easier. Unfortunately, only 20% of the light passes through the color filter, so much more electric power is required to maintain appropriate screen brightness, which in turn significantly reduces the life of such a screen. The problem can be addressed by the introduction of additive technology into the fabrication process as the technology enables precise deposition of the material with no restrictions as to the substrate. An additional advantage for the methods of printing in electronics is the potentially wide spectrum of materials that can be deposited. This makes it possible to fabricate completely new types of screens such as QLED – displays whose emission material is quantum dots, which ensure a very bright image with high contrast. Most of QLED-labelled displays that are currently on sale are in fact WOLEDs with the addition of quantum dots in a color filter. Admittedly, quantum dots, stimulated with blue light, emit the appropriate color of light and reduce the loss of light through a color filter by 80%, but it is only the introduction of a suitable additive method with a precise deposition will allow the potential of this material to be exploited in full. The main technological requirements for the fabrication of such screens include high repeatability of pixel sizes as well as precision in the XY axis. Bearing in mind the trend of continuous increase in resolution and hence pixel density, the XTPL technology has every potential to respond positively to market needs. The possibility of multiplication of printing heads will effectively increase printing efficiency following implementation of XTPL ultra-precise deposition on a production scale, and the wide range of materials that can be deposited using the Issuer’s technology will help market new generation displays that are more efficient and consistent with the current consumer trends.

Trends in additive manufacturing:

In addition to the above developments, additive production is a quite discernible trend in modern electronics. Due to the extremely reduced size of structures, unattainable by any other method, the subtractive technology has become

the main or in some areas even the only method of producing electronics. Continuous development of the printed electronics market increasingly often replaces previous methods with their excessive deposition of material. At present, there are printing devices available in the market that are successfully deployed in key spots on production lines. However, their capabilities are limited by the range of sizes that can be obtained, and their deposition precision is not sufficient in relation to the size and accuracy of arrangement of individual discrete components in electronic circuits. Taking into account these rigorous parameters and the huge market demand, the technology developed by XTPL may constitute a breakthrough in the context of printed electronics production. The sheer number of possible application areas within this sector where the XTPL technology might be used bears witness to its versatility and huge potential.

Possibility of co-financing R&D from subsidies:

In addition to using own funds acquired through the share issue, the Company's R&D activities are also funded by the EU. This source makes it possible to reduce the cost of in-house R&D and research in new application fields, also at the early stages of technological readiness.

3.3.2. Internal factors:

Ability to protect and safeguard intellectual and industrial property:

Effective protection of the intellectual and industrial property developed by XTPL is an essential part of its business. The ongoing patent applications ensure security for the Company and its disruptive technology. At the same time, they are one of the pillars of XTPL value. The intellectual value obtained may also have a positive impact on the ongoing and future commercialization talks. In the process of protecting and safeguarding intellectual property, the Company is supported by renowned entities: law firms from the UK and the USA. The London-based law firm Gill Jennings & Every is a team of more than 100 lawyers, which received multiple awards in the prestigious Legal 500 ranking. They provide services to both enterprises from the SME sector and to global corporations. The K&L Gates law firm supports patent protection of companies specializing in advanced technologies, particularly those from Silicon Valley.

Ability to acquire and maintain appropriate staff

The Company's business profile – building solutions for the high-tech sector – requires the use of high-class specialists from various fields: chemistry, physics, electronics, mechanics, material engineering and numerical simulations. Staff sourcing is a two-pronged process: The Issuer conducts a number of activities in the area of employer branding, and strives to be present at national conferences on nanotechnology, constantly extending its network of Moreover, the incentive program will be an important factor enabling the recruitment and retention of appropriate staff.

Commercialization of technology

In 2021, the Company delivered three Delta Printing System printers to leading research institutes in Europe: Karlsruher Institut für Technologie (KIT) in Karlsruhe (Germany), University of Glasgow (Great Britain), and the Łukasiewicz Research Network – PORT Polish Center for Technology Development (Poland). In addition, on 23 December 2021, the Company signed an agreement with the University of Brescia (Italy) for delivery of another device (in 2022). In addition, last year the Company supplied its device to the Institute for Large Area Microelectronics (IGM) in Stuttgart (Germany). As well as generating cash flows, the strategy of selling printers to the above category of clients notably increases the awareness of

the XTPL technology, not only among research units, but also among industrial entities that those units closely cooperate with. Quite importantly, each client that uses the Delta Printing System specializes in a different area of printed electronics.

- IGM: display technologies (Flat Panel Display);
- KIT: organic and inorganic LEDs;
- University of Glasgow: sensor systems and bendable, printed and flexible electronics;
- PORT: photonics;
- University of Brescia: biodegradable organic biosensors.

Attracting clients active in research in various fields where the UPD technology is used increases the potential scope of the commercial market for XTPL.

The Company also supplies conductive inks for use with the UPD technology and other technologies. The inks are supplied both to the owners of the Delta Printing System (as consumables), and to other interested entities. The latter group includes research units and industrial clients from all over the world.

The Company's strategic goal is to become a global supplier for key players in the printed electronics market. In 2021, nine industrial implementations projects were under way at stages of advancement. As at the Report Date, all the projects are being continued and progressed.

In terms of cooperation with the industry, XTPL has reached a milestone in the form of an agreement signed with Nano Dimension Ltd. The agreement was signed on 10 January 2022, but talks and negotiations continued throughout 2021. Nano Dimension Ltd. is a NASDAQ-listed provider of intelligent machines for the fabrication of Additively Manufactured Electronics (AME). Nano Dimension is implementing a globally innovative system of PCB production based on ink-jet printing methods. In connection with the Agreement, XTPL will develop, on a commercial basis, a special formulation of conductive ink for the devices manufactured and supplied by Nano Dimension.

3.4. FINANCIAL PERFORMANCE

3.4.1. Overview of the key economic and financial figures disclosed in the annual financial statements, including the balance sheet structure

Parent Company:

As at 31 December 2021, the balance sheet total was PLN 12,827 thousand. As at the Balance Sheet Date, non-current assets were PLN 5,845 thousand and constituted 45.6% of the Company's balance sheet total. The key asset items were intangible assets, representing 47.6% of non-current assets, as well as property, plant and equipment, representing 44.7% of non-current assets. The main item of intangible assets was development work related to the production of the laboratory printer as a finished product for commercialization purposes.

The value of current assets as at the Balance Sheet Date was PLN 6,982 thousand, and accounted for 54.4% of the Company's balance sheet total. Their key item was cash, constituting 66.5% of current assets.

As at the Balance Sheet Date, the Company's equity was PLN 5,288 thousand, and accounted for 41.2% of the balance sheet total. Short-term liabilities of PLN 5,923 thousand constitute 46.2% of the balance sheet total. The increase in this item is related to the recognition of liabilities from the issue of bonds (nominal value of PLN 3,600 thousand) as short-term liabilities. Accruals and deferred income, which include grants to assets as well as advances in respect of grants, amounted to PLN 1,839 thousand, representing 14.3% of the balance sheet total.

Compared to previous years, the balance sheet structure clearly changed due to development of the Company's business through the commercialization of its technological solutions. Trade receivables and inventories increased significantly. Moreover, the value of tangible assets underpinning the Company's production capacity has increased. The increase in deferred income is the result of implementation of two projects funded by the National Center for Research and Development and the possibility of financing those projects through advance payments.

The Company's development is also reflected in changes compared to the previous year, presented in the income statement and the statement of cash flows.

The Company's revenues in the reporting period were PLN 4,702 thousand, including PLN 2,086 thousand (44.4%) in respect of revenues from the sale of products. Grants – which in previous years constituted the main source of revenues – were recognized at PLN 2,616 thousand in 2021. The total value of proceeds from grants (reimbursements and advances) was PLN 4,455 thousand in 2021.

In 2021, the Company's operating cash flows improved significantly compared to the previous years and were PLN -3,652 thousand compared to PLN -5,394 thousand in 2020.

The Company's net result for the period from 1 January 2021 to 31 December 2021 was PLN -6,598 thousand compared to PLN -8.182 thousand last year. Adjusting by the incentive scheme, the net result is PLN -5,449 thousand.

Group:

As at 31 December 2021, the balance sheet total was PLN 12,546 thousand. As at the Balance Sheet Date, non-current assets were PLN 5,429 thousand and constituted 43.3% of the Group's balance sheet total. The key asset items were

intangible assets, representing 51.2% of non-current assets, as well as property, plant and equipment, representing 48.2% of non-current assets. The main item of intangible assets was development work related to the production of the laboratory printer as a finished product for commercialization purposes.

As at the Balance Sheet Date, current assets were PLN 7,117 thousand and constituted 56.7% of the Group's balance sheet total. Their key item was cash, constituting 36.5% of current assets.

As at the Balance Sheet Date, the Group's equity was PLN 4,983 thousand and constituted 39.7% of the balance sheet total. Short-term liabilities of PLN 5,948 thousand constitute 47.4% of the balance sheet total. The increase in this item is related to the recognition of liabilities from the issue of bonds (nominal value of PLN 3,600 thousand) as short-term liabilities. Accruals and deferred income, which include grants to assets and advances in respect of grants, amounted to PLN 1,839 thousand, representing 14.6% of the balance sheet total.

Compared to previous years, the balance sheet structure clearly changed due to development of the Group's business through the commercialization of its technological solutions. Trade receivables and inventories increased significantly. Moreover, the value of tangible assets underpinning the Group's production capacity has increased. The increase in deferred income is the result of implementation by the Parent Company of two projects by the National Center for Research and Development and the possibility of financing those projects through advance payments.

The Group's development is also reflected in changes compared to the previous year, presented in the income statement and the statement of cash flows.

The Group's revenues in the reporting period were PLN 4,702 thousand, including PLN 2,086 thousand (44.4%) in respect of revenues from the sale of products. Grants – which in previous years constituted the main source of revenues – were recognized at PLN 2,616 thousand in 2021. The total value of proceeds from grants (reimbursements and advances) was PLN 4,455 thousand in 2021.

In 2021, the Group's operating cash flows improved significantly compared to the previous years and were PLN -3,803 thousand compared to PLN -5,761 thousand in 2020.

The Group's net result for the period from 1 January 2021 to 31 December 2021 was PLN -6,573 thousand. Adjusting by the incentive scheme, the net result is PLN -5,424 thousand.

3.4.2. Extraordinary factors and events having a significant impact on the operations and financial statements

In the reporting period, in the statement of comprehensive income the Company recognized the cost the incentive scheme for employees and collaborators based on the Company's shares, in the portion relating to the period ended 31 December 2021. The date of recognition of costs was the moment when the persons covered by the scheme were offered the purchase of the shares. The cost of the scheme (fair value of the shares issued) was estimated at PLN 1,149 thousand and was fully taken to the profit or loss of the current period. For comparison, in 2020 the recognized cost of the incentive scheme was PLN 2,345.

Recognition of the scheme's costs of PLN 1,149 thousand has no impact on the Company's and the Group's assets or financial position, or their ability to service its obligations. The scheme's costs are a non-cash in nature, and reflect the value of shares transferred (net of their purchase price paid by scheme participants). This transaction did not cause any changes in the measurement of assets, the level of equity or the company's ability to generate revenues in the future.

The shares transferred also did not cause additional dilution of the existing stock as they had been issued in the first half of 2017 (and were intended for the incentive scheme).

The table below presents the Group's result with and without the effect of the incentive scheme valuation.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	WITHOUT INCENTIVE PROGRAM	WITH INCENTIVE PROGRAM
	PLN'000	PLN'000
Continued operations		
Sales revenue	4,702	4,702
Revenue from research and development services	7	7
Revenue from the sale of products	2,079	2,079
Revenue from grants	2,616	2,616
Cost of sales	4,542	4,782
Research and development expenses	4,039	4,279
Costs of goods sold	503	503
Gross profit (loss)	160	-80
General and administrative expenses	5,365	6,274
Other operating income	66	66
Other operating costs	32	32
Operating profit (loss)	-5,171	-6,320
Financial revenues	1	1
Financial expenses	255	255
Profit/ loss before tax	-5,425	-6,574
Income tax	-	-
Net profit (loss) on continued operations	-5,425	-6,574

3.4.3. Achievement of financial forecasts

Not applicable. The Issuer has not decided to publish financial forecasts.

3.4.4. Grants

In the reporting year, the Company implemented three projects co-financed from public funds:

"Innovative technology for precise deposition of conductive mesh for application in new generation OLED displays", under agreement POIR.01.01.01-00-0998/20 of 23.12.2020.

Project duration: 01.07.2020 – 30.06.2023

Project value: 16,003,028.33

Eligible costs: 16,003,028.33

Funding: 11,673,831.24

The project's objective is to develop an additive printing technology of ultra-precise metallic structures designed to reduce resistance of the transparent cathode in new generation TE-OLED displays.

"Development of breakthrough printing technology of 3D micrometric conductive structures using an innovative printhead capable of printing on non-planar substrates and compatible ink for printed electronics applications" – a project carried out under agreement No. POIR.01.01.01-00-1852/20 dated 28 May 2021.

Project duration: 01.10.2020 – 30.09.2023.

Project value: 11,615,569.56

Eligible costs: 11,615,569.56

Funding: 7,695,844.09

The purpose of the project is to develop and build an innovative printing head for automatically depositing paste, with precise control based on machine learning algorithms, as well as to develop silver and copper nanopastes to cover the step with a maximum height of 80 µm for applications in microelectronics.

"Filing a PCT patent application for a method of manufacturing ultra-fine conductive metallic lines" – a project carried out under agreement No. POIR.02.03.04-02- 0001/16 of 15.11.2016 with the Polish Agency for Enterprise Development.

Project duration: 18.01.2018 - 31.12.2023

Project value: PLN 881,610.00

Eligible costs: PLN 774,200.00

Funding: PLN 387,100.00

The purpose of the project is to obtain industrial property protection for the globally innovative method of manufacturing ultra-thin conductive metallic lines.

The method enables the fabrication of TCFs.

3.4.5. Loans incurred

In the reporting period, an overdraft of PLN 300 thousand was available to the Company. However, the facility was used rarely and for a short term only.

3.4.6. Loans granted

As at the Balance Sheet Date, the Company had following loans granted:

Under the loan agreement of 1 February 2019, amended on 20 October 2020, signed with XTPL INC. with its registered office in Delaware, USA, in the reporting period the Company disbursed to the subsidiary four tranches of the loan totalling USD 50,000.

After the reporting period and up to the Report Date, the Company disbursed two loan tranches of USD 20,000.

The Company granted two loans to TPL Sp. z o.o. On 4 January 2021, the Company signed a loan agreement of PLN 200 thousand with TPL Sp. z o.o. As at the Balance Sheet Date, the debt of TPL Sp. z o.o. on this account was PLN 350 thousand. As at the Report Date, the debt of TPL Sp. z o.o. on account of loans was PLN 250 thousand.

3.4.7. Issue of securities

During the Reporting Period, the Company did not issue any shares or bonds.

3.4.8. Current and anticipated financial position, and development outlook

The Management Board evaluates the current situation of the Company as stable. The Company steadily develops sales of printing devices and inks. In addition, in 2022 the Company will generate sales under the agreement with Nano Dimension Ltd. Furthermore, some of the implemented industrial implementation projects will reach the stage of paid research & development.

At the same time, the Company is implementing two projects co-financed by the NCBR with a total grant amount of PLN 19.4 million. Last year, the Company obtained PLN 4,455 thousand on this account.

The future financial position will depend primarily on three factors:

- a) expected cash flows related to the commercialization of the technology developed;
When assessing the Company's future situation, the Management Board only looks at revenues from the sale of proprietary products, i.e. laboratory/ demonstrator printers and their dedicated consumables (inks, cartridges and nozzles) as well as revenues from the signed and active agreement with Nano Dimension Ltd. For the time being, the Management Board has conservatively excluded revenues from industrial implementations (license and similar fees) from these estimates although delivery of such contracts will cause a sharp increase in revenues.
- b) projects with grants;
Both projects are subsidized by NCBR are related to strategic commercialization initiatives, so their implementation will not result in a significant increase in operating costs. The Company has qualified personnel with experience in implementing grant projects.
- c) expected cash flows related to financial activities;
The Company is not planning any shares issues in the foreseeable future. In July 2022, bonds convertible into shares with a nominal value of PLN 3,600 thousand are due to be redeemed. The current price of the Company's shares is lower than the value of conversion of the bonds into shares. For this reason, the Company's Management Board started talks with the bondholders aimed at extending the maturity date and possibly changing the interest rate of the convertible bonds. Two of three bondholders, representing 94% of the debt (i.e. PLN 3.378 thousand at the nominal value), expressed their willingness to sign an agreement amending the terms of the issue. The investors who confirmed their willingness to sign an agreement changing the terms are significant and long-term shareholders of the Company: the ACATIS fund and the Deutsche Balaton fund. Administrative activities are under way to finalize the agreement, although the agreement itself has not been signed yet. The remaining 6% of the debt will be repaid by the Company on the original maturity date. In the unlikely event that the bonds are redeemed in full, the Company will use debt, specific or bridge financing, based mainly on contracted and future sales, and contracted grants from publicly funded development projects.

