SPECTRASYSTEMS

Leading the industry in innovation, performance and sustainability

Spectra Systems Corporation
Annual Report and Accounts 2023

Spectra Systems is an established world leader in providing security technology that includes software and advanced materials for use in banknotes, tax and postage stamps, product authentication, and gaming.

Spectra provides integrated solutions comprised of engineered materials for authentication and hardware and software systems which verify the unique signatures of the authentication materials. Through a series of strategic supply and licensing agreements with governmental, institutional and corporate partners, we have become industry leaders in the currency and document authentication markets, and one of the world's leading suppliers of high-speed currency authentication sensors. Most recently we have developed and perfected Fusion™ and sensors resulting in the world's first machine-readable polymer substrate for banknotes. We have created a solid supply chain to provide both covert and machine-readable covert substrates to take advantage of this rapidly growing segment of the industry.

Our Banknote Disinfection System (BDS) was developed in response to the Covid-19 pandemic. The BDS is capable of sterilizing up to 5 million banknotes in an hour and is in use by an Asian central bank.

Spectra's solutions are also used for authenticating and tracking well-established consumer branded products such as energy drinks, shampoo, wine, spirits, and tobacco. This area has been expanded through the acquisition of Cartor Security Printers, a world leader in security printing of postage and tax stamps.

Spectra's security software also provides secure Internal Control Systems (ICS) to US and international lotteries including Norsk Tipping in Norway, the Netherlands, and Canada and 17 US lottery jurisdictions including Puerto Rico. Spectra Systems is an associate member and active participant in the North American and Provincial Lottery Association (NASPL) and the World Lottery Association (WLA).

STRATEGIC REPORT

CORPORATE GOVERNANCE

FINANCIAL STATEMENTS

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HIGHLIGHTS

Revenue (US$ million)

20.3

(2022: 19.6)

Adjusted PBTA (US$ million)

8.2

(2022: 7.8)

Adjusted earnings per share (US¢)

13.9

(2022: 14.5)

1 Before stock compensation expense and excludes non-controlling interest

2 Before amortization and stock compensation expense, and excludes non-controlling interest

3 Excludes US$513k (2022: US$1,099k) of restricted cash and investments

4 Cartor Holding Limited debt acquired on 21 December 2023

Financial highlights

- Revenue of US$20,288k (2022: US$19,627k), up 3.4%
- Adjusted EBITDA[1] up 3.9% at US$8,394k (2022: US$8,077k)
- Adjusted PBTA[1] up 6.0% to US$8,231k (2022: US$7,765k)
- Adjusted earnings per share[2] down 4.1% to US 13.9 cents (2022: US 14.5 cents)
- Cash generated from operations of US$7,524k (2022: US$8,040k)
- The Board is declaring an annual dividend of US$0.116 per share to be paid in June 2024
- Cash[3] of US$13,253k (2022: US$17,496k) and debt[4] of US$5,583k (2022: US$nil) at December 31
- Acquisition of Cartor Security Printers for £5.5 million in cash and £3 million in stock at closing with an additional £2 million of stock upon achieving milestone in 18 months

Operational highlights

- Appointment of Edward Spies as Chief Financial Officer in May 2023
- On 21 December 2023, the Company acquired 100% of the shares of Cartor Holding Limited ("Cartor") in a cash and stock deal for a maximum of £10.5 million in total consideration. Cartor's operations for the remaining ten days of the fiscal year have been incorporated in the financial statements
- Sensor development project progressing towards completion and manufacturing contract being negotiated
- Largest order in the Company's history for covert materials from a central bank received in October 2023
- Ongoing polymer substrate product refinement with Middle Eastern central bank to qualify as a supplier
- New K-cup customer trials successful with first sales in February 2024

SPECTRA AT A GLANCE

Spectra is a highly responsive organization that develops advanced solutions for its customers.

Spectra authentication products are comprised of engineered materials and hardware systems which verify the unique signatures of the authentication materials in banknotes and brand products.

With our acquisition of Cartor Security Printers, we will be able to rapidly advance the commercialization of our polymer substrate products, as well as expanding the use of our optical materials in postage, tax, and revenue stamps.

Our gaming software platforms are used by lotteries to validate the large number of transactions processed each day.

45 billion
banknotes with our security features are circulating worldwide.

950 million
dollars of energy drinks sold annually that contain our materials.

155 million
American passports contain our document technology.

25 million
transactions processed by our ICS gaming technology on a daily basis.

60 million
bottles of hair product are protected from counterfeiting with our SpectraGuard technology.

8 million
packs of high-end cigarettes protected by our TruBrand™ technology annually.

OUR CUSTOMERS

Our end customers include a G7 central bank and one of the world's largest commercial security printers, which has previously supplied our technology to a second G7 central bank and numerous other central banks.

With the acquisition of Cartor Security Printers we are now the exclusive supplier of postage stamps to Royal Mail in the United Kingdom, as well as numerous other postal jurisdictions.