3.4.9. Financial resources management

Parent Company:

As at the Balance Sheet Date, the ratio of current assets to current liabilities (current liquidity ratio) was 1.18. The Company's current assets were PLN 6,982 thousand and its short term liabilities amounted to PLN 5,923 thousand. In 2021, the Company faced no material risks with regard to liquidity and timely payment of its obligations.

Moreover, in the Reporting Period, the Company signed a PLN 300 thousand overdraft agreement.

Group:

As at the Balance Sheet Date, the ratio of current assets to current liabilities (current liquidity ratio) was 1.2. The Group's current assets were PLN 7.117 thousand, and current liabilities stood at PLN 5.947 thousand. In 2021, the Group faced no material risks with regard to liquidity and timely payment of its obligations.

Moreover, in the Reporting Period, the Parent Company signed a PLN 300 thousand overdraft agreement.

3.4.10. Investment plans

According to the strategy of further development of the Company and the Group adopted by the Management Board, in the coming years significant investment expenditures will be incurred primarily for the continuation of R&D in the nanoprinting technology area related to the development of technology and its adaptation to the needs of industrial partners.

Proceeds from grant agreements will be the main source of funding for investments related to technology development. In addition, the Company takes into account the possibility of co-financing its capital expenditures by a counterparty (under a JDA).

Where its technology is contracted and commercialized, the Company and the Group will also consider debt financing for its projects. When assessing the risk attached to the above model of financing investment plans, the Management Board of the Parent Company is guided by the potential of securing financial resources.

3.4.11. Factors which may affect the results in the subsequent quarters

Factors which may affect the Company's and the Group's operations and results in the following quarters:

- Signing commercial contracts, and progress of work on paid evaluation initiatives, licensing or joint-development agreements in relation to the Issuer's technology;
- Ability to protect and safeguard intellectual and industrial property, including the number and scope of submitted patent applications;
- Favourable trends in the electronics industry;
- Acquiring additional financing in the form of grants and subsidies supporting the Issuer's research and development activities;
- Economic consequences of the war in Ukraine;
- Situation in financial markets and development of the coronavirus pandemic.

3.5. REMUNERATION

3.5.1. Remuneration, bonuses or benefits for members of the Company's bodies

Figures in PLN thousand

Management Board:

Name	Function	2021	2020
Filip Granek	CEO	699	432
Salary under an employment contract		360	360
Valuation of the incentive program		339	72
Jacek Olszański	CFO	478	211
Salary under an employment contract		275	120
Valuation of the incentive program		203	91

The value of remuneration includes remuneration under the employment contract and valuation of the incentive scheme.

Detailed information on the conditions and amount of remuneration of the Management Board:

Filip Granek – PhD, CEO:

Receives remuneration based on an employment contract at PLN 30,000 gross monthly. He did not receive any bonus or reward for the Reporting Period. As part of the incentive scheme in force at the Company, he was granted the right to acquire 5,000 shares of the Issuer and 2,000 subscription warrants for 2020, as well as 5,000 shares and 3,000 subscription warrants for 2021.

Jacek Olszański – Management Board Member

Receives remuneration based on an employment contract at PLN 30,000 gross monthly. In the reporting period, the remuneration amounts were changed on the back of achievement of the goals set by the Supervisory Board. From 1 January 2021 to 30 June 2021, the remuneration of the Management Board Member was PLN 20,000 gross per month; in the period from 1 July 2021 to 30 November 2021, the remuneration was PLN 25,000 gross per month, and from 1 December 2021, the remuneration was PLN 30,000 gross per month.

He did not receive any bonus or reward for the Reporting Period. As part of the incentive scheme in force at the Company, he was granted the right to acquire 3,000 shares of the Issuer and 2,000 subscription warrants for 2020, as well as 5,000 shares and 3,000 subscription warrants for 2021.

Supervisory Board:

Name	Role	2021	2020
Wiesław Rozłucki. PhD	Chairman of the Supervisory Board	96.0	96.0
Bartosz Wojciechowski, PhD	Deputy Chairman of the Supervisory Board	24.0	14.0
Andrzej Domański	Deputy Chairman of the Supervisory Board	24.0	3.7
Piotr Lembas	Supervisory Board Member	12.0	12.0
Beata Turlejska	Supervisory Board Member	12.0	6.0
Professor Herbert Wirth	Supervisory Board Member	12.0	11.7

Members of the Supervisory Board receive a fixed monthly remuneration of PLN 1,000 (except for the Chairman, whose monthly remuneration is PLN 8,000 and Deputy Chairmen, whose monthly remuneration is PLN 2,000 – since November 2020, and PLN 1,000 earlier).

Audit Committee:

Name	Role	2021	2020
Piotr Lembas	Chairman of the Audit Committee*	12.0	12.0
Wiesław Rozłucki. PhD	Audit Committee Member **	12.0	12.0
Professor Herbert Wirth	Audit Committee Member	12.0	10.9
Andrzej Domański	Audit Committee Member	12.0	1.2

*until 26 May 2021, Audit Committee Member

** until 26 May 2021, Audit Committee Chairman

Members of the Audit Committee receive a fixed monthly remuneration of 1,000 PLN.

3.5.2. Agreements between the Issuer and its executive directors providing for payment of compensation

Not applicable. No agreements were made between the Issuer and its executive directors that would provide for payment of compensation in the event of their resignation or removal without a valid reason or if their removal is due to acquisition of the Issuer by another entity.

Where a member of the Management Board is removed, the provisions of the Labor Code may apply, specifically Article 10(1) of the Act of 13 March 2003 on special rules for terminating employment relationships with employees for reasons not attributable to employees.

3.5.3. Obligations arising from pensions and similar benefits

Not applicable. The Issuer has no obligations resulting from pensions or similar benefits towards former management personnel members and has no liabilities incurred in connection with any such pensions.

3.5.4. Remuneration policy

Overview of the remuneration system adopted by the Company

On 30 June 2020, the Issuer adopted a remuneration policy. Since that date, it has been amended once (on 5 November 2020 – the amendment only concerned the possibility to differentiate the remuneration of Deputy Chairman of the Supervisory Board from the remuneration of Supervisory Board Members; see ESPI Current Report No. 43/2020 for details).

Members of the Management Board are entitled to a fixed monthly remuneration determined by the Supervisory Board. Decisions on granting a bonus to the Management Board members are taken by the Supervisory Board.

Members of the Supervisory Board (and the Audit Committee) are entitled to a fixed monthly remuneration determined by the General Meeting.

Detailed information on the conditions and amount of remuneration:

Detailed information can be found in point 2.11.1 ([link](#)).

Non-financial components of remuneration:

Members of the Management Board (based on a resolution of the Supervisory Board) may be granted the Issuer's shares or subscription warrants as part of the incentive scheme. The decision to grant them is discretionary. Details are described in point 2.12.4 ([link](#)) and 2.11.1 ([link](#)).

Assessment of the remuneration policy

The overarching goal of the fixed and variable remuneration system is to ensure the incentive nature of remuneration paid to Members of the Management Board and to create a basis for their development. The implementation of the objectives is assessed by the Company's body indicated in the policy. Where the objectives are achieved, the body may decide on granting the bonus. The Company's remuneration policy supports the implementation of the Company's objectives, in particular the long-term increase in shareholder value and the stability of the business. An important feature ensuring an incentive nature of the remuneration of Management Board Members is the incentive scheme adopted in the Company based on shares and subscription warrants.

3.6. OTHER INFORMATION

3.6.1. Events occurring after the Balance Sheet Date

Conclusion of an agreement for distribution of the Issuer's technological solutions with merconics GmbH & Co. KG

On 4 January 2022 an agreement was signed between the Issuer and Merconics GmbH & Co. KG based in Germany, providing for distribution of the Issuer's technological solutions in selected European countries. Under the agreement, merconics will be the distributor of XTPL's technological solutions in Europe, including on the German, Austrian, French and Swiss markets. The purpose of the cooperation is to support the Issuer in expanding the range of applications for the Company's technology and products at R&D centers, scientific institutions and technological corporations. The partnership will also increase awareness and visibility of the Issuer's solutions among global market players.

Merconics is a reputable European distributor active in the area of advanced manufacturing and analytical equipment for the semiconductor sector. For more than 15 years, it has been providing its clients – global OEMs (Original Equipment Manufacturers) – with the highest quality breakthrough technologies. Their portfolio includes solutions from brands such as Bruker, Veeco, NovaCetrix, PulseForge or Optomec.

Start of cooperation with Nano Dimension Ltd. to develop a new generation conductive nanoink for industrial applications in the Client's products designed for the production of PCBs

On 10 January 2022, the Company entered into a cooperation agreement with the Israeli company Nano Dimension Ltd. whereby the Company will develop a special formulation of conductive ink based on metallic nanoparticles with high conductivity intended for industrial applications in the Client's products designed for the production of PCBs.

Nano Dimension Ltd. is a NASDAQ-listed provider of intelligent machines for the fabrication of Additively Manufactured Electronics (AME). Nano Dimension is implementing a globally innovative system of PCB production based on ink-jet printing methods.

In connection with the Agreement, XTPL will develop, on a commercial basis, a special formulation of conductive ink for the devices manufactured and supplied by Nano Dimension.

Patent protection obtained from the Japanese Patent Office

On 4 January 2022, the Issuer received information that the Japanese Patent Office had granted the Company a patent for its method of forming lines of several hundred nanometers using the XTPL-developed silver nanoink. The patent was granted in response to the patent application "Bottom-up method for forming wire structures upon a substrate". The final formal requirement for obtaining the patent is to pay the patent fee by 3 February 2022. Should the requirement not be met, the Company will communicate this in a separate current report.

The application procedure for this patent was initiated on 22 March 2016. This is also the date when patent protection started. Moreover, the Company's portfolio includes 24 patent applications.

Outside of Japan, the patent application is already protected in the United States, China and Germany. The Issuer is taking steps to obtain protection in other countries, including Israel, Vietnam and Taiwan.

Conclusion of an agreement for distribution of the Issuer's technological solutions in India

18 February 2022, an agreement was signed between the Issuer and Vertex Global Solutions based in Mumbai (India), providing for distribution of XTPL's technological solutions. Under the Agreement, Vertex will be the distributor of XTPL's

technological solutions in the Indian market. The purpose of the cooperation is to introduce the Issuer's technologies and products to the specified market, as well as to increase the awareness and visibility of the Company's solutions among global players present in that market.

Vertex specializes in providing innovative solutions for industrial manufacturers of displays, semiconductors and organic photovoltaic cells. The firm's founders have over 25 years of experience in the industry. India ranks among global leaders in terms of research and development prospects. It has a large base of educated employees and a rapidly growing internal market.

Project of a consortium that includes the Issuer recommended for co-financing by the European Commission

On 21 March 2022, the Company's Management Board received information that the project "Building Active MicroLED displays By Additive Manufacturing" developed by a consortium to which the Issuer belongs had been recommended for co-financing in the competition HORIZONCL4-2021-DIGITAL-EMERGING-01-31 – Research and Innovations Actions (RIA) organized by the European Commission under the Horizon Europe Framework Programme (HORIZON). The consortium also includes:

- ALEDIA (France)
- BARCO NV (Belgium)
- QustomDot BV (Belgium)
- X DISPLAY COMPANY TECHNOLOGY LIMITED (Ireland)
- X-CELEPRINT LIMITED (Ireland)
- and the University of Stuttgart (Germany).

The project is designed to develop an innovative technology for the production of flexible microLED displays using precise additive printing technologies.

- Total Project value: EUR 4,293,263.75;
- The Issuer's participation in the Project: EUR 429,812.50;
- Recommended co-financing for the Issuer: EUR 429,812.50;
- Implementation period: 24 months.

Agreement signed by the Issuer with the University of Brescia relating to strategic cooperation in the field of new generation bioelectronics

On 22 March 2022, the Issuer signed a strategic cooperation agreement with the Department of Information Engineering/ Dipartimento di Ingegneria dell'Informazione from the University of Brescia in Italy. The purpose of the cooperation is to work together on development of new generation organic and biodegradable biological sensors using the Company-developed electronics printing technology. As part of the agreement, the Company will ensure technological and expert support relating to its proprietary technology and the Delta Printing System. On the other hand, the DII will provide XTPL with information on the results of its work and outcomes of microproduction of printed biosensors integrated with 3D, adaptable, and flexible substrates. The information will be based on feedback received from industry partners. In addition, results of the research will be published in publicly available scientific articles and presented at the most important international scientific conferences.

Settlement of the incentive scheme

On 31 March 2022, the Company's Management Board and the Supervisory Board, pursuant to the resolution of the EGM of 24 April 2019, granted the employees and collaborators of the Company the right to acquire 22,105 shares and 50,000 warrants.

The valuation of the financial instruments granted in 2022 is PLN 1,149, and will be included in the financial data for 2022.

Signing an agreement with the US company nScript for the sale XTPL's conductive nanopaste CL8

On 5 April 2022, a licence agreement was signed between the Issuer and the US company nScript, Orlando, Florida, providing for the sale of conductive nanopaste CL85 developed and produced by XTPL. Under the Agreement, the nanopaste produced by the Issuer will be distributed by nScript to its customers under the nScript brand. Since 2002, nScript has designed and manufactured high-precision microdispensing equipment for printed electronics, electronics packaging, solar cell metallization, communications, 3D printing and bioprinting. Its customers include military, academic and research institutes, government agencies and national labs, as well as privately-owned technology corporations. nScript technological solutions are used by manufacturers from the medical, defense and space sectors.

Completing the first stage of the technological phase under the agreement with Nano Dimension Ltd.

On 11 April 2022, the first stage of development as part of the technological phase of the activities specified in the Agreement was completed and approved by Nano Dimension Ltd. The Agreement relates to developing a new generation conductive nanoink for industrial applications in the Client's products designed for the production of PCBs. Under the Agreement, completion of the first stage of the technological phase and the Client's approval of the work triggers the payment of the first tranche. The related revenue will be recognized in Q2 2022 and will significantly influence the financial results for that period. This means that the Issuer enters the next stage of work under the technological phase defined in the Agreement, aimed at creating a dedicated nanoink formulation. The Agreement between the Issuer and Nano Dimension provides for four main stages in the technological phase.

3.6.2. Impact of the SARS-CoV-2 pandemic on the Company's and Group's operations

As a result of the COVID-19 pandemic and due to administrative constraints, the Company developed a number of procedures that are triggered depending on the risk level. The Company is well prepared for remote work. The XTPL team members are provided with laptops and company phones with internet access. They can use the GSuite apps to smoothly continue work from home. Teamwork tools are also used to ensure work efficiency. Technological work is continued at the Company's headquarters while maintaining all sanitary requirements announced by state institutions. 95% of the Team members have been vaccinated.

The procedures do not inhibit business development. XTPL conducts proactive sales support activities, also through a network of distributors. All deliveries and installations of devices at clients' sites are carried out in line with the requirements in force in the target country.

3.6.3. Impact of the war in Ukraine on the Company's and Group's operations

The war in Ukraine did not change XTPL's operating model. The Company has not been affected by any impact of the conflict on the printed electronics market. In addition, the Company:

- is not dependent on any raw material/ component supplies from the regions of Russia, Belarus or Ukraine;
- does not conduct sales activities in the above markets; likewise, the Company's business strategy does not envisage sales to those countries going forward;
- does not have any on-site or remote collaborators from those countries;
- is exporter of goods denominated mainly in EUR, so it is not exposed to negative effects of depreciation of the zloty;

- has not received any information from business partners from countries other than those mentioned above about their plans to introduce changes in their business activities that could adversely affect XTPL.

The Company has identified the risk that the conflict might impact its operations indirectly by affecting the global economy in terms of:

- reduced availability of raw materials and the related lower availability of materials and components;
- supply chain difficulties due to limitations in air transport.

The Company and its employees undertook a number of activities to help Ukrainian war refugees, for example:

- introduced an additional paid day off per month for volunteering for all employees
- published job ads on a portal dedicated to Ukrainian refugees
- collected toys and essential items for children from an Ukrainian orphanage who came to Poland
- offered accommodation to Ukrainian refugees
- sewed clothes for children from Ukraine
- helped in sorting donations at local help centers
- donated computer equipment to the crisis management center that helps refugees
- helped in transporting Ukrainian citizens from the Wrocław railway station to their place of accommodation
- provided material support to Ukrainian soldiers
- paid contributions to verified fundraisers.

3.6.4. Agreements that in the future might affect the proportion of shareholdings

In April 2019, the Company adopted an incentive scheme for key employees and collaborators of the Group, including for Management Board Members. The incentive scheme is based on existing series L and P shares and subscription warrants. The scheme might bring about changes in the proportions of shares held by shareholders. As at the Report Date, the scheme participants were granted rights to subscribe for 34,020 subscription warrants, as a result of which they could potentially take up 34,020 shares of the Company. The maximum pool of subscription warrants that can be granted under the scheme is 182,622, which will entitle their holders to take up 182,622 shares of the Issuer.

3.6.5. Information about the auditor

On 8 July 2021, the Issuer concluded an agreement on audit of the unconsolidated and consolidated financial statements with **4AUDYT sp. z o.o.** with its registered office in Poznań (60-846) at ul. Kochanowskiego 24/1, with share capital of PLN 100,000.00, NIP 7811817052, entered under KRS number 0000304558 in the National Court Register, Register of Entrepreneurs kept by the District Court for Poznań Nowe Miasto i Wilda in Poznań.

The agreement provides for:

1. audit of the unconsolidated financial statements of XTPL S.A. prepared in accordance with the International Financial Reporting Standards, International Accounting Standards and related interpretations published in the form of European Commission Regulations (IFRSs/ IASs) for the period from **1 January 2021 to 31 December 2021**.
2. audit of the consolidated financial statements of the XTPL Group prepared in accordance with IFRSs/IASs for the period from **1 January 2021 to 31 December 2021**.

3. limited review of the half-yearly unconsolidated financial statements of **XTPL S.A.** prepared in accordance with IFRSs/IASs for the period from **1 January 2021 to 30 June 2021**.
4. limited review of the half-yearly consolidated financial statements of the **XTPL Group** prepared in accordance with IFRSs/IASs for the period from **1 January 2021 to 30 June 2021**.
5. audit of the unconsolidated financial statements of the **XTPL S.A.** prepared in accordance with IFRSs/IASs for the period from **1 January 2022 to 31 December 2022**.
6. audit of the consolidated financial statements of the **XTPL Group** prepared in accordance with IFRSs/IASs for the period from **1 January 2022 to 31 December 2022**.
7. limited review of the half-yearly unconsolidated financial statements of **XTPL S.A.** prepared in accordance with IFRSs/IASs for the period from **1 January 2022 to 30 June 2022**.
8. limited review of the half-yearly consolidated financial statements of the **XTPL Group** prepared in accordance with IFRSs/IASs for the period from **1 January 2022 to 30 June 2022**.

The remuneration for the above services is:

- . item 1 – net remuneration of **PLN 30,000.00** + VAT and ensuring the continuity of service.
- a. item 2 – net remuneration of **PLN 16,000.00** + VAT and ensuring the continuity of service.
- b. item 3 – net remuneration of **PLN 15,000.00** + VAT and ensuring the continuity of service.
- c. item 4 – net remuneration of **PLN 10,000.00** + VAT and ensuring the continuity of service.
- d. item 5 – net remuneration of **PLN 30,000.00** + VAT and ensuring the continuity of service.
- e. item 6 – net remuneration of **PLN 16,000.00** + VAT and ensuring the continuity of service.
- f. item 7 – net remuneration of **PLN 15,000.00** + VAT and ensuring the continuity of service.
- g. item 8 – net remuneration of **PLN 10,000.00** + VAT and ensuring the continuity of service.

4AUDYT sp. z o.o. is an audit firm in accordance with Article 46 of the Act of 11 May 2017 on statutory auditors, audit firms and public oversight, and in accordance with Article 57 of this Act is entered on the list of audit firms kept by the Polish Audit Oversight Agency under number 3363.

The auditor was selected by the Supervisory Board by resolution No. 09/05/2021 of the Supervisory Board of XTPL S.A. of 26 May 2021 regarding the selection of an audit firm that will carry out statutory audits and interim reviews of XTPL's financial statements for two years.

The agreement was amended to include audit of compliance of financial statements in the ESEF format and increased the remuneration as follows:

- re b – by PLN 4,000 net + VAT;
- re f – by PLN 4,000 net + VAT.

In the financial year 2020, the Issuer's standalone and consolidated financial statements were also audited by 4Audyt sp. z o.o.

In addition, under the agreement of 10 May 2021, 4AUDYT sp. z o.o. assessed the Issuer's report on remuneration for 2019–2020.

Remuneration for this service was PLN 11,000 + VAT.

3.6.6. Significant agreements signed after the balance sheet date

After the Balance Sheet Date, on 10 January 2022, the Company entered into a cooperation agreement with the Israeli company Nano Dimension Ltd. whereby the Company will develop a special formulation of conductive ink based on metallic nanoparticles with high conductivity intended for industrial applications in the Client's products designed for the production of PCBs.

Nano Dimension Ltd. is a NASDAQ-listed provider of intelligent machines for the fabrication of Additively Manufactured Electronics (AME). Nano Dimension is implementing a globally innovative system of PCB production based on ink-jet printing methods.

In connection with the Agreement, XTPL will develop, on a commercial basis, a special formulation of conductive ink for the devices manufactured and supplied by Nano Dimension.

On 22 March 2022, the Company signed a strategic cooperation agreement with the Department of Information Engineering/ Dipartimento di Ingegneria dell'Informazione from the University of Brescia in Italy. The purpose of the cooperation is to work together on development of new generation organic and biodegradable biological sensors using the Company-developed electronics printing technology.

As part of the agreement, the Company will ensure technological and expert support relating to its proprietary technology and the Delta Printing System. On the other hand, the DII will provide XTPL with information on the results of its work and outcomes of microproduction of printed biosensors integrated with 3D, adaptable, and flexible substrates. The information will be based on feedback received from industry partners. In addition, results of the research will be published in publicly available scientific articles and presented at the most important international scientific conferences.

3.6.7. Changes in managing the Issuer's and the Group's business

Not applicable. None in the Reporting Period.

3.6.8. Explanation of seasonality or business cycles

Not applicable. The Issuer's activity is not subject to seasonality or business cycles.

3.6.9. Non-arms length transactions with related entities

Not applicable. As part of the group, no transaction was made with any related party on non-commercial terms.

3.6.10. Proceedings before courts and other bodies

No significant judicial, arbitration or administrative proceedings are pending in relation to liabilities or receivables of the Issuer.

3.6.11. Financial instruments

Not applicable. Neither the Parent Company nor its Subsidiaries use financial instruments in relation to the price risk, credit risk, risk of material disruption of cash flows or financial liquidity risk.

3.6.12. Guarantees given and received

Not applicable. Neither the Issuer nor its Subsidiaries provided or received any guarantees in the reporting period.

3.6.13. Key financial and non-financial performance indicators

At the current stage of activity, the Company's key indicators are sales revenues and industrial implementation projects, as well as the use of grant proceeds. In the financial year, the Company recorded a significant increase in sales revenues and a steady progress in industrial implementation projects. Grant projects are proceeding without significant disruptions, although prolonged delivery times for materials and components should be noted. When assessing the Group's ability to continue as a going concern, the Management Board takes into account the current cash levels, commercialization progress and sales plans, ongoing projects co-funded by the European Union, and financial obligations in respect of bonds convertible to shares. In view of the above, the Management Board of XTPL S.A. estimates that the Group, depending on the degree of delivery of its actions planned, has ensured funds continuation of its operations over the next 12 months.

3.6.14. Structure of major equity investments

The Company holds shares in two subsidiaries:

- XTPL Inc. based in Delaware, USA, worth USD 5,000.
- TPL Sp. z o.o. – shares were contributed to the Company in the form of donation.

3.6.15. Significant off-balance sheet items

Contingent liabilities granted by the Parent Company were in the form of promissory notes together with promissory note declarations to secure the contracts for co-financing projects financed by the EU as well as a lease agreement.

The change in the value of contingent liabilities in relation 31 December 2020 amounts to PLN 4,822 thousand. It is caused by the payout of further tranches of grants totalling PLN 4,455 thousand, conclusion of lease agreements with their related obligations of PLN 367 thousand. At the Balance Sheet Date and until the date of approval of the financial statements for publication, no events occurred that could result in materialisation of the above contingent liabilities. As at the date of approval of the financial statements there were no undisclosed liabilities resulting from any agreements of material value.

CONTINGENT LIABILITIES	31.12.2021	31.12.2020
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Promissory notes	13,209	8,387
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Total contingent liabilities	13,209	8,387
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3.7. RISK FACTORS AND THREATS RELATED TO THE COMPANY'S AND THE GROUP'S BUSINESS ENVIRONMENT

3.7.1. Risk factors and threats related to the Company's and the Group's business environment

3.7.1.1. Macroeconomic risk

The Company's and the Group's activity depends on the macroeconomic situation in the markets in which the Company plans to start the sale of its products and services, primarily in the United States, Asia and Western Europe. Profitability of the Company's operations will depend, inter alia, on the economic growth, consumption and investment level (particularly in the electronics sector), fiscal and monetary policy, inflation, and especially the level of expenditures on consumer electronics in those countries. All these factors may have an impact on the Company's and the Group's financial results, and thus may also affect implementation of the Company's development strategy.

3.7.1.2. Currency risk

Due to the fact that the Company's and the Group's clients are international entities, most of the Company's revenues related to the commercialization of technology are settled in foreign currencies (mainly the euro and the US dollar). At the same time, as the Company is based in Poland, most of its ongoing expenses will be settled in the Polish zloty. As a result, the Company may be exposed to a significant FX risk. Volatility of exchange rates may primarily cause changes in the value of the Company's revenues and receivables after their conversion into PLN.

Despite the significant weakening of the Polish currency related to the outbreak of the war in Ukraine,, the Company and the Group do not see currency risk as a significant threat to the expected level of their operating profitability. The weakening of the Polish zloty strengthens the cash position of the Company as an exporter. A significant portion of purchases of materials and components for the production of printers is settled in euro. As a result, revenues from foreign currency sales constitute a natural hedge against exchange rate movements. As and when required, the Company and the Group will resort to FX risk management instruments available in the banking market.

3.7.1.3. New technology risk

The market in which the Company and the Group operate is characterized by rapid development of technologies. For this reason, the development of the Company's and the Group's operations entails constant tracking and analysis of new market trends and identification of emerging potential competitors and technological solutions they implement. There is a risk that if the current market trends change, the Company and the Group will be forced to look for new applications for its technology outside of what it previously saw at its core business or to incur expenditures to make its existing solutions more competitive. Likewise, the Company and the Group can not rule out that in the future a new technology will be developed which will make the solutions offered by the Company and the Group unattractive for potential clients. Materialization of this risk will mean additional costs, which will adversely affect profitability of the Company's and the Group's operations. In addition, the need to perform additional work may delay the moment of commercialization of the Company's and the Group's product.

3.7.1.4. Competitive risk

The Company and the Group operate in a very attractive market of modern technologies characterized by a steadily growing demand. In this market, there is a number of players whose experience and capital resources are higher than those of the Company. As the market is changing fast, there is a risk of a new entity emerging whose offer will be more innovative than the Company's and the Group's offer. A competitive edge may be obtained by implementing innovative, unique solutions that are attractive for prospective clients in utility and economic terms.

At present, the Company is not aware of any solutions that would technically offer better parameters for the ultra-precise printing using high-viscosity nanoinks. However, it cannot be ruled out that a new entity or a solution will emerge that will surpass the Company's technology in some or all key parameters. There is also a risk that the Company and the Group will be unable to respond quickly or effectively to the changing market environment, and consequently the solutions offered by the Company and the Group will be considered less competitive. Materialization of this risk may have a negative impact on the sale of the Company's and the Group's products and services and, in consequence, on its trading performance.

3.7.1.5. Risk related to the development of the SARS-CoV-2 pandemic

Due to the market in which the Company operates, the situation related to the coronavirus threat fundamentally does not affect the Issuer's operational activity. The Company has developed a number of procedures depending on the level of risk and applies them as appropriate depending on the situation. Office workers may perform their duties remotely (they are provided with a company phone with Internet access and a laptop). Technology staff work in compliance with all the standards announced by state authorities. Some technology staff are involved in the development of new grant applications, and therefore may also partly work from home. As a rule, all meetings take place using video- or teleconferencing. The planned operations related to the shipment of products take place in conformity with the requirements in force in the country of destination.

3.7.2. Sources of supply

The Company commercializes and develops its proprietary nanoprinting technology. Due to the advancement of the technology, the Company makes use of a wide range of products and services available in the market, the key ones being measurement, research, conductive nanoinks formulation development and patent protection services as well as services related to rental of specialist equipment and laboratories. The great diversity and variability of the Company's R&D work is reflected in the number of sources of supply it uses. As a result, in 2021, the Company reached a 56% threshold of purchases from one supplier – provider of research services and lessor of laboratories and office space (100%). At the same time, the Company steadily increases its laboratory equipment and limits the use of outsourced measurement and research services.

In the manufacturing process, the Company sources materials and chemical reagents, which are the key inputs for the production of highly conductive inks offered by XTPL S.A. and uses suppliers of components and materials in the process of making the Delta Printing System devices.

The chemicals suppliers base is highly fragmented. No supplier exceeds 20% of total purchases in this category. In addition, there are many high-quality materials available in the market and there is no risk of dependence on any single source of supply. Importantly, the vast majority of chemicals are purchased in the domestic market, so potential problems with global supply chains have only limited impact on the Company.

In terms of materials and components for the production of printers, one supplier reached 32% of the total value of purchases in this category. The other suppliers do not exceed 15% of the total turnover. The Company constantly forges relationships with new entities and builds a base of alternative suppliers.

3.7.3. Risk factors related to the Company's and the Group's operations

3.7.3.1. Risk related to the technology commercialization process

The Company's and the Group's business model provides for a gradual commercialization of the technology of printing ultra-thin conductive lines for various applications in printed electronics. At present, the commercialization process already covers printing devices and nanoinks. In terms of industrial implementations on clients' production lines, the target business model is that the Company and the Group will commercialize their technological solutions through licensing or will manage the whole value chain, i.e. manufacture, product marketing, distribution and provision of specialized services tailored to the client's needs. The choice of the commercialization model will depend on the results of negotiations with the partner, specific nature of the particular application field and the Issuer's assessment regarding effectiveness of each of the possible commercialization methods in that field.

Currently, the Company is involved in nine industrial implementation projects, which confirms the market need for solutions offered by the XTPL technology. In addition, the Company signed and carries out an agreement with Nano Dimension Ltd. to develop a next generation conductive nanoink for industrial applications in the firm's products designed for the production of PCBs. This agreement is the first agreement signed with an industrial partner and is a milestone in the Company's development.

However, there is a risk that introduction of devices into individual markets will not be in line with the current expectations due to, for example, a lack of or insufficient demand in target countries, misidentification of potential clients' needs, misidentification of legal conditions, incomplete adaptation of the Company's products to the requirements of foreign markets, an ineffective promotional campaign or an unexpected emergence of a competitor. Occurrence of the above events may stifle the Company's and the Group's growth dynamics, adversely impacting their operations and financial position.

3.7.3.2. Risk of failure to achieve revenues

At the present stage of the Company's development, this risk should be considered negligible. In the financial year, the Company significantly increased its sales revenues compared to the previous year. The main stream of those revenues was the sale of printing devices. The Company intends to develop this product group rapidly, also by building its distribution network (external distributors) all over the world. At the same time, the Company steadily increases its revenues from the sale of inks and other consumables for printers. Furthermore, the Company has an agreement with an industrial entity to develop a next generation conductive nanoink. The first revenues on this account will be recognized in 2022.

3.7.3.3. Risk of low product quality

The Company's and the Group's business model providing for a gradual introduction of the technology of printing ultra-thin conductive lines for various applications in printed electronics gives rise to a risk of defects, insufficient product quality or unsatisfactory performance of the technology at the initial phase of its commercialization. However, the emergence of unforeseen defects and problems should be taken into account. Such situations may result in a negative first reception of the Company's and the Group's products and, consequently might dampen interest in and demand for the product. As a result, the Company and the Group might not receive revenues in the expected amount.