Additionally, several recognizable brand authentication customers use our technologies to protect their consumer goods brands, while our Secure Transactions Group provides solutions for 21 lotteries, 17 in the United States of America and 4 international.

Our solutions have been used by:

- 20 central banks including two G7 central banks;
- commercial security printers and papermakers;
- Crane & Co.;
- suppliers of security threads for world currencies;
- LMI Packaging Solutions;
- Fres-Co System USA, Inc.;
- Vins Plastics;
- multinational consumer product companies;
- governments of Turkey, India, Malaysia, the Netherlands and Norway;
- Intralot SA;
- Scientific Games International Inc.;
- International Game Technology PLC;
- lotteries in 17 states within the United States of America;
- lotteries in three countries;
- Royal Mail; and
- PostNord AB.

OUR MARKETS

With over 150 billion banknotes manufactured annually worldwide and 85% of all transactions performed using banknotes, this business has proven to be a high-quality, long-term revenue source for the Company.

Our largest G7 central bank orders received in 2023 highlight the importance of demand for reserve bank currencies as a store of value. With 20 central banks having used our products and newly developed technologies for polymer banknotes, we expect continued strong earnings from this sector. With polymer substrate banknotes growing at 18% CAGR, the Company is positioned to enter this market with conventional and machine-readable substrates through our exclusive supply agreement with Toray Plastics America, and in-house printing capability at our Cartor facility; we expect to penetrate this market within five years.

With billions of dollars lost to counterfeit goods, the ability to empower anyone with a smartphone to authenticate products and banknotes containing our materials transforms the market. Our TruBrand™, TruStamp™ and TruNote™ suite of solutions are the only materials-based smartphone authentication technologies in the world and rely on our proprietary materials rather than easily counterfeited images.

Spectra's current suite of portable reader-based solutions as well as related optical materials can be used for authenticating and tracking consumer and tax-bearing products. Our reader-based business has grown considerably in Asia and has several recognizable brand owners as customers.

Consumer confidence is central to strong lottery sales and any perceptions of indiscretions in the lottery operation can destroy years of effort in building a strong customer base. Lotteries and gaming regulators need an independent mechanism for providing visibility and assurance that their operation is playing by the rules. Many lottery jurisdictions require that an independent Internal Control System (ICS), such as our Premier64 Integrity ICS, be in place to meet consumer assurance requirements.

OUR SOLUTIONS

Authentication systems

Spectra's sophisticated capabilities allow us to invent, develop and manufacture integrated solutions comprised of a system of taggant materials and sensor equipment to authenticate banknotes and security documents at all levels of security.

- Level I: Provides unique overt, luminescent visual effects.
- Level II: Provides the public with a smartphone-based and materials-based solution to examine banknotes and documents for authenticity.
- Level III:
  - Has been used by 20 central banks, including two G7 banks; our covert materials and sensors provide the highest level of banknote security worldwide.
  - Is the world's first machine-readable polymer substrate.

Optical materials

In the course of developing our authentication solutions for over a decade, Spectra has created a large number of unique optical materials which are responsive to various forms of excitation, from light to ambient environmental conditions, including gaseous constituents. These products are used in secure documents as well as K-cups and banknote security threads.

This segment of our business has grown modestly on the phosphors, secure documents and banknotes side and significantly with K-cups having added a new printer in 2023 that is placing orders in 2024.

Polymer banknote substrates: security and sustainability

Our entrance into the growing polymer substrate market has gained traction rapidly. We are poised to penetrate this market ahead of schedule with ongoing central bank trials and aggressive marketing to private printers, several of which print commemorative notes for central banks considering the switch to polymer.

We were the first company to close the security gap between paper and polymer with our breakthrough technology for producing crystal clear yet covert machine-readable biaxially oriented substrates. We also recently launched our sustainable circular polymer substrate which has an audited supply chain that ensures that equivalent amounts of materials are recycled.

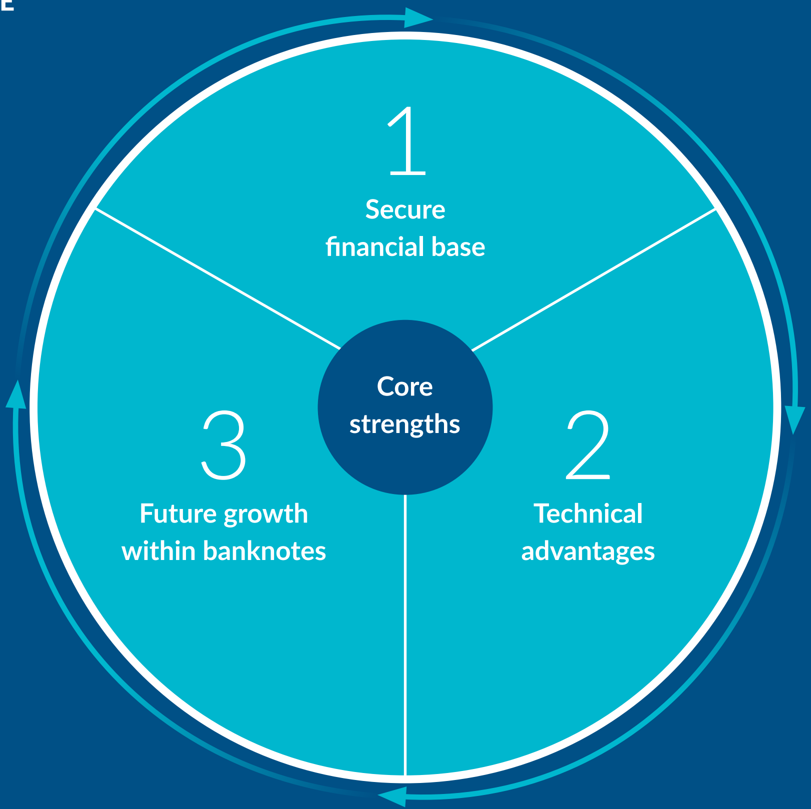
Secure transactions

Spectra's Secure Transactions Group is a leading supplier of independent Internal Control Systems (ICS) for real-time fraud control and risk management to government-sanctioned gaming operators. Currently deployed in North America, Europe and Asia, our systems monitor and audit more than US$30 billion in annual sales for online, internet and mobile phone-based lotteries and pari-mutuel organizations.

Our Premier64 Integrity ICS benefits and advantages include:

- fully automated independent real-time monitoring;
- support of both online and instant lottery games; and
- monitoring online systems from all major gaming operators.

INVESTMENT CASE



Our core strengths

Spectra is a profitable, cash–generative technology business with a small debt at interest rates below 1% post the acquisition of Cartor Security Printers and predictable long-term income streams and excellent growth opportunities.

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1. SECURE FINANCIAL BASE

- Successfully commercialized optical technologies across multiple sectors
- Approximately 45 billion banknotes worldwide and 155 million US passports contain our security technologies
- Long-term security features for central banks, governments and global corporations which once installed are near permanent features on multi-year contracts
- For the twelve months to December 31, 2023:
  - Generated revenues of US$20.3 million
  - Adjusted profit before tax of US$8.2 million
  - Generated cash from operations of US$7.5 million

2. TECHNICAL ADVANTAGES

- Very little reliance on third parties
- Manufacturing, servicing and R&D all managed in house
- Long-term management team holds the technical expertise and is fully aligned to shareholders with a collective shareholding of 49.5 million (including share options)
- Next generation of products includes potentially transformative growth from polymer banknote substrates

3. FUTURE GROWTH WITHIN BANKNOTES

- Growth in use of polymer banknotes is a clear opportunity for Spectra to sell Fusion™, its newly developed machine-readable and sustainable polymer substrate
- Significant scope to increase market share of the growing banknote authentication market through innovative materials
- Breakthrough technology for disinfecting banknotes for casinos and central banks in the event of another pandemic
- A comprehensive contract with a major world central bank for the development, manufacture and servicing of a sensor system with the potential of generating US$20 million of profits between 2025 and 2027

Focused on our future growth.

Our strategic priorities

Spectra's aim is to generate attractive returns for shareholders made up of capital and income growth (historical dividend yield exceeding 4%).

STRATEGIC AIM
Capitalize on existing customer relationships and suite of security products

Development strategy

- Future development of covert materials and sensors will continue to be primarily externally funded
- Engage with existing customers, including central banks and security suppliers, to promote the concept of upgrading their security features to incorporate public and machine-readable security

Progress

- Completed supply chain mitigation program with central bank worth US$1.3 million for preparation and received go ahead for production in 2022 at 22% price increase
- Revenue from our optical and security phosphor materials remained strong
- Continued momentum towards customer acceptance of latest pre-production sensor units
- Expansion of sensor capabilities to detect exotic counterfeits
- Development and sale of a Banknote Disinfection System

Outlook

- Completion of sensor development and revenue recognition of development payments
- First sensor shipments to a major world central bank expected in 2025
- New online Quality Control system contract with central bank

STRATEGIC AIM
Open new sales channels for the full spectrum of our product offering: Cartor Security Printers acquisition

Development strategy

- Engage with security ink suppliers, commercial printers, government agencies and brand owners to promote the use of our public and machine-readable security materials and detection systems
- Acquisition of Cartor Security Printers leverages its sales channels to accelerate sales of our optical materials
- Continue development of authentication technologies designed to address evolving counterfeiting threats

Progress

- Our recent development of new and modified smartphone technology based on our TruBrand™ patents to leverage Cartor Security Printers sales pipeline
- Began a new testing program to qualify our material with a Canada-based K-cup lid printer
- Added a new Global Sales Director of Banknote Technology

Outlook

- Increased sales of our newest phosphor products
- Further growth of our K-cup materials business
- New opportunities with passport integrators