3.7.3.4. Risk related to the business development model and the failure deliver the Company's and the Group's strategy

The goal of the business model is commercialization of the Company's ultra-precise technology of printing a wide range of nanomaterials. The Company is already commercializing its first products – technology carriers. It also conducts nine projects related to the implementation of technologies on the production lines of partners, but in this area, which has the greatest potential, the Company does not yet implement a repeatable business model. Due to the geographic and economic conditions in the market, the Company will develop its business presence mainly in the United States, Asia and Western Europe. The Company intends to build its market position through organic growth, primarily based on further development of its technology. Due to a number of factors, the Company is unable to guarantee in full that its business development model will work. The Company's future in the broadly understood printed electronics market depends on its ability to create and implement a successful long-term development strategy and to continue to develop its technology. The risk of making bad decisions resulting from improper assessment of the situation or the Company's inability to adapt to changing market conditions, incorrect strategic assumptions, including in relation to the developed technology and the adopted commercialization plan and the degree of demand from potential clients, may mean that the business development model will not be effective and the future financial results might be lower than currently expected.

3.7.3.5. Risk related to the difficulty with acquiring experienced and specialized employees

The high level of technological advancement of the Company's research leads to a constant increase in the requirements regarding skills and experience of employees. Next to technology, the engineering and scientific staff is the Company's most valuable asset. The pace and quality of the Company's R&D is directly related to the skills of specialists who form the R&D team. The Company employs engineers from the fields of chemistry, physics, electronics, mechanics, material engineering, programming and numerical simulations. Nearly in all these fields, the number of specialists available for hiring is not high. As regards acquisition of the best specialists, the Company competes with firms both in Poland and abroad.

As the Company expands the size of its operations, this factor may be of particular importance in the future as it might limit the development potential. Difficulties in sourcing employees may delay work or force the Company to abandon certain projects.

3.7.3.6. Risk of losing key team members

The Company's activity is based on a narrow team of people with relevant know-how who pool competencies in engineering and technical, financial management and strategic management of the Company. For this reason, losing key people may adversely affect the Company's further business, its financial, property and economic condition as well as its development prospects as it may impair the Company's potential to sell its products, develop its technology, win new contracts and properly manage already existing contracts.

Most of the Company's personnel are people employed in operational roles. They do tasks which require expertise, skill and education. The Company is exposed to the risk of losing some of its operational staff, which might weaken the organizational foundations of the Company's business. These situations might result in the Company's stability being undermined and force it to raise remuneration levels in order to retain employees. As a result, it may affect the Company's operating costs.

3.7.3.7. Risk of dependence on future counterparties

Due to the specific nature of industrial implementation projects (with high contract values), commercialization of the first projects will result in major dependence on individual clients. Hence, the Company conducts projects with many partners in various markets and application fields.

The sale of printing devices and consumables does not pose such a risk due to the one-sided nature of transactions in the case of printers and the fragmented market in the case of consumables.

Due to the fact that the Company supplies advanced technical equipment, there is a risk of dependence on suppliers of materials and components. The Company tries to diversify supply sources, forges partnerships and builds a base of alternative suppliers, but it should be kept in mind that with such technically advanced devices, the replacement of components is also subject to risk in terms of efficiency of the manufactured devices.

3.7.3.8. Risk of potential disclosure of confidential information on technology

Implementation of the Company's strategy depends, inter alia, on the fact that the holders of confidential information, particularly that concerning development and technological processes related to the ultra-precise printing technology. There is a risk that sensitive information will be divulged by persons connected with the Company, which may result in the information being used by competitors, despite the intellectual property protection measures used by the Company.

The indicated risk factor may have a negative impact on the Company's business, financial position, development prospects, results and share price.

3.7.3.9. Risk of intellectual property infringement

The Company operates in an area where regulations concerning industrial and intellectual property rights and their protection are of significant importance. At present, there are no proceedings under way regarding infringement of any industrial or intellectual property rights in which the Company would be involved. The Company intends to conduct its business in such a way as not to infringe any third party rights in this respect. However, it can not be ruled out that third parties would bring claims against the Company regarding infringement of industrial and intellectual property rights by the Company. Even if unwarranted, such claims might adversely affect the schedule of the Company's strategy implementation, and the defense against such claims may involve significant costs, which may adversely impact the Company's financial results. In addition, during work on its own patent applications, the Company carefully reviews the available literature and patents known at present. However, there is a risk of infringement of intellectual property rights related to patents that have been submitted but not published yet.

Cooperation with external partners gives rise to similar risks. Formally unauthorized entities might attempt to use the intellectual property of XTPL by either violating or attempting to circumvent the patent application. The circumstances described above may have a material adverse effect on the Company's development prospects, results and financial position.

3.7.3.10. Risk of technology scaling

Due to the fact that the technology underlying the printing process developed by XTPL is based on highly innovative solutions, there is a risk that an increase in its use from laboratory to industrial scale might end up unsuccessfully.

This risk may materialize due to difficulties with obtaining technology parameters in industrial production that would be equally stable as those obtained in the laboratory. In addition, there is a risk that the technology developed may not be sufficiently effective for certain production processes in industry (e.g. due to a failure to achieve satisfactory production process efficiency).

3.7.3.11. Risk of a failure to reach the target clients and achieve sales plans

XTPL clients will include, in particular, large manufacturers of devices for the fabrication of electronics. They have long communication and decision-making channels. There is a risk that a proposition from XTPL, as a company with a short market history, will be assessed as not reliable enough. This may delay delivery of the Company's sales targets or indeed lead to a failure to acquire a targeted client. However, an increase in sales, especially the sales of printing devices, is accompanied by a steady increase in awareness of the XTPL technology, both among direct buyers, including research institutes, and indirect ones, such as industrial partners that research institutes cooperate with. In addition, the Company itself has established a number of relationships with industrial partners and is now working with them on nine projects.

3.7.3.12. Risk of emergence of a competitive technological solution

New technological solutions that are in competition against XTPL are constantly being developed in the global technology market. A comparison of the parameters of the currently available solutions with the parameters achieved in the XTPL technology shows, in the Company's opinion, that competitive technologies offer solutions with weaker parameters and oftentimes higher production costs compared with what is expected to be achieved by the industrial XTPL solution. The Company has undertaken measures designed to cover its technology with extensive patent protection. As at the report date, the Company's competitive risk can be described as low, as the developed solutions are less effective than those on which the Company is working at present. However, it is not possible to rule out the possibility that a more technologically advanced or more cost-effective solution might emerge in the market. There is also a risk that competitors might significantly increase their expenditures to promote available solutions. These risks may materially affect the Company's development outlook.

3.7.3.13. Risk of loss of financial liquidity and access to financing

As at the Report Date, the Company's revenues from the sale of products and services, supported by grant proceeds, are sufficient to secure its operating activities. However, it should be noted that except for nanoink sales, the Company has not yet achieved stable, recurring income.

There is also a risk of financing the operations when the business is taken to an industrial scale.

3.7.3.14. Risk of not receiving grants and subsidies

Grants and subsidies are the second source (next to share issues) of financing the Company's research and development. There is a risk of not receiving adequate grants and subsidies, which may delay research and development.

In the past, the Company entered into a grant agreement with NCBR whereby NCBR is authorized to terminate the financing in the cases enumerated in the agreement, including when (i) the Issuer refuses to undergo or hinders inspections; (ii) the Issuer has made legal and organizational changes that jeopardize the performance of the agreement or

fails to inform the NCBR of its intention to make such changes; (iii) the NCBR identifies gaps in the submitted documentation on the environmental impact of the project, and such gaps are not eliminated by a stated deadline; (iv) the beneficiary fails to comply with disclosure obligations during implementation and durability period of the project; (v) irregularities, listed directly in the agreement, occur in delivery of the project. Therefore, there is a risk that NCBR might claim reimbursement of the grant provided to the Company, in whole or in part, which may affect the financial position of the Company.

3.7.3.15. Risk of implementation of in-house technologies by the Company's potential clients

An important group of potential buyers of the technology developed by the Companies are global producers of electronic components (e.g. displays). There is a risk that these entities, which have significant technical and organizational resources, may develop their in-house nanoprinting solutions, and consequently will not be interested in the product offered by the Company.

3.7.3.16. Risk of unforeseen events

The Company is exposed to the risk of extraordinary events, such as technical failures (e.g. of electrical networks, either internal or external), natural disasters, acts of war, etc. These events might impair the effectiveness of or disrupt the Company's operations. In such circumstances, the Company may be exposed to unforeseen costs.

3.7.3.17. Human factor risk

In its production activity, the Company works with people employed under employment contracts and other civil law contracts. Actions performed by these persons as part of their work may lead to errors caused by improper performance of their duties. Such actions may be intentional or unintentional and may lead to disruptions and delays in the commercialization process.

3.7.3.18. Risk of failure of the equipment used in the Company's and the Group's operations

In its operations, the Company relies on properly working specialist equipment. There is a risk that in the event of a serious equipment failure which cannot be addressed immediately, the Company may be forced to temporarily suspend some or all of its activities until the failure is removed. Equipment failures may also lead to a loss of the data used for developing the Company's product. An interruption in business or loss of key data for a particular project may result in the Company being unable to perform its obligations under existing contracts or cause a loss of these contracts, which may adversely affect the Company's financial performance.

3.7.3.19. Risk of insufficient insurance coverage

The Company enters into insurance contracts in the course of its activity. However, it can not be ruled out that insurance risks will materialize in the Company's activity that will go beyond the scope of insurance coverage, or unforeseen events occur that are out of scope of the existing insurance policies. Such events may have an adverse impact on the Company's trading performance.

3.7.3.20. Risk of court and administrative proceedings

According to the available information, no court or administrative proceedings are pending against the Company that would have a significant impact on its operations. However, the Company's future sales activity will give rise to potential risks associated with possible customer claims in relation to the products sold. The Company also enters into commercial contracts with external entities whereby both parties are required to provide specified service/ consideration. This in turn gives rise to a risk of disputes and claims arising from such contracts. These disputes or claims may adversely affect the Company's reputation and, consequently, its financial results.

3.7.3.21. Risk of related-party transactions

The Company enters into transactions with its related parties. Where competent tax authorities question the methods of how the Company has determined market conditions for related-party transactions, this may have negative tax implications for the Company, potentially causing a material adverse effect on its business, financial position and results.

3.7.3.22. Risk of intellectual property rights and application patents

The Company's technology may be the basis for other entities to develop derivative or related technologies. There is a risk that such entities will decide to submit application patents based on the Company's technology. As a result, the Company, as the holder of the underlying patent, will have to cooperate with a third party, as the application patent holder, to ensure commercial implementation of a particular technology. In terms of intellectual property rights, the Company uses works created by persons employed under employment contracts.

3.7.3.23. Risk related to commercialization agreements

Due to the specific nature of its operations, the Company may use various types of commercialization agreements (license agreements, JDAs, product sale agreements, joint venture agreements). However, it is not possible to rule out the market risk related to a failure to find a partner interested in purchase of the Company's products or commercialization. Market risk is also affected by changes in potential clients' strategies, changes resulting from movements in market trends and inability to reach decision makers. In addition, account should be taken of the risk of default by a contractual partner or the risk of the Issuer's failure to abide by the terms of the contract due to materialization of any of the risks described above. Should any of these circumstances occur, this may adversely affect the Issuer's operations, financial results and/or development prospects.

3.8. SHAREHOLDING STRUCTURE

3.8.1. Shareholding structure

The shareholding structure as at the Balance Sheet Date was as follows (shareholders holding at least 5% of the total number of votes at the General Meeting):

Ref.	Shareholder	Number of shares held	% of all shares	Number of votes	% of all votes
1.	Filip Granek, PhD	316,998	15.62%	316,998	15.62%
2.	Deutsche Balaton Group*	245,687	12.11%	245,687	12.11%
3.	Sebastian Młodziński	233,657	11.51%	233,657	11.51%
4.	ACATIS Investment Kapitalverwaltungsgesellschaft mbH on behalf of ACATIS Datini Valueflex Fonds	195,663	9.64%	195,663	9.64%
5.	Pankiewicz Venture Sp. k.	161,172	7.94%	161,172	7.94%
6.	Others	876,045	43.17%	876,045	43.17%
	TOTAL	2,029,222	100.00%	2,029,222	100.00%

* Deutsche Balaton AG and Heidelberger Beteiligungsholding AG

As at the Report Date, the shareholding structure was as follows (shareholders holding at least 5% of the total number of votes at the General Meeting):

Ref.	Shareholder	Number of shares held	% of all shares	Number of votes	% of all votes
1.	Filip Granek, PhD	316,998	15.62%	316,998	15.62%
2.	Deutsche Balaton Group*	246,203	12.13%	246,203	12.13%
3.	Sebastian Młodziński	233,657	11.51%	233,657	11.51%
4.	ACATIS Investment Kapitalverwaltungsgesellschaft mbH on behalf of ACATIS Datini Valueflex Fonds	195,663	9.64%	195,663	9.64%
5.	Pankiewicz Venture Sp. k.	185,008	9.12%	185,008	9.12%
6.	Others	851,693	41.97%	851,693	41.97%
	TOTAL	2,029,222	100.00%	2,029,222	100.00%

* Deutsche Balaton AG and Heidelberger Beteiligungsholding AG

3.8.2. Shares held by members of management and supervisory bodies

Ref.	Name	Role	Shares held as at 31 December 2021	Shares held as at the Report Date
1.	Filip Granek, PhD	CEO	316,998	316,998
2.	Jacek Olszański	Management Board Member	1,250	1,250
3.	Wiesław Rozłucki, PhD	Chairman of the Supervisory Board	-	-
4.	Bartosz Wojciechowski, PhD	Deputy Chairman of the Supervisory Board	800	1000
5.	Professor Herbert Wirth	Supervisory Board Member	-	-
7.	Piotr Lembas	Supervisory Board Member	-	-
8.	Beata Turlejska-Zduńczyk	Supervisory Board Member	-	-
9.	Andrzej Domański	Deputy Chairman of the Supervisory Board	-	-

3.8.3. Acquisition of own shares

Not applicable. The company did not acquire its own shares in the financial year.

3.8.4. Employee Share Program

On 24 April 2019, the Company's EGM voted in favour of a package of resolutions introducing a new employee incentive scheme at the Company. The scheme covered the key personnel of XTPL S.A. and XTPL Inc., and will continue until 2021. It is based on warrants (stock options), entitling its holders to subscribe for no more than 182,622 series R shares. The price for taking up shares by the beneficiaries of the program will be set at the market value of XTPL at the time of adoption of the scheme, i.e. PLN 165.84. The warrants' underlying stock will be issued gradually in the years 2021–2029. In accordance with the conditions of the incentive scheme, vesting will take place annually. The scheme will also use shares from the previous incentive scheme and – to a small extent (approx. 2% of the share capital) – the issue of series P shares (to supplement the stock pool due to the increase in the number of scheme participants). As a result, the scheme will bring maximum benefits in terms of building the value of XTPL, while not causing any noticeable equity dilution for the existing shareholders. The decision to grant shares or warrants is discretionary in nature, and is made by the Supervisory Board (for Members of the Management Board) or the Management Board (for other eligible persons).

The Company consistently implements plans related to the introduction and execution of the incentive scheme based on the standards used in technology companies operating in the Silicon Valley. Such incentive schemes will allow the Company to acquire and maintain the most talented specialists not only in Poland, but also in the United States. In the Company's opinion, the system in which key personnel participate in potential financial success is one of the most important factors that might contribute to rapid growth and market expansion and, quite importantly, without increasing current cash expenses.

To limit any adverse impact associated with the sale of shares by participants of the incentive scheme, including to limit the potential effect of periodic increase in the supply of shares in the market, the rules of the incentive scheme stipulate that the Company's Management Board, and in the case of the participants who are members of the Management Board – the Supervisory Board, may make the subscription or acquisition of shares conditional on prior conclusion of a lock up agreement with the Company on the terms specified by the Company's Management Board or Supervisory Board, respectively.

3.8.5. Presence on the stock market

3.8.5.1. XTPL S.A. on the Warsaw Stock Exchange

The Company has the status of a public (listed) company. Since 20 February 2019, its shares have been listed on the regulated (parallel) market operated by the Warsaw Stock Exchange.