STRATEGIC AIM
Grow our newest technology for polymer banknotes

Development strategy

- Increase sales and marketing programs to promote our Fusion™ polymer banknote substrate offering
- Actively engage with the three major stakeholders in the banknote industry, which include ink manufacturers, security printers, and state print works, to validate our Fusion™ polymer substrate

Progress

- Increased sales efforts for polymer banknote substrates with appointment of Global Sales Director for Banknote Technology and launch of enhanced website
- Produced a large number of print-ready Fusion™ polymer sheets for a Middle Eastern central bank laboratory print trial
- Received central bank request to provide large quantities of Fusion™ substrate for a large print trial ongoing in 2023
- Formed a close working relationship with the largest commercial printer of polymer banknotes and commenced a project to develop and produce a house note that will incorporate both our Fusion™ machine-readable security, as well as its newest public security feature

Outlook

- Opportunity to bid in a polymer banknote tender
- A commemorative note series using our Fusion™ polymer substrate
- Production of high-quality house notes to aid in joint marketing programs

Engaging with our stakeholders.

Section 172

Section 172 of the Companies Act 2006 requires the Board of Directors to take into consideration the interests of stakeholders and other matters in their decision making. The Board of Directors of the Company believes that it has acted in a way to best promote the success of the Company. The Directors fulfill their duty by ensuring that there is a strong governance structure at the Board level and throughout the Company. The Board regularly reviews our principal stakeholders and how we engage with these stakeholders and has identified our shareholders, customers, employees and suppliers as our key stakeholders. The Board takes seriously the views of these stakeholders in setting and implementing our strategy. In the following pages, we set out how we have engaged with these key stakeholders.

In addition to these key stakeholders, the impact on the environment and the communities in which the Company operates is considered when making decisions.

During 2021, the Company donated US$35,000 to the Leicester Royal Infirmary SACT Suite Extension project. In terms of protecting the environment, the Company converted to LED lighting at our research and development and manufacturing facilities to reduce our carbon footprint and reduce electric consumption by an estimated 59,000 kWh annually. In addition, we actively recycle solvents whenever possible and utilize recycled labeling products.

The Company continued its efforts to improve sustainability with particular focus on our product manufacturing processes. Our raw materials are sourced from suppliers with sustainability programs in effect and our Fusion™ polymer banknote substrate is produced by our manufacturing partners which have implemented solar farms, and cogeneration plants, follow a zero landfill policy, and deployed new manufacturing equipment that operates on 30% less energy.

Shareholders

Why we engage

- To ensure that our strategy is aligned with the interests of shareholders
- To increase the share price and total shareholder return
- To give a clear and consistent message

How we engage

- Investor interaction via phone calls, face to face meetings, Zoom meetings, site visits and investor roadshows
- Regular investor meetings following the full-year and mid-year results
- Issuance of the annual report, mid-year results and RNS issuances throughout the year
- Updating our investor relations website
- Participate in recorded interviews which are disseminated and posted on our website

Employees

Why we engage

- To ensure we maintain a highly motivated and skilled workforce
- To ensure ongoing focus on health and safety and employee wellbeing
- To support employee educational advancement

How we engage

- Regularly scheduled meetings to encourage the generation of new ideas
- Senior management maintains an open door policy and invites discussion from our employees
- Professional development and a tuition reimbursement program
- Covid-19 protocols to safeguard the health of our employees
- Senior and long-serving staff are incentivized through the Company Share Option Plan, with 3.3 million options currently outstanding to employees
- Annual holiday party and Company outing to foster camaraderie

Customers

Why we engage

- To exceed the expectations of our customers and build long-term relationships
- To maintain a high level of product quality

How we engage

- A dedicated account team for our customers to provide timely responses
- Regular customer meetings to discuss the “customer experience”
- Service-level agreements and quality standards
- Providing 24 x 7 support for critical customer needs
- Going “above and beyond” to meet the complete satisfaction of our customers

Suppliers

Why we engage

- To manage supply chain risk, especially in regards to Covid-19
- To build a global supply chain and develop long-term relationships to make materials and services available when needed
- To ensure the use of the best quality materials and resources we can source
- To ensure security of supply and high supplier standards
- To ensure our suppliers have sustainability programs in place

How we engage

- Regular communication with our key suppliers
- Supplier evaluations and audits

We continue to develop and sell cutting-edge technologies to remain the innovation leader in the authentication industry and to offer our shareholders the springboard to even bigger growth of their Company.

Introduction

We are delighted to report that we outperformed the 2022 earnings results with revenue for the year up 3.4% at US$20,288k (2022: US$19,627k), primarily driven by pre-production development contracts as well as strong demand for our materials to meet production requirements of our long-standing central bank customer.

As a result of the increased revenue, adjusted EBITDA (before stock compensation expense) for the year increased 3.9% to US$8,394k compared to the prior year of US$8,077k.

Having generated cash from operations of US$7,524k (2022: US$8,040k), cash at the period end was US$13,253k (2022: US$17,496k), including the settling the Cartor acquisition cash consideration of US$7 million. This also follows the US$5,182k paid to shareholders during June in the form of the Company's dividend of US$0.115 per share.