WSE Ticker	XTP
ISIN	PLXTPL000018

Number of shares	2,029,222
Free float	44%
Indexes	WIG-Poland, WIGtech, WIGtech Total Return, INNOVATOR

According to statistical data provided by the WSE, at the end of 2021, the Company's capitalization on the WSE regulated market was PLN 92.9 million (EUR 20.2 million). During the whole of 2021, the value of trading in the Company's shares exceeded PLN 46.5 million (EUR 10.2 million). The highest price per share was PLN 84.40, and the lowest price was PLN 39.70.

Analytical coverage

In 2020, Stifel Europe Bank AG (MainFirst Bank AG) has started issuing recommendations for XTPL – XTPL is the first Polish company covered by that bank. Stifel is a European financial services firm, specializing in Equity Brokerage, Investment Banking and Fixed Income, which is following about 400 predominantly European stocks. The Stifel Group is particularly strong when it comes to cooperating with technology investors from many countries, including the United States. Analytical reports in Poland are distributed by Erste Securities.

History of recommendations issued by Stifel Europe Bank AG for XTPL S.A.:

Institution	Analyst	Recommendation	Target price	Report publication date
Stifel Europe Bank AG	Florian Pfeilschifter	BUY	PLN 225	5 January 2022
Stifel Europe Bank AG	Florian Pfeilschifter	BUY	PLN 225	30 September 2021
Stifel Europe Bank AG	Florian Pfeilschifter	BUY	PLN 225	02.062021

Stifel Europe Bank AG	Florian Pfeilschifter	BUY	PLN 210	29 April 2021
MainFirst Bank AG	Florian Pfeilschifter	BUY	PLN 210	30 September 2020
MainFirst Bank AG	Florian Pfeilschifter	BUY	PLN 210	2 September 2020
MainFirst Bank AG	Florian Pfeilschifter	BUY	PLN 210	24 April 2020
MainFirst Bank AG	Florian Pfeilschifter	BUY	PLN 215	24 February 2020

Research is distributed to Polish institutional investors by Erste Securities Polska S.A.

3.8.5.2. XTPL S.A. on the Frankfurt Stock Exchange

Since March 2020, the Company has also been listed on the Open Market at Deutsche Börse in Frankfurt (FRA ticker FRA: 5C8).

As regards financial reporting, the Group and the Company use IASs/ IFRSs.

The Group's and the Company's financial year is from 1 January to 31 December.

3.9. Corporate Governance

3.9.1. General information

Since 20 February 2019, the Issuer's shares have listed on the regulated (parallel) market operated by the Warsaw Stock Exchange (GPW). Accordingly, until July 2021, the Issuer was subject to the corporate governance principles set out in the annex to Resolution No. 26/1413/2015 of the Council of the Warsaw Stock Exchange of 13 October 2015 – “Best Practice for GPW Listed Companies 2016”. The set of corporate governance principles (2016) is publicly available on the website of the Warsaw Stock Exchange at <https://www.gpw.pl/archiwum>

Since July 2021, the Issuer has been subject to a set of corporate governance rules specified in the Resolution of the Stock Exchange Council of 29 March 2021 on the adoption of “Best Practices for WSE Listed Companies 2021” (DPSN 2021). The set of corporate governance principles (2021) is publicly available on the website of the Warsaw Stock Exchange at <https://www.gpw.pl/dobre-praktyki2021>

3.9.2. Exemptions from application of the corporate governance principles applicable to the regulated market (DPSN 2016)

Within respect to the “Best Practice of GPW Listed Companies 2016”, in the Reporting Period until July 2021, the Issuer adhered to the principles set out in this document, except the following ones:

I.R.2. Where a company pursues sponsorship, charity or other similar activities, it should publish information about the relevant policy in its annual activity report.

The principle does not apply to the Company.

Company's comment: At the moment, the Company does not pursue any sponsorship, charity or other similar activities.

I.Z.1.10. financial projections, if the company has decided to publish them, published at least in the last 5 years, including information about the degree of their implementation;

The principle does not apply to the Company.

Company's comment: At the moment, the Company has not decided to publish financial projections.

I.Z.1.15. Information about the company's diversity policy applicable to the company's governing bodies and key managers; the description should cover the following elements of the diversity policy: gender, education, age, professional experience, and specify the goals of the diversity policy and its implementation in the reporting period; where the company has not drawn up and implemented a diversity policy, it should publish the explanation of its decision on its website;

The principle is not followed.

Company's comment: The Company does not have a diversity policy. The Company employs people with appropriate qualifications and professional experience, without differentiating them by age or gender. When selecting candidates for members of the supervisory and management bodies, the Company's competent bodies follow the best interest of the Company and its shareholders, taking into account the candidates' qualifications, skills and performance. Decisions regarding appointment to the Management Board or the Supervisory Board are not motivated by gender. Therefore, the Issuer cannot ensure a balanced participation of men and women in management and supervisory positions.

I.Z.1.16. Information about the planned broadcast of a general meeting, not later than 7 days before the date of the general meeting;

The principle is not followed.

Company's comment: The principle is not followed by the Company due to the high cost of ensuring appropriate equipment and the technical resources needed to meet the obligations implied by this principle – such cost would be out of proportion to the potential benefits that might flow to shareholders. In this regard, the Company complies with the applicable provisions of its Articles of Association and law, and operates an appropriate information policy.

I.Z.1.20. An audio or video recording of a general meeting;

The principle is not followed.

Company's comment: The Issuer does not publish any audio or video recording of its general meetings. In the opinion of the Issuer, proper performance of information obligations related to general meetings, i.e. in particular the publication of current reports via the ESPI system and providing relevant information on the Company's website, provides shareholders with full access to information on general meetings. The decision not to follow the above rule is a cost avoidance measure. However, the Issuer declares that it will abide by this corporate governance principle in that it will publish on its website an audio record of its general meetings provided that the Company's shareholders, including minority shareholders, (stock investors) so desire.

II.R.2. Decisions to elect members of the management board or the supervisory board of a company should ensure that the composition of these bodies is comprehensive and diverse among others in terms of gender, education, age and professional experience.

The principle is not followed.

Company's comment: The Company does not have a diversity policy. The Company employs people with appropriate qualifications and professional experience, without differentiating them by age or gender. At present, only the men are members of the Issuer's bodies, but historically women also had functions on the Supervisory Board. When selecting candidates for members of the supervisory and management bodies, the Company's competent bodies follow the best interest of the Company and its shareholders, taking into account the candidates' qualifications, skills and performance. Decisions regarding appointment to the Management Board or the Supervisory Board are not motivated by gender. Therefore, the Issuer cannot ensure a balanced participation of men and women in management and supervisory positions.

II.Z.2. A company's management board members may sit on the management board or supervisory board of companies other than members of its group subject to the approval of the supervisory board.

The principle is not followed.

Company's comment: The Articles of Association and the Company's internal documents do not impose information obligations on Management Board members in this regard. Nevertheless, pursuant to Article 18 of the Issuer's Articles of Association, the Supervisory Board may remove or suspend a Management Board member only for important reasons. An important reason is, *inter alia*, engaging – without the Supervisory Board's prior consent – in a business that is in competition against the Company, in particular by holding or purchasing shares in or joining a competitor as a partner or a member of its executive or non-executive bodies, or representing a competitor as its attorney (excluding subsidiaries as defined in the Code of Commercial Companies);

III.R.1. The company's structure should include separate units responsible for the performance of tasks in individual systems or functions, unless the separation of such units is not justified by the size or type of the company's activity.

The principle is not followed.

Company's comment: The Company's structure does not include a separate unit that would be responsible for risk management, internal audit and compliance. All tasks resulting related to those areas are performed directly by the Management Board. The existing structure ensures proper control in this respect. However, in the future the Company

might consider setting up relevant separate organisational units, if it is justified by the size or type of business carried on by the Company.

III.Z.3. The independence rules defined in generally accepted international standards of the professional internal audit practice apply to the person heading the internal audit function and other persons responsible for such tasks.

The principle is not followed.

Company's comment: There is no person at the Company to manage the internal audit function as the Company has no formal unit responsible for internal audit.

IV.R.2. If justified by the structure of shareholders or expectations of shareholders notified to the company, and if the company is in a position to provide the technical infrastructure necessary for a general meeting to proceed efficiently using electronic communication means, the company should enable its shareholders to participate in a general meeting using such means, in particular through:

- 1) real-life broadcast of the general meeting;
- 2) real-time bilateral communication where shareholders may take the floor during a general meeting from a location other than the general meeting;
- 3) exercise of the right to vote during a general meeting either in person or through a proxy.

The principle is not followed.

Company's comment: Application of the above recommendation may involve organisational, technical and legal risks that might lead to an attempt to challenge validity of the general meetings held. In addition, adoption of this principle would expose the Company to additional costs connected with ensuring technical conditions for participation in the general meeting. The rules for convening and holding general meetings that arise from law and the Terms of Reference of the general meeting create sufficient possibilities for shareholders to participate in the general meeting in person and use their rights in this respect, and the Company calls general meetings by setting such days and times as to allow broad participation by shareholders. At the same time, shareholders may participate in the general meeting by a proxy.

IV.Z.2. If justified by the structure of shareholders, companies should ensure publicly available real-time broadcasts of general meetings.

The principle is not followed.

Company's comment: The current ownership structure of the Company does not justify the need to ensure publicly available real-time broadcasts of general meetings. The principle is not followed by the Company also due to the high cost of ensuring appropriate equipment and the technical resources needed to meet the obligations implied by this principle – such cost would be out of proportion to the potential benefits that might flow to shareholders. In this regard, the Company complies with the applicable provisions of its Articles of Association and law, and operates an appropriate information policy. This ensures proper and effective exercise of rights from shares, and sufficiently safeguards the interests of all shareholders, including minority shareholders.

IV.Z.3. Presence of representatives of the media should be allowed at general meetings.

The principle is not followed.

Company's comment: The Company might allow presence of media representatives at general meetings subject to prior authorisation. Irrespective of the above, in the case of any questions regarding general meetings addressed to the Company by media representatives, the Company immediately provides relevant answers. The Company fulfils the information obligations imposed on listed companies in accordance with the applicable laws, comprehensively and reliably, and operates an intensive communication policy.

IV.Z.12. The management board should present to participants of an ordinary general meeting the financial results of the company and other relevant information contained in the financial statements to be approved by the general meeting.
The principle is not followed.

Company's comment: Due to the fact that the Company's financial results and other key details contained in the financial statements, subject to approval by the general meeting, are available on the Issuer's website from the day of their publication through the ESPI system, the Management Board will not present those data in detail during general meetings. Instead, the Management Board will answer shareholders' questions;

VI.Z.2. To tie the remuneration of members of the management board and key managers to the company's long-term business and financial goals, the period between the allocation of options or other instruments linked to the company's shares under the incentive scheme and their exercisability should be no less than two years.

The principle is not followed.

Company's comment: In the Company's situation, achieving long-term business, economic and financial objectives of the Company by implementing incentive schemes based on options or other financial instruments linked to the Company's shares does not require the Company prior introduction of a fixed period between the allocation of such instruments and their exercisability. Accordingly, in the case of the incentive scheme introduced at the Company, the above principle will not be followed.

3.9.3. Scope of application of the corporate governance principles applicable to the regulated market (DSPN 2021)

Within respect to the "Best Practice of GPW Listed Companies 2021", in The Reporting Period, the Issuer adhered to the principles set out in this document. According to the current status of compliance with the Best Practice, the Company does not apply 16 principles: 1.3.1., 1.3.2., 1.4., 1.4.1., 1.4.2., 1.5., 2.1., 2.2., 2.7., 2.11.5., 2.11.6., 3.4., 3.5., 4.1., 4.3., 4.4.

Details are provided below:

INFORMATION POLICY AND COMMUNICATION WITH INVESTORS

1.1. Companies maintain efficient communications with capital market participants and provide fair information about matters that concern them. For that purpose, companies use diverse tools and forms of communication, including in particular the corporate website where they publish all information relevant for investors.

The principle is followed.

The Company's comment on how the principle is applied.

The Company has a website, including a service for capital market participants, with all essential corporate documents, articles of association, financial and current reports and other information documents, including quarterly presentations on the financial performance in a particular period. Currently, the Company does not publish on its website any answers provided to investors and shareholders via electronic correspondence. The Company's Management Board is considering publication of this correspondence in the near future. So far, the Company has not published recordings of investor meetings. The Management Board will consider the possibility of implementing this practice using the YouTube channel operated by the Company and available through its website.

1.2. The company makes the financial results included in the interim report available for inspection as soon as possible after the end of the reporting period or, where that is not possible for justified reasons, publishes at least a preliminary estimated financial result as soon as possible.

The principle is followed.

The Company's comment on how the principle is applied.

The Company starts work on drafting financial reports immediately after the end of the reporting period, setting the dates for publication of those reports well in advance. This is to ensure that financial results are presented as soon as practicable after the end of the reporting period, while maintaining the highest degree of care and integrity. For this reason, the Company does not plan to publish estimates prior to the publication of a financial report for a given period.

1.3. Companies integrate ESG factors in their business strategy, including in particular:
1.3.1. environmental matters, including measures and risks related to climate change and sustainable development;

The Company does not use this principle.

The Company's business model or strategic goals do not make direct reference to environmental issues or the risk of climate change. This is also related to the type of the Company's activity, which does not have any significant adverse impact on the environment. However, the Company's Management Board and employees are environmentally aware and undertake actions aimed at mitigating the risk of climate change and ensure that the Company develops its business showing respect for the natural environment. If the Company updates its current development strategy, it will also take into account ESG matters.

1.3.2. social and employee factors, including among others actions taken and planned to ensure equal treatment of women and men, decent working conditions, respect for employees' rights, dialogue with local communities, customer relations.

The Company does not follow this principle.

The Company's business model or strategic goals do not make direct reference to social or employee matters. The Company adheres to the applicable employment law provisions relating to working conditions, respect for employee rights, equality and non-discrimination. In this regard, the Company implemented its anti-bullying, discrimination and harassment procedure. At the same time, in terms of relations with local communities and customers, the Company, its Management Board and employees follow the principles of mutual respect and kindness, and provides knowledge and education, e.g. by participating in business associations. If the Company updates its current development strategy, it will also take into account the above matters.

1.4. To ensure quality communications with stakeholders, as a part of the business strategy, companies publish on their website information concerning the framework of the strategy, measurable goals, including in particular long-term goals, planned activities and their status, defined by measures, both financial and non-financial. ESG information concerning the strategy should among others:

The Company does not follow this principle.

By ensuring proper and reliable communication with stakeholders, the Company publishes its business strategy on its website (in a separate service dedicated to investors and shareholders). Due to the specific nature of the Company's business, this strategy does not take into account ESG matters or financial/ non-financial metrics. If the Company updates its current development strategy, it will also take into account ESG matters.

1.4.1. explain how climate change considerations are integrated into the decision-making processes of the company and its group entities, highlighting the resulting risks;

The Company does not follow this principle.

Due to the specific nature of its business, with negligible impact on the environment and climate change, the Company did not include ESG matters in its development strategy. However, the Company's Management Board and employees have high environmental awareness and undertake actions aimed at development with respect for the natural environment. If the Company updates its current development strategy, it will also take into account the above matters.

1.4.2. present, among other things, the equal pay index for employees, defined as the percentage difference between the average monthly pay (including bonuses, awards and other benefits) of women and men in the last year, and present

information about actions taken to eliminate any pay gaps, including a presentation of related risks and the time horizon of achieving the equality target.

The Company does not follow this principle.

Due to the specific nature of its business, providing data in the scope specified above would not reliably reflect the actual situation in terms of equal pay broken down by gender. The Company adopted internal rules of remunerating employees, with priority given to knowledge and experience, regardless of gender.

1.5. The company discloses, at least annually, the expenditure incurred by it and its group in supporting culture, sport, charitable institutions, the media, social organisations, trade unions, etc. Where the company or its group has incurred expenditure for such purposes in the year under review, the disclosure includes a breakdown of such expenditure.

The Company does not follow this principle.

At the moment, the Company does not pursue any sponsorship, charity or other similar activities.

1.6. Companies participating in the WIG20, mWIG40 or sWIG80 index hold on a quarterly basis and other companies hold at least on an annual basis a meeting with investors to which they invite in particular shareholders, analysts, industry experts and the media. At such meetings, the management board of the company presents and comments on the strategy and its implementation, the financial results of the company and its group, and the key events impacting the business of the company and its group, their results and outlook. At such meetings, the management board of the company publicly provides answers and explanations to questions raised.

The principle is followed.

The Company's comment on how the principle is applied.

Even though the Company does not currently belong to the WIG20, mWIG40 or sWIG80 indices, it regularly organizes earnings calls with investors, during which it discusses the financial results achieved, the most important events and implementation of strategic goals. During these meetings, the Company's Management Board also answers investors' questions. In addition, the Company regularly contacts the media informing them about the most important events, and the Management Board provides comments and interviews in this regard.

1.7. Where an investor requests information on the company, the company responds promptly, but no later than within 14 days.

The principle is followed.

MANAGEMENT BOARD AND SUPERVISORY BOARD

2.1. Companies should have in place a diversity policy applicable to the management board and the supervisory board, approved by the supervisory board and the general meeting, respectively. The diversity policy defines diversity goals and criteria, among others including gender, education, expertise, age, professional experience, and specifies the target dates and the monitoring systems for such goals. With regard to gender diversity of corporate bodies, the participation of the minority group in each body should be at least 30%.

The Company does not use this principle.

The Company does not have a diversity policy. The Company employs people with appropriate qualifications and professional experience, without differentiating them by age or gender. When selecting candidates for members of the supervisory and management bodies, the Company's competent bodies follow the best interest of the Company and its shareholders, taking into account the candidates' qualifications, skills and performance.

2.2. Decisions to elect members of the management board or the supervisory board of companies should ensure that

the composition of those bodies is diverse by appointing persons ensuring diversity, among others in order to achieve the target minimum participation of the minority group of at least 30% according to the goals of the established diversity policy referred to in principle 2.1.

The Company does not use this principle.

The Company does not have a diversity policy. The Company employs people with appropriate qualifications and professional experience, without differentiating them by age or gender. Currently, men represent a majority in the Company's bodies. When selecting candidates for members of the supervisory and management bodies, the Company's competent bodies follow the best interest of the Company and its shareholders, taking into account the candidates' qualifications, skills and performance.

2.3. At least two members of the supervisory board meet the independence criteria listed in the Act of 11 May 2017 on auditors, audit firms and public supervision, and have no real and significant links with a shareholder holding at least 5% of the total number of votes in the company.

The principle is followed.

2.4. Supervisory board and the management board members vote in an open ballot, unless the law stipulates otherwise.

The principle is followed.

2.5. Supervisory and management board members voting against the resolution may enter a dissenting opinion in the minutes.

The principle is followed.

2.6. Serving on a company's management board is the management board member's main area of professional activity. Management board members should not undertake additional professional activity if the time devoted to such activity prevents them from diligently performing their duties in the company.

The principle is followed.

2.7. The exercise of functions by members of the company's management board in the bodies of entities outside the company's group requires the consent of the supervisory board.

The Company does not use this principle.

The Articles of Association and the Company's internal documents do not impose information obligations on Management Board members in this regard. Nevertheless, pursuant to Article 18 of the Issuer's Articles of Association, the Supervisory Board may remove or suspend a Management Board member only for important reasons. An important reason is, inter alia, engaging – without the Supervisory Board's prior consent – in a business that is in competition against the Company, in particular by holding or purchasing shares in or joining a competitor as a partner or a member of its executive or non-executive bodies, or representing a competitor as its attorney (excluding subsidiaries as defined in the Code of Commercial Companies);

2.8. Supervisory board members must be able to devote the time necessary to perform their duties.

The principle is followed.

2.9. The chairman of a supervisory board should not combine his function with managing the work of the supervisory board's audit committee.

The principle is followed.

2.10. The company, in accordance with its size and financial situation, delegates the administrative and financial resources necessary to ensure the efficient functioning of the supervisory board.

The principle is followed.

2.11. In addition to its activities under the law, once a year the supervisory board draws up an annual report and submit it to the ordinary general meeting for approval. The report referred to above includes at least:

2.11.1. information on the composition of the supervisory board and its committees, with an indication of which supervisory board members meet the independence criteria set out in the Act of 11 May 2017 on auditors, audit firms and public supervision, and which of them have no real and significant links with a shareholder holding at least 5% of the total number of votes in the company, as well as information on the composition of the supervisory board in the context of its diversity;

The principle is followed.

2.11.2. summary of the activities of the council and its committees;

The principle is followed.

2.11.3. an assessment of the company's situation on a consolidated basis, including an evaluation of the internal control systems, risk management, compliance and the internal audit function, together with information on the steps that the supervisory board has taken to perform this assessment; this assessment includes all significant control mechanisms, including in particular reporting and operational activities;

The principle is followed.

2.11.4. an assessment of the application by the company of the corporate governance principles and the manner of fulfilling information obligations concerning their application, as defined in the Stock Exchange Regulations and regulations concerning current and periodical information provided by issuers of securities, together with information on actions taken by the supervisory board in order to perform this evaluation;

The principle is followed.

2.11.5. an assessment of the validity of the expenditure referred to in principle 1.5;

The Company does not follow this principle.

Currently, the Company does not pursue any sponsorship, charity or other similar activities.

2.11.6. information on the extent to which the diversity policy is implemented in relation to the management board and the supervisory board, including the achievement of the objectives referred to in principle 2.1.

The Company does not follow this principle.

The principle is not followed, as the Company does not apply principle 2.1. The Company does not have a diversity policy. The Company employs people with appropriate qualifications and professional experience, without differentiating them by age or gender. When selecting candidates for members of the supervisory and management bodies, the Company's competent bodies follow the best interest of the Company and its shareholders, taking into account the candidates' qualifications, skills and performance.

INTERNAL SYSTEMS AND FUNCTIONS

3.1. A listed company maintains effective internal control, risk management and compliance systems and an effective internal audit function appropriate to the size of the company and the nature and scale of its business, which is the responsibility of the management board.

The principle is followed.

3.2. A company identifies within its structure the units responsible for the tasks of particular systems or functions, unless this is not justified by the size of the company or the nature of its activities.

Not applicable.

Due to the Company's size and scope of activities the Company's structure does not include a separate unit that would be responsible for risk management and compliance. All tasks resulting related to those areas are performed directly by the Management Board and are supervised by the Audit Committee. The existing structure ensures proper control in this respect. However, in the future the Company might consider setting up relevant separate organizational units, if it is justified by the size or type of business carried on by the Company.

3.3. A company included in the WIG20, mWIG40 or sWIG80 index appoints an internal auditor heading the internal audit function, who acts in accordance with internationally recognised standards of professional practice for internal auditing. In other companies where no internal auditor meeting the aforementioned requirements has been appointed, the audit committee (or the supervisory board if it performs the functions of an audit committee) annually assesses whether there is a need to appoint such a person.

The principle is followed.

3.4. Remuneration of risk managers, compliance officers and the head of internal audit should be based on the fulfilment of assigned tasks and not on short-term company performance.

The Company does not follow this principle.

The Company's structure does not include a separate unit that would be responsible for risk management and compliance. All tasks resulting related to those areas are performed directly by the Management Board and are supervised by the Audit Committee. The existing structure ensures proper control in this respect. However, in the future the Company might consider setting up relevant separate organizational units, if it is justified by the size or type of business carried on by the Company.

3.5. Those responsible for risk management and compliance report directly to the president or another member of the management board.

The Company does not follow this principle.

The Company's structure does not include a separate unit that would be responsible for risk management and compliance. All tasks resulting related to those areas are performed directly by the Management Board. The existing structure ensures proper control in this respect. However, in the future the Company might consider setting up relevant separate organizational units, if it is justified by the size or type of business carried on by the Company.

3.6. The head of internal audit reports organisationally to the chairman of the management board and functionally to the chairman of the audit committee, or to the chairman of the supervisory board if the board acts as the audit committee.

The principle is followed.

3.7. Principles 3.4 – 3.6 also apply to entities within the company's group that are material to the company's business, if they have designated persons to perform these tasks.

Not applicable.

The Company's group does not include entities that would be significant for its operations.

3.8. At least once a year, the person responsible for internal audit, or in the absence of such a function in the company, the company's management board, provides the supervisory board with an assessment of the effective functioning of the systems and functions referred to in principle 3.1, together with an appropriate report.

The principle is followed.

3.9. The supervisory board should monitor the efficiency of the systems and functions referred to in principle 3.1 among others on the basis of reports provided periodically by the persons responsible for the functions and the company's management board, and make an annual assessment of the efficiency of such systems and functions according to principle 2.11.3. Where the company has an audit committee, it should monitor the efficiency of the systems and functions referred to in principle 3.1, which however does not release the supervisory board from the annual assessment of the efficiency of such systems and functions.

The principle is followed.

3.10. At least every five years, a company included in the WIG20, mWIG40 or sWIG80 index has its internal audit function reviewed by an independent auditor selected with the participation of the audit committee.

Not applicable.

The Company is not a member of the WIG20, mWIG40 or sWIG80 indices.

GENERAL MEETING AND RELATIONS WITH SHAREHOLDERS

4.1. Companies should enable their shareholders to participate in a general meeting by means of electronic communication (e-meeting) if justified by the expectations of shareholders notified to the company, provided that the company is in a position to provide the technical infrastructure necessary for such general meeting to proceed.

The Company does not follow this principle.

The principle is not followed by the Company due to the high cost of ensuring appropriate equipment and the technical resources needed to meet the obligations implied by this principle. In this regard, the Company complies with the applicable provisions of its Articles of Association and law, and operates an appropriate information policy.

4.2. Companies should set the place and date as well as the form of a general meeting so as to enable the participation of the highest possible number of shareholders. To this end, the company also endeavours to ensure that the cancellation of the general meeting, rescheduling or adjournment of the meeting takes place only in justified cases and that it does not prevent or restrict shareholders from exercising their right to participate in the general meeting.

The principle is followed.

4.3. Companies provide a public real-time broadcast of the general meeting.

The Company does not follow this principle.

The current ownership structure of the Company does not justify the need to ensure publicly available real-time broadcasts of general meetings. The principle is not followed by the Company also due to the high cost of ensuring appropriate

equipment and the technical resources needed to meet the obligations implied by this principle. In this regard, the Company complies with the applicable provisions of its Articles of Association and law, and operates an appropriate information policy. This ensures proper and effective exercise of rights from shares, and sufficiently safeguards the interests of all shareholders, including minority shareholders.

4.4. Presence of representatives of the media should be allowed at general meetings.

The Company does not follow this principle.

The Company might allow presence of media representatives at general meetings subject to prior authorisation. Irrespective of the above, in the case of any questions regarding general meetings addressed to the Company by media representatives, the Company immediately provides relevant answers. The Company fulfils the information obligations imposed on listed companies in accordance with the applicable laws, comprehensively and reliably, and operates an active communication policy;

4.5. If the management board becomes aware a general meeting being convened pursuant to Article 399 § 2 – 4 of the Commercial Companies Code, the management board should immediately take steps which it is required to take in order to organise and conduct the general meeting. The foregoing applies also where a general meeting is convened under authority granted by the registration court according to Article 400 § 3 of the Commercial Companies Code.

The principle is followed.

4.6. In order to make it easier for shareholders participating in the general meeting to vote on resolutions with due knowledge, draft resolutions of the general meeting concerning issues and resolutions other than those of a procedural nature should contain a justification, unless this can be deduced from the documentation presented to the general meeting. Where an item is put on the agenda of a general meeting at the request of a shareholder or shareholders, the management board requests a statement of the reasons for the proposed resolution, if not already provided by the shareholder or shareholders.

The principle is followed.

4.7. The supervisory board gives its opinion on draft resolutions submitted by the management board to the agenda of the general meeting.

The principle is followed.

4.8. Draft resolutions of the general meeting on items on the agenda of the general meeting should be tabled by shareholders at least 3 days before the general meeting.

The principle is followed.

4.9. Where the subject of the general meeting is to be an appointment to the supervisory board or the appointment of a new supervisory board:

4.9.1. nominations for supervisory board members should be made in sufficient time to enable the shareholders attending the general meeting to take a decision with due deliberation, but no later than 3 days before the general meeting; the nominations, together with a set of materials concerning them, should be published on the company's website without delay;

The principle is followed.

4.9.2. a candidate for a supervisory board member submits declarations with regard to meeting the requirements for members of the audit committee set out in the Act of 11 May 2017 on auditors, audit firms and public supervision, as well

as with regard to the existence of the candidate's real and significant links with a shareholder holding at least 5% of the total number of votes in the company.

The principle is followed.

4.10. Any exercise of the rights of shareholders or the way in which they exercise their rights must not hinder the proper functioning of the governing bodies of the company.

The principle is followed.

4.11. Members of the management board and the supervisory board attend the general meeting, either at the meeting place or by means of real-time bilateral electronic communication, and are able to express themselves on the items on the agenda of the general meeting and to answer substantively to questions put to the general meeting. The management board presents to the participants of the annual general meeting the financial results of the company and other relevant information, including nonfinancial information, contained in the financial statements to be approved by the general meeting. The management board discusses significant events relating to the past financial year, compares the data presented with previous years and indicates the extent to which the plans of the past year have been implemented.

The principle is followed.

4.12. A resolution of the general meeting concerning an issue of shares with subscription rights should specify the issue price or the mechanism of setting the price or authorise the competent governing body to set the price prior to the subscription right record date within the timeframe necessary for investors to make decisions.

The principle is followed.

4.13. A resolution on a new issue of shares with exclusion of pre-emptive rights, which at the same time grants the pre-emptive right to subscribe for the new issue shares to selected shareholders or other entities, may be adopted if at least the following conditions are met:

- a) the company has a reasonable, economically justifiable need to raise capital urgently, or the share issue is connected with reasonable, economically justifiable transactions, such as, inter alia, a merger with or acquisition of another company, or the shares are to be subscribed under an incentive scheme adopted by the company;
- b) the persons to whom the right of preference will be given will be identified according to objective general criteria;
- c) the share subscription price is reasonably related to the current price of the shares in that company or is determined as a result of a market-based book-building process.

The principle is followed.

4.14. The company should aim to distribute profits by paying dividends. It is possible to leave all profits with the company if any of the following reasons apply:

- a) the amount of this profit is minimal and consequently the dividend would be insignificant in relation to the value of the shares;
- b) the company recognises uncovered losses from previous years and the profit is allocated to reducing them;
- c) the company will justify that the allocation of the profit to investment will bring tangible benefits to the shareholders;
- d) the company has not generated cash to pay dividends;
- e) payment of dividends would significantly increase the risk of breaching covenants arising from loan agreements or bond issue conditions binding the company;
- f) leaving the profit with the company is in line with the recommendation of the institution supervising the company by virtue of carrying out a particular activity.

The principle is followed.

CONFLICTS OF INTEREST AND RELATED PARTY TRANSACTIONS

5.1. Members of the management board or the supervisory board should notify the management board or the supervisory board, respectively, of any conflict of interest which has arisen or may arise, and should refrain from considering any issue which may give rise to such a conflict of interest in their case.

The principle is followed.

5.2. Where a member of the management board or the supervisory board concludes that a decision of the management board or the supervisory board, respectively, is in conflict with the interest of the company, he or she should request that the minutes of the management board or the supervisory board meeting show his or her position.

The principle is followed.

5.3. No shareholder should be privileged over other shareholders with regard to related party transactions. This also applies to transactions of the company's shareholders with entities belonging to its group.

The principle is followed.

5.4. The company may only purchase its own shares (buy-back) in a manner that respects the rights of all shareholders.

The principle is followed.

5.5. If a company's transaction with a related party requires the supervisory board's approval, the supervisory board assesses, before adopting a resolution on approval, whether it is necessary to first consult an external entity that will carry out a valuation of the transaction and an analysis of its economic effects.

The principle is followed.

5.6. If the conclusion of a transaction with a related party requires the approval of the general meeting, the supervisory board draws up an opinion on the advisability of concluding such a transaction. In such a case, the supervisory board assesses the need for prior consultation with an external body as referred to in principle 5.5

The principle is followed.

5.7. Where a decision on the conclusion by the company of a significant transaction with a related party is taken by the general meeting, the company, before such decision is taken, ensures that all shareholders have access to the information necessary to assess the impact of the transaction on the company's interest, including the opinion of the supervisory board referred to in principle 5.6.

The principle is followed.

REMUNERATION

6.1. Remuneration of management and supervisory board members and key managers should be sufficient to attract, retain and motivate individuals with the necessary competences to properly manage and supervise the company. Remuneration should be commensurate with the tasks and duties performed by the individual and the associated responsibilities.

The principle is followed.

6.2. Incentive schemes should be designed in a way that, inter alia, makes the level of remuneration of members of the company's management board and key managers conditional on an actual long-term situation of the company in terms

of financial and nonfinancial performance and long-term growth of shareholder value and sustainability, as well as the stability of the company's operations.

The principle is followed.