The Company has made further progress in 2023 with revenue, adjusted profit before tax and amortization and adjusted EBITDA all ahead of the prior year. EPS is slightly lower this year primarily due to a combination of the issuance of additional shares to Cartor Security Printers ("Cartor", CSP) as part of the acquisition cost as well as increased taxation borne by the Company due to the full utilization of net operating loss tax and credits in 2024. Our cash position remains strong, even after the Cartor acquisition. Cash generation was driven by sensor development milestones and prepayments, record sales of covert materials to a central bank and strong optical materials sales.

The acquisition of Cartor is transformative and brings security printing into the core capabilities of the Company. Cartor brings many optical materials opportunities through its existing sales pipelines and provides Spectra with a secure supply on a par with the two largest banknote polymer substrate suppliers. Excess capacity at Cartor will be critical to polymer substrate manufacturing and the acquisition will increase Spectra margins and supply chain stability.

The combination of the sensor revenues, expected to begin with the execution of the manufacturing contract, as well as the increased opportunities for optical materials and downstream polymer substrate sales are expected to result in record revenues, cash generation, and continued long-term growth.

The Board therefore believes that the Company is on track to achieve record earnings in 2024.

Review of operations

Physical and Software Authentication Systems business

The Physical and Software Authentication Systems business had revenue of US$18,411k (2022: US$18,164k) and adjusted EBITDA of US$8,266k (2022: US$8,005k).

Authentication Systems revenues were driven by the large sales of covert materials including the 22% price increase for supply chain mitigation, strong sales of optical materials and the continuing funding for sensor development, which is entering its final phases in 2024.

Our optical materials business won a new K-cup customer in 2023 which begun purchasing material in February 2024. In addition, in 2023 we established a new relationship with a major banknote supplier in Indonesia, which has resulted in testing of several of our optical materials, particularly those used in security threads.

On the software security side of the Company's business, the Secure Transactions Group generated an adjusted EBITDA of US$132k (2022: US$72k) on revenue of US$1,670k (2022: US$1,463k). The 2023 results are in line with expectations as we continue development of a new software platform.

Security Printing (CSP) business

CSP generated revenue of US$146k during the ten-day period ended December 31, 2023. In its year ended September 30, 2022, based on audited financial statements prepared in accordance with UK GAAP (FRS 102), CSP generated an EBITDA of £3,022,088 and profit before taxation of £1,010,026 on turnover of £16,022,532. Its net assets at that date were £4,441,120. In its year ended September 30, 2023, based on unaudited management accounts, Cartor generated an EBITDA of £2,525,100 and profit before taxation of £435,600 on turnover of £16,188,200. The year ending 2023 was very active with the production of the new Royal Mail postage stamps with HM King Charles ongoing during the acquisition process. The bulk of this revenue prior to acquisition related to postage stamps. CSP has been heavily focused on growing the more profitable new segment of postage, namely, hybrid stamps which carry serialized information to prevent reuse and counterfeiting.

The period since the acquisition has seen a smooth and successful integration on all fronts, from accounting to strategic planning and particularly the ongoing polymer qualification process. Key CSP staff on the polymer substrate program have daily calls with the Spectra materials team in Rhode Island. Based on the post-acquisition plan at CSP, the focus of the CSP business will be on hybrid serialized postage stamps, tax and revenue stamps and gaining market share in postage stamps, in addition to producing polymer substrate for Spectra.

CHIEF EXECUTIVE OFFICER'S STATEMENT continued

Review of operations continued

Security Printing (CSP) business continued

As well as driving Spectra's growth in the polymer substrate market, CSP will enable Spectra to introduce its advanced security technologies into CSP products which include postage stamps, tax and revenue stamps, brand authentication labels and ID documents. CSP has established an international presence in these products, which currently utilize various public features, and is expected to be able to both develop the necessary processes to integrate Spectra's technologies, as well as work with its customers to upsell Spectra products.

The international polymer substrate market currently has only two suppliers, CCL Industries in Canada and De La Rue International in the UK. Spectra's research and dialogues with central banks have clearly shown the desire of the banks to have another supplier of ready to print bespoke polymer substrate. Spectra has been working with CSP for over two years to achieve high-quality, conventional, machine-readable, and ready for printing polymer substrates that include conductive layers, opacity layers and bespoke window designs as required by central banks. Spectra has enhanced its competitive position in the market by further integrating the production supply chain of Fusion™. The CSP operation has also developed the technology and established the parameters to produce high-quality polymer banknote substrates on its machine-readable polymer produced with Spectra covert taggants embedded within polypropylene manufactured at Toray Plastics America.

During 2023 our testing program with a Middle Eastern central bank evolved from a hopeful supplier to a strong collaborative customer relationship. Through several trials in 2023, which are continuing in 2024, we have become involved in assisting the central bank with other issues related to polymer banknotes, while we rapidly close the remaining gaps to achieve qualification.