6.3. If one of the company's incentive programmes is a managerial options programme, then the realisation of the options programme should be conditional on the fulfilment by the entitled persons, within a period of at least three years, of predetermined, realistic and appropriate financial and non-financial and sustainable development objectives for the company, and the price set for the acquisition of shares by the entitled persons or the settlement of the options may not differ from the value of the shares at the time of the adoption of the programme.

The principle is followed.

6.4. The supervisory board carries out its tasks on a continuous basis, and therefore the remuneration of board members cannot depend on the number of meetings held. Remuneration of members of committees, in particular the audit committee, should take into account the additional workload related to the work in those committees.

The principle is followed.

6.5. Supervisory board members should not be remunerated on the basis of the short-term performance of the company.

The principle is followed.

3.9.4. Internal control and risk management

Due to its size, the Company does not have a separate internal audit unit. Internal audit tasks have been divided and allocated to the bodies and functions indicated below. Effective functioning of the system of internal control over financial reporting is the direct responsibility of the Company's Management Board.

In 2021, the Company had a financial department supported by legal advisors, who provided assistance in relation to the internal control process, among other things. In addition, some internal control tasks (testing the Company's operations for compliance with law) are performed by the Head of the Project Management Office. Keeping the books of account was entrusted to a third party which has appropriate qualifications, knowledge and experience. Responsibility for performance of duties relating to accounting rests on members of the Management Board of the Company (they are also responsible for exercising oversight over delegation of the account-keeping to a third party). In addition, members of the Management Board and members of the Supervisory Board are obliged to ensure that the financial statements meet the requirements of the Accounting Act. Members of the Management Board and members of the Supervisory Board are jointly and severally liable to the Company for any damage caused by their acts and omissions in relation to the above responsibilities.

The Company's internal control system mainly includes the following areas:

- controlling and management accounting
- accounting, including financial reporting
- forecasting and financial analyses.

As part of the internal control and risk management system there are organizational solutions and corporate standards/ procedures in place that support effectiveness of the control over financial reporting and identification/ elimination of risk factors in this area. The following measures should be noted:

- harmonized accounting policies, financial reporting and accounting procedures;
- application of a standardized financial reporting model for external and internal purposes – operational management;
- division of roles and responsibilities of individual departments (including the external accounting function), and the middle and upper management;
- regular and formalized process of reviewing and updating the budget assumptions and financial projections;
- having the financial accounts reviewed and audited by an independent auditor.

The Company keeps abreast of the legal developments relating to the stock exchange reporting and makes sure it is prepared for their implementation comfortably in advance.

Vertical functional control is performed daily by the managers of individual departments in relation to the employees and processes within their areas of responsibility. All the Company's cost-related documents are confirmed by the person responsible for the purchase (expert approval) and verified by the Financial Manager (horizontal check, including the check for compliance of the expenditure with the budget). If the costs are related to a public grant to a project, the documents are additionally verified by the Head of the Project Management Office. Once verified, the documents are subject to final approval by the Management Board. Any documents not approved according to the above procedure can not be booked or sent for payment. The final (additional) stage of the ongoing verification is the formal check of accounting documents carried out by third party responsible for account-keeping. This is carried out using Standard ERP IT system, which guarantees high efficiency of the process both in terms of internal control and work organization. This system prevents, for example, the posting and payment of documents not approved in the above procedure.

Each month, upon closing on the books of account, a management report is put together with details on the key financials. The Management Board and unit managers analyse and discuss the Company's performance on an ongoing basis.

Each quarter, interim financial reports are drawn up in cooperation with the third party responsible for account-keeping. Next, the reports are verified by the financial manager of the Company (at the first stage) and by the Management Board. Furthermore, each quarter, the Company's Management Board verifies the reliability and currency of the annual budgets and short-term projections. Where appropriate, the Management Board liaises with the management of individual departments to review and update the budget assumptions.

In accordance with principle 2.11.3 of the Code of Best Practice for WSE Listed Companies 2021, the annual report on the activities of the supervisory board should include an assessment of the company's consolidated position, taking into account assessment of the internal control, risk management and compliance systems and the internal audit function.

3.9.5. Shareholders

Major shareholders are indicated in item 3.8.1

The list of shares held by members of the Management Board and Supervisory Board is presented in item 3.8.2.

3.9.6. Special control rights

Not applicable. The Issuer has not any issued securities that would give special control rights.

3.9.7. Restrictions of voting rights

The Issuer's Articles of Association do not provide for any restrictions on the exercise of voting rights attached to shares.

3.9.8. Restrictions as to the transfer of debt securities

The Issuer's Articles of Association do not provide for any restrictions as to the transfer of ownership of the rights attached to shares or other securities of the Issuer.

In relation to the shares that were or will be handed over to eligible persons under the incentive scheme, lock-up agreements were or will be signed to limit the possibility of selling these shares.

The following restrictions apply to series A subscription warrants issued pursuant to Resolution No. 07/04/2019 of the Extraordinary General Meeting of 24 April 2019 on the issue of series A subscription warrants with exclusion of pre-emptive rights (intended for the incentive scheme):

The Warrants shall not be transferable, except where:

- a. the Warrants are sold to the Company for their cancellation;
- b. the Warrants are sold to an entity or entities designated by the Company subject to the consent of the Company's Management Board;
- c. the Warrants are sold in exceptional circumstances, subject to the consent of the Company's Management Board;
- d. the Warrants are inherited, either under statutory and testimonial inheritance.

3.9.9. Appointment of members of management bodies

The Management Board members are appointed and removed by the Supervisory Board (§ 20 of the Articles of Association).

The Management Board runs the Issuer's affairs and represents the Issuer.

The powers the Management Board result from applicable law (including the Polish Commercial Companies Code) and the Issuer's Articles of Association. The powers of the Management Board include all matters not reserved for the General Meeting or the Supervisory Board (§ 21(1) of the Articles of Association).

The authorized capital provisions contained in the Articles of Association have expired, therefore, as at the Report Date, the Management Board has no rights to issue shares (this right belongs to the General Meeting).

§ 20 of the Articles of Association reads as follows:

"§ 20 Composition and term of office

- 1. The Management Board shall be composed of 1 to 5 members appointed for a joint, three-year term, calculated in calendar years, from the day on which the appointment becomes effective. Each member of the Management Board may be reappointed for the next term of office.*
- 2. Management Board members shall be appointed and removed by the Supervisory Board.*
- 3. If a member of the Management Board is not able to perform their duties, the Supervisory Board may delegate a member of the Supervisory Board to temporarily perform the duties of such member of the Management Board.*
- 4. The mandate of a member of the Management Board shall expire no later than on the date of the General Meeting which approves the financial statements for the last full financial year within the particular term of office. The mandate of a member of the Management Board shall also expire upon death, resignation, or removal of the person concerned from the Management Board."*

3.9.10. Amendments to the Articles of Association

Any amendments to the Issuer's Articles of Association require a resolution by the General Meeting adopted by a majority of three quarters of votes, and need to be recorded in the register of entrepreneurs of the National Court Register – in accordance with Article 430 § 1 and Article 415 § 1 of the Commercial Companies Code.

According to Article 446 § 1 of the Commercial Companies Code, until 19 April 2020, the Management Board could decide to issue new shares and amend the Articles of Association in connection with an increase in the Issuer's share capital, within the authorized capital specified in the Company's Articles of Association. Another authorization for the Management Board to issue new shares within the authorized capital requires the prior amendment of the Articles of Association.

No changes to the Issuer's Articles of Association were made in the Reporting Period.

3.9.11. Brief of the General Meeting

The brief of the General Meeting of Shareholders and the basic rights and obligations of shareholders in terms of participation in the General Meeting are set out in the Commercial Companies Code, the Articles of Association and the Terms of Reference of the General Meeting available at: <https://ir.xtpl.com/pl/materialy/korporacyjne/>

Detailed powers of the General Meeting are indicated in Chapter III of the Articles of Association in the part relating to the General Meeting (§12–§16) and in Article 393 et seq. of the Commercial Companies Code.

In accordance with the Commercial Companies Code, the powers of the General Meeting include in particular: consideration and approval of the Management Report and the financial statements for the previous financial year; granting discharge to Management Board and Supervisory Board members for performance of their duties; taking decisions regarding claims for compensation for damage caused in the establishment of the Company or in the exercise of management or supervision; selling or leasing the enterprise or its organized part and establishing limited property right thereon; distributing profit or covering losses; issuing convertible bonds or preemptive bonds, and issuing subscription warrants referred to in Article 453 § 2 of the Commercial Companies Code; liquidating the Company; purchasing own shares for cancellation, cancelling shares and reducing the Company's share capital; merging, transforming and dividing the Company and making amendments to the Articles of Association.

In accordance with the Articles of Association, the powers of the General Meeting include:

- 1) setting the remuneration and the rules of remunerating members of the Supervisory Board, including members of the Audit Committee and other Supervisory Board committees;
- 2) granting consent for the Company to acquire shares for their cancellation;
- 3) adopting and amending the terms of reference of the Supervisory Board;
- 4) adopting and amending the terms of reference of the General Meeting.

During the General Meeting, the Management Board is required to provide shareholders, at their request, with information concerning the Company, if it is justified for the assessment of the matter included in the agenda. However, the Management Board will refuse to provide information if it could harm the Company, in particular if it involved revealing technical, commercial or organizational secrets of the business. An answer is considered given if the requested information is available on the Company's website at a place where shareholders can ask questions and receive answers.

The right to participate in the General Meeting is held only by persons who are shareholders of the Company sixteen days before the date of the General Meeting (day of registration of participation in the General Meeting, with each share carrying one vote at the General Meeting).

3.9.12. Supervisory Board and committees

The Supervisory Board consists of 5 to 7 members. Members of the Supervisory Board are appointed and removed by the General Meeting. Members of the Supervisory Board shall be appointed for a joint, three-year term of office.

The Supervisory Board of the current term of office was appointed by resolution of the Annual General Meeting of Shareholders of XTPL S.A. of 30 June 2020.

Composition of the Supervisory Board:

As at the Balance Sheet Date:	As at the Report Date:
Wiesław Rozłucki, PhD – Supervisory Board Chairman	Wiesław Rozłucki, PhD – Supervisory Board Chairman
Bartosz Wojciechowski, PhD – Deputy Chairman of the Supervisory Board	Bartosz Wojciechowski, PhD – Deputy Chairman of the Supervisory Board
Andrzej Domański – Deputy Chairman of the Supervisory Board	Andrzej Domański – Deputy Chairman of the Supervisory Board
Beata Turlejska-Zduńczyk – Supervisory Board Member	Beata Turlejska-Zduńczyk – Supervisory Board Member
Piotr Lembas – Supervisory Board Member	Piotr Lembas – Supervisory Board Member
Professor Herbert Wirth – Supervisory Board Member.	Professor Herbert Wirth – Supervisory Board Member.

In the Reporting Period there were no changes in the Supervisory Board.

The brief of the Supervisory Board is determined by Polish Commercial Companies Code, the Articles of Association and the Terms of Reference of the Supervisory Board available at the Issuer's website at: <https://ir.xtpl.com/pl/materialy/korporacyjne/>

Detailed powers of the Supervisory Board are indicated in Chapter III of the Articles of Association in the part relating to the Supervisory Board and in Article 381 et seq. of the Commercial Companies Code.

In accordance with the Articles of Association, the Supervisory Board's powers include:

- 1) evaluating, as at the end of each financial year, financial statements of the Company, in respect of their compliance with the books of account, documents and the facts;
- 2) evaluating the Management Board's report and the Management Board's proposals concerning the distribution of profit and cover of losses;
- 3) submitting to the General Meeting annual written reports on the results of the evaluation referred to in points 1)–2) above;
- 4) appointing and removing members of the Company's Management Board, and suspending, for important reasons, individual members of the Company's Management Board or the whole Management Board in the performance of their duties, as well as delegating members of the Supervisory Board to temporarily perform duties of members of the Management Board who are not able to perform their duties;
- 5) determining the remuneration of Management Board members;
- 6) expressing consent for the Company to enter into a significant transaction with a related entity – within the meaning of the Act of 29 July 2005 on public offering, conditions governing the introduction of financial instruments to organized trading and public companies, except where the provisions of this Act exclude such an obligation;
- 7) granting consent to acquire a business enterprise or an organized part thereof belonging to another entrepreneur, to join another company or purchase/acquire/dispose of shares in another company;
- 8) approving and amending the terms of reference of the Management Board;
- 9) expressing consent to grant members of the Management Board of the Company or members of the management boards of its subsidiaries the right to subscribe for or acquire the Company's shares as part of incentive schemes or remuneration systems based on shares or other financial instruments issued by the Company;
- 10) granting consent for the Company to make any decisions (including conclusion of an agreement) in the scope of disposal or acquisition of the Company's real estate or shares in real estate;
- 11) representing the Company in agreements with members of the Management Board and in disputes with the Management Board or its members;
- 12) selecting a statutory auditor to audit financial statements.

In addition to the audit committee described in point 3.9.14., no committees have been set up within the Issuer's Supervisory Board.

3.9.13. The Management Board of

The Management Board consists of 1 to 5 members. Members of the Management Board are appointed and removed by the Supervisory Board. Members of the Management Board are appointed for a joint, three-year term of office.

The Management Board of the current term of office was appointed by a resolution of the Supervisory Board of 30 June 2020 (which will continue until 30 June 2023).

Composition of the Management Board:

As at the Balance Sheet Date:	As at the Report Date:
Filip Granek, PhD, CEO	Filip Granek, PhD, CEO

Jacek Olszański – Management Board Member	Jacek Olszański – Management Board Member
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The brief of the Management Board is determined by Polish Commercial Companies Code and the Articles of Association available at the Issuer's website at: <https://ir.xtpl.com/pl/materialy/korporacyjne/>

Detailed powers of the Management Board are indicated in Chapter III of the Articles of Association in the part relating to the Management Board (§17-18) and in Article 368 et seq. of the Commercial Companies Code. The powers of the Management Board shall include all matters not reserved for the General Meeting or the Supervisory Board. The Management Board conducts current operations of the Company, manage its assets and represent it before third parties.

3.9.14. Audit Committee

Audit Committee

General information and composition of the Audit Committee:

By resolution of 5 June 2018, pursuant to Article 128(1) of the Act on statutory auditors, audit firms and public oversight of 11 May 2017 ("Statutory Auditors Act"), the Supervisory Board set up an Audit Committee at the Company.

The brief of the Audit Committee is set out in the "Terms of Reference of the Audit Committee of XTPL S.A." adopted by the Supervisory Board by Resolution of 5 June 2018.

The powers and duties of the Audit Committee provided for by law are performed by the Issuer's Audit Committee as of 20 February 2019 – i.e. from the date when the Issuer's shares were admitted to trading on the regulated market and when the Issuer obtained the status of a public interest entity.

The Audit Committee consists of four members.

Composition of the Audit Committee:

<u>As at the Balance Sheet Date:</u>	<u>As at the Report Date:</u>
Piotr Lembas – Chairman of the Audit Committee, independent Audit Committee member*	Piotr Lembas – Chairman of the Audit Committee, independent Audit Committee member*

Wiesław Rozłucki, PhD – independent Audit Committee Member	Wiesław Rozłucki, PhD – independent Audit Committee Member
Professor Herbert Wirth – independent Audit Committee Member	Professor Herbert Wirth – independent Audit Committee Member
Piotr Lembas – independent Audit Committee Member	Piotr Lembas – independent Audit Committee Member

*As required by the Best Practice for GPW Listed Companies 2021, on 26 May 2021, the Company's Supervisory Board changed the Chairman of the Audit Committee.

Piotr Lembas was appointed to this role, replacing Wiesław Rozłucki.

This was due to Principle 2.9 of the Best Practice 2021, which says that "The chairman of a supervisory board should not combine his function with managing the work of the supervisory board's audit committee". For those reasons, the Company decided to introduce the changes described above.

As required by the Best Practice for GPW Listed Companies 2021, on 26 May 2021, the Company's Supervisory Board changed the Chairman of the Audit Committee. Piotr Lembas was appointed to this role, replacing Wiesław Rozłucki. This was due to Principle 2.9 of the Best Practice 2021, which says that "The chairman of a supervisory board should not combine his function with managing the work of the supervisory board's audit committee". For the above reasons, the Company the changes described above.

Independent members of the Audit Committee:

As at the Report Date, all Members of the Audit Committee (Wiesław Rozłucki, Piotr Lembas, Herbert Wirth and Andrzej Domański) meet the independence criteria indicated in Article 129(3) of the Act on Statutory Auditors and have made appropriate statements in this respect.