In addition to steadily converging on qualification and a tender invitation with the central bank, we have many ongoing initiatives in 2024 with a large polymer banknote printer, commemorative note printers and another Middle Eastern central bank.

Corporate governance

Spectra Systems is an AIM listed company and has always worked to abide by best practices as advised by both our bankers as well as our shareholders. Recently ISS has issued certain recommendations regarding board composition, committee assignments, and option grants.

Our Board has comprised the same Directors during 2023. Directors include BJ Penn, Non-executive Chairman, Government Security Committee Chairman and Nominating Committee Chairman, Nabil Lawandy, Chief Executive Officer, Dr. Barbara Paldus, Non-executive Director, Jeremy Fry, Non-executive Director and Audit Committee Chairman, and Donald Stanford, Non-executive Director and Compensation Committee Chairman.

With regard to Director option grants, the Company has adopted a new policy which will allow new Directors to receive a one-time option grant upon joining the Board of Directors. Going forward, no Directors will be issued new options beyond the ones received on joining the Board. This is a compromise position relative to US standards and UK guidance that non-executive directors hold no options.

Strategy

The Company's strategy for increasing revenue and earnings continues to be focused on selling more products to existing customers as well as opening new sales channels for the full spectrum of our product offering. We have had very good success in upselling existing central bank customers and commercially exploiting supply chain and pandemic-related issues as part of our strategy. Examples of these successes are the expansion of sensor capabilities for exotic counterfeits and the implementation of a program with our customer to deal with supply chain issues now and going forward. The acquisition of the CSP business will fuel the growth of sales channels through insertion of Spectra materials into contract renewals and new business proposals. Several such opportunities have already materialized and are expected to resolve in 2024.

CSP will follow much the same approach with its traditional customers, focusing on converting them from traditional to the more sophisticated hybrid stamps currently utilized in the UK. As the exclusive supplier of conventional and hybrid postage stamps in the UK, CSP is well positioned to take advantage of a cascade of adoptions of this higher-level authentication and anti-fraud technology. CSP is also aggressively pursuing growth in its postage stamp business as more state printers decide to outsource the printing of postage stamps.

With regard to our optical materials and brand authentication products, we continue to propose to both central banks and overt security suppliers the concept of upgrading such features to incorporate public and machine-readable security. Our recent development of smartphone readable security threads will expand the opportunities for the technology in passports and secure documents, including, most recently, holograms. The strategy behind this approach is based around partnering with current contract holders which can benefit from our technology and materials to upsell their existing customers. Spectra has developed both release layer and hot stamped holograms which carry covert features for potential use in very high-value documents and valuable artwork and is searching for partners to deliver this technology. These new cutting edge security holograms will be shown at the upcoming Digital and Document Security conference in Lisbon this April.

Finally, with our strong cash generation and the upcoming expected windfall from the sensor program, we continue to explore judiciously possible mergers and acquisitions which can cost effectively solve manufacturing needs, provide synergistic expertise in high-value areas of authentication, open doors to implement our upselling strategy, and expand our customer base or strengthen our supply chain. We have evaluated several targets throughout 2023 to this point in 2024 and have passed on all but the CSP acquisition which was a great fit on many levels, particularly the expertise and available machine time for the polymer substrate initiative. The acquisition was timely and eliminated perceived supply chain risks from the vantage point of risk averse central banks.

Prospects

The Company continues to have a multitude of new short-term and long-term prospects. The short-term opportunities are expected in the 2024 – 2026 period and the long-term opportunities are expected in the 2027 – 2030 time frame.

The short-term opportunities include:

- execution of sensor manufacturing and service contracts with payments;
- first sensor shipments to a central bank and additional payments;
- security thread optical materials sales with Indonesian partner;
- sales of Fusion polymer substrate to Middle Eastern central bank;
- Indian passport current format;
- Swiss Post postage stamp contract;
- temporary license plates in Ghana; and
- Yemen tax stamps.

Long-term opportunities include:

- delivery of sensors to a central bank;
- further increase of covert authentication materials by a current or new central bank customer;
- covert materials for UK and other countries' passports;
- increased polymer substrate uptake with new public security feature by a major polymer banknote printer;
- Mozambique spirits tracking with two-level continuous ink jet materials developed for major player in tax and revenue stamps;
- multi-factor holograms for very high-value products including art
- new Indian passport format; and
- Ethiopian tax stamps.