Knowledge and skills of the Audit Committee members:

Piotr Lembas and Andrzej Domański have knowledge and skills of accounting. Their respective backgrounds are described below.

Piotr Lembas has a degree in Finance and Accounting, the Faculty of Management, Computer Science and Finance of the University of Economics in Wrocław. Then he earned a degree in Master Studies in Finance, a CFA affiliate programme. He holds the Chartered Financial Analyst (CFA) certificate (no. 200403). Earlier, in 2013-2015, Piotr Lembas worked with EY Corporate Finance as a senior consultant. For nearly two years (2015–2017), he worked in the financial department of the Adiuvio Investments S.A. Group, where he supported the financial director in the preparation of financial statements for the purpose of fulfilment of the obligations of WSE listed entities.

Andrzej Domański has knowledge and skills of accounting. Their respective backgrounds are described below.

Andrzej Domański has a university degree (MA in economics and a CFA certification) and held managerial positions (including on management boards) for many years.

Professional career:

October 2016 – September 2019: Member of the Management Board of Eques Investment TFI, responsible for the Capital Markets Department, fund management, preparation of macroeconomic and stock market analyses

September 2014 – July 2016: Head of the Fund Management Department at Noble Funds TFI, responsible for coordinating the work of the department, supervising other managers, and working on new products.

April 2010 – September 2014: Portfolio Manager at Noble Funds TFI, responsible for managing the Noble Equity Fund, Stable Growth Fund Plus, Timing Noble Fund and Noble Fund Global Return.

November 2008 – March 2010: Equity Portfolio Manager at KBC TFI, responsible for making allocation decisions, company selection and building model portfolios.

May 2007 – June 2008: Stock market dealer – Head of the Transaction Execution Office at KBC TFI, responsible for concluding transactions on the equity market, supervising the execution of orders, maintaining relations with brokerage houses and development of procedures for a newly established unit (Dealing Desk).

April 2006 – May 2007: Sector Analyses Specialist at the BPH Economic Analyses Office, responsible for monitoring and preparing reports on the situation in the liquid fuels, gas, metals and property sectors.

November 2005 – March 2006: Specialist in the Investor Relations Office at PKO BP, responsible for preparing reports and presentations on the Bank's results, and information materials for investors, as well as for contacts with investors and analysts.

Prof. Herbert Wirth, BEng, PhD, DSc, has knowledge and skills relating to the industry in which the Issuer operates. Their respective backgrounds are described below.

XTPL S.A. operates in the materials technology industry. Research and development is the key field of its operations. The buyers of the Company's products and services are large international corporations operating outside the country (international trade). Professor Herbert Wirth has knowledge of the materials technology industry (Master of Science, PhD, AGH University of Science and Technology in Kraków and current professor at the Wrocław University of Technology) and in the business administration industry (completed postgraduate studies in project management at George Washington University, School of Business and Public Management). Professor Herbert Wirth also has skills in the field of material technologies as well as international trade and management of global corporations (e.g. acquired while serving as the CEO of KGHM). In addition, he has experience in research and development – he held managerial functions at Cuprum sp. z o.o. (R&D Center) and served as Head of Development and Project Management at KGHM).

Provision of authorised non-audit services by the auditor:

In the Reporting Period, the auditor of the Issuer's financial statements did not provide any permitted non-audit services to it. This is with the exception of the audit firm's assessment of the report on remuneration of Management Board and Supervisory Board Members. The assignment was approved by the Audit Committee, which assessed the audit firm's independence in this regard. The audit firm's assessment of the report is attached to the ESPI Current Report No. 11/2021 of 14 June 2021.

Auditor selection:

On 26 May 2021, the Issuer's Supervisory Board selected an audit company to perform the statutory audit of the financial statements and carry out a limited review of the interim financial statements (standalone and consolidated) of XTPL.

The assignment covers a term of two years (i.e. interim reviews for 2021 and 2022 and statutory audits for 2021 and 2022). The selected auditor is 4AUDYT sp. z o.o. having its registered office in Poznań.

The selection was preceded by a tender procedure (in accordance with the policy and procedure on selection of an audit firm). Invited to submit their bids were also audit firms which obtained less than 15% of their total audit fees from public interest entities in Poland in the previous calendar year. The bid evaluation procedure contained transparent and non-discriminatory selection criteria. The recommendation regarding the selection of the audit firm to conduct the audit complied with the binding conditions and was made under a selection procedure arranged by the Issuer in accordance with the applicable criteria.

Policy and procedure on selection of an audit firm:

The Audit Committee adopted the policy and procedure on selection of an audit firm to audit unconsolidated and consolidated financial statements, which is available on the Issuer's website at <https://ir.xtpl.com/pl/materialy/korporacyjne/>

The purpose of the auditor selection policy and procedure is to define transparent and non-discriminatory rules for the process leading to submission by the Audit Committee, free from any influence by third parties, recommendations regarding the audit firm, and the selection by the Supervisory Board of an independent and competent audit firm to conduct the audit.

The Company may invite any audit firms to submit their proposals for a statutory audit provided that this is not in breach of Article 17(3) of Regulation No 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC ("Regulation No 537/2014"), which applies to the maximum duration of an audit engagement with a particular audit firm; organisation of the tender procedure does not preclude the participation in the selection procedure of firms which received less than 15% of the total audit fees from public interest entities in the Member State concerned in the previous calendar year, as specified in the list of audit firms referred to in Article 91 of the Statutory Auditors Act; this is not in breach of the provisions which are the basis for provision of non-audit services by the audit firm, including Article 5 of Regulation No 537/2014 and Article 136 of the Statutory Auditors Act, which relate to prohibited services.

When selecting an audit firm, the Supervisory Board acts on the basis of the below criteria and recommendations from the Audit Committee. In the case of selection of an audit firm to conduct a statutory audit for the Issuer, except in the situation when the audit engagement is extended, the Audit Committee presents a recommendation to the Supervisory Board containing in particular:

- at least two possible choices for the audit engagement and a duly justified preference for one of them indicated to the Audit Committee;
- a statement that the recommendation is free from any undue influence by third parties;
- a statement that the Company has not entered into any agreements containing clauses referred to in Article 66(5a) of the Accounting Act.

The recommendation of the Audit Committee is made following a tender procedure, using the procedure described in detail in the said policy.

The Supervisory Board, when selecting an audit firm, and the Audit Committee, when drawing up the recommendation, may take into account the following criteria in particular (details shall be determined in the tender documentation): the audit firm's prior experience in conducting audits of financial statements and consolidated financial statements of companies, including public companies; the audit firm's capacity, including in terms of HR and organisation, to ensure full range of services specified by the Company in the request for proposal, taking into account the professional nature of this activity; the fee proposed by the audit firm; a possibility to conduct the audit within the time limit specified by the Company in the request for proposal; the audit firm's impartiality and independence in relation to the Company and the Group, within the meaning of the Act, in particular Article 69–73 of the Statutory Auditors Act; having the rights and authority to carry out the audit in accordance with the Statutory Auditors Act; satisfying the conditions to be able to issue an unbiased opinion in accordance with the Statutory Auditors Act; compliance with the conditions for the rotation of the audit firm and the key statutory auditor in accordance with the Statutory Auditors Act and Regulation (EU) No 537/2014; compliance by the audit firm with the standards pertaining to the audit of financial statements; other justified criteria, indicated at the discretion of the Audit Committee and the Supervisory Board.

When selecting an audit firm, the Supervisory Board uses the following rules: the rule of rotating the audit firm, based on which the maximum duration of uninterrupted statutory audit engagements with the same audit firm or an audit firm connected with such audit firm or any member of its network in the EU to which these audit firms belong, may not exceed 10 years; the rule of a cooling off period, based on which after the maximum period of uninterrupted duration of the audit engagement the current audit firm shall not carry out any statutory audit for the Company over the following 4 years; the rule of rotating the key statutory auditor, based on which the key statutory auditor may not carry out statutory audits at the Company for a period longer than 5 years. The key statutory auditor may carry out a statutory audit of the Company again after at least 3 years following the end of the last statutory audit. The rule is to select an audit firm for a minimum period of two years.

Permitted non-audit services policy

The Audit Committee adopted the policy on provision by the audit firm which conducts an audit, by its affiliates and by members of its network, of permitted non-audit services. The policy is available on the Issuer's website at <https://ir.xtpl.com/pl/materialy/korporacyjne/>
<https://ir.xtpl.com/pl/materialy/korporacyjne/>

The policy reflects the provisions of Regulation No 537/2014 and the Statutory Auditors Act.

The policy on provision by the audit firm which conducts an audit, by its affiliates and by members of its network, of permitted non-audit services provides that the Audit Committee issues a decision with consent to the provision of non-audit services after assessing whether the service is permitted, whether the service is not prohibited and whether there are any threats to the independence of the audit firm. The Audit Committee communicates its decision immediately to the Supervisory Board and the Management Board of the Company. Permissible services may be provided to the extent not related to the tax policy of the Company and after the Audit Committee has carried out an assessment of risks and independence safeguards.

The statutory auditor or audit firm carrying out the statutory audit of the Company and members of their networks, or entities connected with the statutory auditor or audit firm, may not provide the Company, its parent company or entities controlled by it with any prohibited services other than financial audit in the following periods: from the beginning of the audited period to the issuance of an audit report and in the financial year immediately preceding the above period, with respect to services related to development and implementation of internal control procedures and risk management

procedures connected with preparation or control of financial information or development and implementation of technological systems related to financial information.

Audit Committee meetings:

During the Reporting Period, the Audit Committee held 5 meetings.

During those meetings, the Audit Committee:

1. Adopted an overall work program of the Audit Committee for 2021.
2. Discussed with the Management Board the decision on extending the contract with the statutory auditor or appointing a statutory auditor.
3. Discussed with the Management Board the method of implementing internal audit at the Company.
4. Adopted a resolution on granting consent to the assignment relating to assessment of the report on remuneration of Management Board and Supervisory Board Members.
5. Presented the work of the Management Board of XTPL S.A. in the financial year 2020.
6. Summarized cooperation to-date with the auditor in relation to the audit of financial statements and discussed the conversation between the statutory auditor and Piotr Lembas.
7. Discussed the standalone and consolidated financial statements of XTPL S.A. for the financial year of 2020.
8. Discussed the Management Board's report on XTPL S.A. activities
9. Discussed the additional report presented to the Audit Committee.
10. Adopted a resolution on the "Information for the Supervisory Board of XTPL S.A. about audit results, and explaining how the audit has contributed to the reliability of financial reporting, and what role the Audit Committee has played in the audit process".
11. Adopted a resolution on presentation to the Supervisory Board of XTPL S.A. of a recommendation regarding assessment of the standalone and consolidated financial statements of XTPL S.A. for the financial year 2020.
12. Adopted a resolution on presentation to the Supervisory Board of XTPL S.A. of a recommendation regarding assessment of the Management Board's report on the activities of XTPL S.A. for 2020.
13. Passed a resolution on adoption of the report on the activities of the XTPL Audit Committee for the period from 01/01/2020 to 31/12/2020.
14. Discussed the quarterly report for Q1 2021.
15. Discussed the IT audit.
16. Discussed the cooperation with the consulting company in the area of internal audit in 2021.
17. Discussed the submitted bids and results of the tender procedure relating to the auditor selection.
18. Discussed the recommendation to the Supervisory Board regarding selection of the audit firm which the Audit Committee plans to entrust with the statutory audit/ limited reviews of financial statements
19. Adopted a resolution on the "Recommendation made to the Supervisory Board regarding selection of the audit firm which the Audit Committee plans to entrust with the statutory audit/ limited reviews of financial statements".
20. Listened to Management Board's selected information relating to the financial statements and the Management Report for the first half of 2021 and the main points contained in the independent auditor's report on the review of the interim condensed consolidated and standalone financial statements.
21. Discussed the H1 2021 report and points from review of the condensed consolidated and standalone financial statements.
22. Discussed the quarterly report for Q3 2021.

In addition, discussions were held with the auditor regarding the issue of the auditor's independence, the strategy performing financial statements audit and the objectives and scope of the audit. The level of materiality of the audit and how it was determined were also discussed with the auditor.

A detailed description of the activities of the Audit Committee during the Reporting Period will be presented in the report on the activities of the Audit Committee, which will be a part of the report on the activities of the Supervisory Board (it will be made available in the materials relating to the convocation of the Annual General Meeting).

Signatures:

Filip Granek
Chairman of the
Management Board



Jacek Olszański
Member of the
Management Board



3.10. OTHER STATEMENTS

a) Management Board's statement

The Management Board of XTPL S.A. declares that to the best of its knowledge the annual consolidated and unconsolidated financial statements for 2021 and the comparable data have been prepared in accordance with the applicable accounting policies and give a true, fair and clear view of the assets, financial position and profit or loss of the Issuer.

The Management Board of XTPL S.A. declares that the Management Board's report on the activities of the Issuer and the Group gives a true view of development, achievements and the situation of the Issuer and the Group (including a description of key threats and risks).

Signatures of Management Board members:

Filip Graneł
Chairman of the
Management Board



Jacek Olszański
Member of the
Management Board



Wrocław, 26 April 2022

b. Information from the Management Board regarding auditor selection

On the basis of the Supervisory Board's statement and the Supervisory Board's resolution on auditor selection for audit of the Company's annual financial statements of 16 July 2019, the Management Board of XTPL S.A. advises that the auditor for the 2021 annual consolidated and standalone financial statements was selected in accordance with the applicable law, including the legal provisions governing the selection of an audit firm.

In addition, the Management Board advises that:

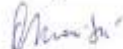
- a) the audit firm and members of the auditing team responsible for audit of the 2020 annual consolidated and unconsolidated financial statements met the conditions for preparing an impartial and independent audit report on the annual financial statements in accordance with applicable laws, professional standards and professional ethics;
- b) the applicable laws related to the rotation of the audit firm and the key statutory auditor and the mandatory cooling off period are complied with by the Company;
- c) the Company has an auditor selection policy in place as well as a policy on the provision for the Issuer of non-audit services by the audit firm, including services conditionally excluded from the range of prohibited services.

Signatures of Management Board members:

Filip Graneł
Chairman of the
Management Board



Jacek Olszański
Member of the
Management Board



Wrocław, 26 April 2022

c. Statement of the Supervisory Board

Pursuant to § 70(1)(8) and § 71(1)(8) of the Regulation on current and financial information provided by issuers of securities, the Supervisory Board of XTPL S.A. declares that XTPL S.A.:

- a) complies with the legal provisions regarding appointment, composition and functioning of the Audit Committee, including those relating to fulfillment by its members of the independence criteria and the requirements re knowledge and skills in the industry in which the Issuer; and
- b) the Audit Committee of XTPL S.A. performed its tasks of the Audit Committee provided for in the applicable regulations.

Signatures of Supervisory Board members:

d. Management Board's opinion

In its opinion about the consolidated and standalone financial statements of XTPL S.A. for the financial year 2021, the audit firm neither expressed a qualified opinion nor issued a negative opinion.

Signatures of Management Board members:

Filip Grąnek
Chairman of the
Management Board



Jacek Olszański
Member of the
Management Board



Wrocław, 26 April 2022

e. Assessment by the Supervisory Board

The Supervisory Board of XTPL S.A. declares that it has assessed the Management Board's report on the Issuer's and the Issuer's Group's activities in the Reporting Period and has assessed the unconsolidated and consolidated financial statements for the financial year 2021 in terms of their compliance with the books of account, evidence and the facts, and as a result of the assessment it confirms that these documents have been prepared in accordance with the Company's books of account, evidence and the facts.

The Supervisory Board made a positive assessment of the Management Board's report on activities of the XTPL Group and the consolidated financial statements for the year ended 31 December 2021 based on the analysis of:

- a) content of the report on the Issuer's and the XTPL Group's activities the consolidated financial statements of XTPL S.A. for the financial year ended 31 December 2021 submitted by the Issuer's Management Board;
- b) report on the audit of the unconsolidated and consolidated financial statements of XTPL S.A. prepared by 4Audyt sp. z o.o.;
- c) information from the Audit Committee on the course and results of the audit and on reliability of the financial reporting.

Signatures of Supervisory Board members:

f. Approval for publication

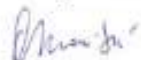
The annual report for the financial year 2021 was approved for publication by the Management Board of XTPL S.A. on 26 April 2022.

Signatures of Management Board members:

Filip GrANEK
Chairman of the
Management Board



Jacek Olszański
Member of the
Management Board



Wrocław, 26 April 2022