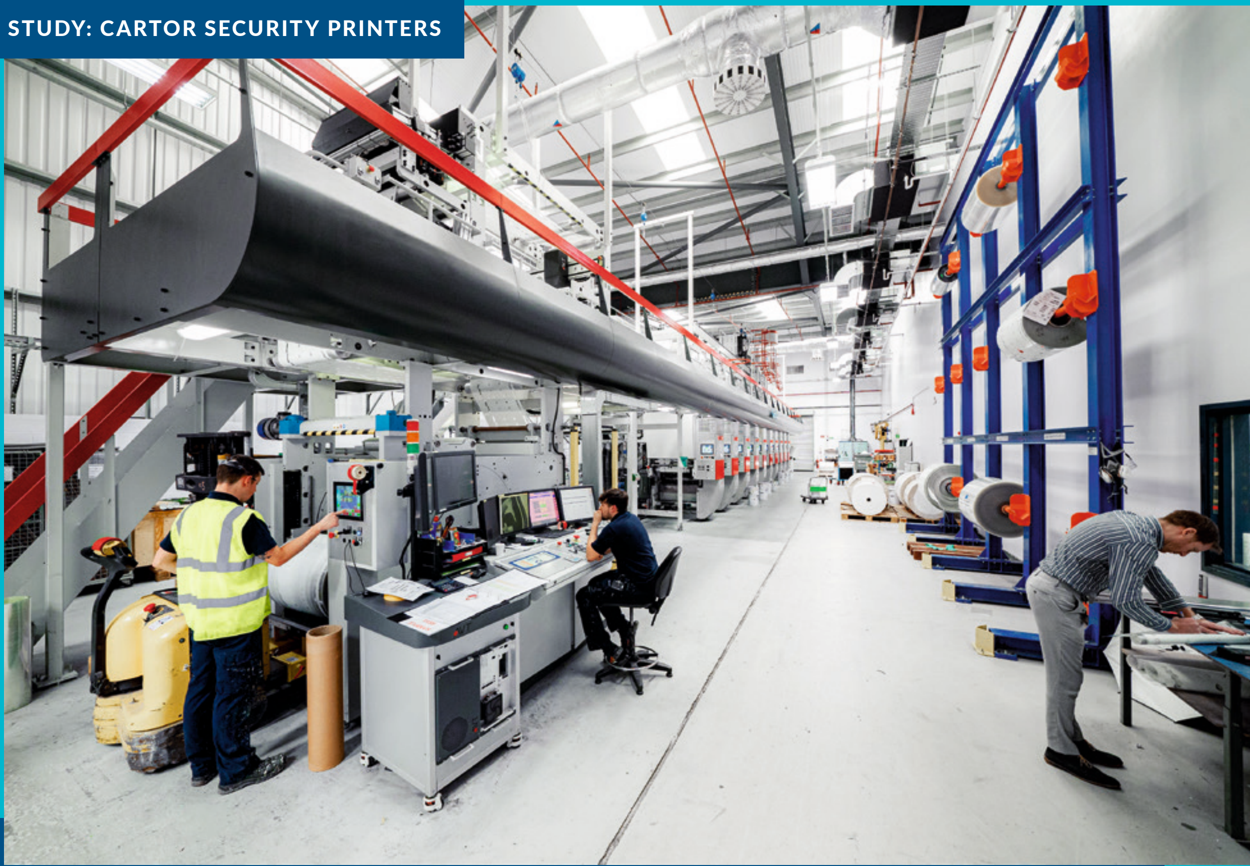
The combination of these prospects generated directly by Spectra Systems Rhode Island and CSP, independently and collaboratively, has positioned the Company to accelerate its revenue and earnings growth over the coming years. We continue to develop cutting-edge technologies with our expanded security printing capabilities and expertise to remain a technology leader in the authentication industry and to offer our shareholders growth through innovation serving both new and existing customers.

Dividend

With the Company having a ninth year of sustainable profits, reaching their highest levels since its admission to trading on AIM, and having sufficient resources to execute on its growth plans with its existing cash reserves, the Board is delighted to again issue an increased dividend. Our dividend policy takes account of the Group's profitability, underlying growth, and maintenance of sufficient cash reserves. The Board therefore intends to pay an annual dividend of US$0.116 per share on or about June 28, 2024 to shareholders of record as of June 14, 2024.

Nabil M. Lawandy
Chief Executive Officer
March 27, 2024

CASE STUDY: CARTOR SECURITY PRINTERS



Spectra Systems has been engaged in central bank trials with its polymer banknote substrates produced at its wholly owned subsidiary Cartor Security Printers.

"The Spectra Board of Directors and I are delighted to announce the acquisition of Cartor to solidify our position in the polymer substrate market and expand our business through new sales channels."

Nabil M. Lawandy
Chief Executive Officer

Acquisition

Cartor Holdings Limited acquisition

We completed the acquisition of Cartor Holdings Limited in December 2023.

Background on Cartor

Cartor, through its three wholly owned subsidiary companies, operates from two manufacturing sites in the UK and France, supplying postage stamps to over 180 administrations globally. In addition to conventional and hybrid postage stamps, it prints and produces tax stamps, vouchers, coupons, certificates, and security documents, and provides a safe and secure environment for hand assembly and fulfillment. Cartor differentiates itself from its competitors by using state-of-the-art technology to make it difficult for counterfeiters to operate in industries with high monetary or intellectual value products and services. In addition to its core security printing business, Cartor has worked with Spectra for the past two years to develop the necessary expertise to produce Fusion™ substrates for qualification by central banks and leading polymer banknote printers.

The acquisition is expected to consolidate the supply of Spectra's Fusion™ polymer substrate within the enlarged Group; increase margins on polymer substrates by bringing profit margin within the enlarged Group, an open new sales opportunity for Spectra security products in postage, tax and revenue stamps, and brand protection and security labels; increase combined earnings through replacing current supplies to Cartor with Spectra's optical materials; increase product development capabilities with direct access to Cartor's state-of-the-art printing capabilities; and increase visibility for Spectra through two facilities in Wolverhampton, UK, and Meauce, France, giving the enlarged Group presence in four G7 countries.

Rationale for the acquisition and increased opportunity

The international polymer substrate market currently has only two suppliers, CCL Industries in Canada and De La Rue International in the UK. Spectra's research and dialogues with central banks have clearly shown the desire of the banks to have another supplier of ready to print bespoke polymer substrate.

Spectra has been working with Cartor for two years to achieve high-quality, conventional, machine-readable, and ready for printing polymer substrates which include conductive layers, opacity layers and bespoke window designs as required by central banks. Spectra has enhanced its competitive position in the market by further integrating the production supply chain of Fusion™.

In addition to driving Spectra's growth in the polymer substrate market, the acquisition will, in the opinion of Spectra's Board of Directors, enable Spectra to introduce its advanced security technologies into Cartor products which include postage stamps, tax and revenue stamps, brand authentication labels and ID documents. Cartor has established an international presence in these products, which currently utilize various public features, and is expected to be able to both develop the necessary processes to integrate Spectra's technologies, as well as work with its customers to upsell Spectra products.

On December 21, 2023, we completed an acquisition of Cartor Holdings Ltd ("Cartor"), a leader in the security printing industry. Consideration includes £5.5 million to be satisfied in cash, and £3.0 million of the issue of new shares of common stock of Spectra ("Shares"). In addition, £2.0 million of shares may be payable by Spectra by but no later than 18 months after completion in the event that Spectra has qualified its Fusion™ polymer substrate for tender submissions with a central bank customer. Spectra assumes £4.4 million of Cartor's current external debt, at an average interest rate of 0.3%, as part of the acquisition. The fair value measurement of Cartor's net assets at the acquisition date resulted in the recognition of £1.84 million of goodwill, £0.9 million of brand recognition, and £1.62 million of customer lists.

BOARD OF DIRECTORS

To the Board of Directors and stockholders of Spectra Systems Corporation

Our Board of Directors has a collective responsibility to shareholders for the sustainable long-term success of the business.

Committee key:

A Audit Committee
C Compensation Committee
G Government Security Committee
N Nominating Committee
Committee Chairman

BJ PENN
Non-executive Chairman

C G N

Mr. Penn was Acting Secretary of the US Navy from March to May 2009, having previously been Assistant Secretary of the US Navy (Installations and Environment) since 2005. Mr. Penn began his career as a Naval Aviator and was named EA-6B Pilot of the Year in 1972. Throughout his distinguished career, significant leadership assignments included: Executive Officer/Commanding Officer VAQ 33, Battalion Officer at the US Naval Academy, Air Officer on the USS America, Special Assistant to the Chief of Naval Operations, Commanding Officer of NAS North Island, CA, and Deputy Director of the Navy Office of Technology Transfer & Security Assistance. Mr. Penn left the Navy in 1995, joining Loral Corporation as Director of International Business.

In 1996, Loral sold its defense electronics and system integration businesses to Lockheed Martin and Mr. Penn was assigned to Lockheed Martin's corporate staff. Mr. Penn returned to the US Navy in 2001 as Director of Industrial Base Assessments.

Mr. Penn received his BS in Industrial Technology from Purdue University and his MS in Human Resource Management and Personnel Administration from the George Washington University. Mr. Penn has also received certificates in Aerospace Safety from the University of Southern California and in National Security for Senior Officials from the Kennedy School, Harvard University. Mr. Penn serves as Trustee at the George Washington University and is on the board of the Naval Aviation Museum.

NABIL M. LAWANDY
President and Chief Executive Officer

G

Dr. Lawandy is the founder, President and Chief Executive Officer of the Company. Dr. Lawandy started his career at the NASA Goddard Space Flight Center, where he was a pioneer in the development of sub-millimeter optically pumped lasers. From 1981 to 1999, Dr. Lawandy was a tenured full professor of Engineering and Physics at Brown University, where his work focused on instabilities in single and multimode lasers and a wide spectrum of non-linear optics and atom-field interaction problems. In addition to Spectra Systems Corporation, Dr. Lawandy has founded two other companies, Spectra Disc Corporation and Solaris Nanosciences, and has raised over US$80 million in investment capital.

Dr. Lawandy holds a BA in Physics, and an MS and PhD in Chemistry, all from Johns Hopkins University. Dr. Lawandy has authored over 180 reviewed scientific papers and is an inventor on over 80 US and foreign issued patents. His entrepreneurial and scientific work has been covered in several high-profile publications including the London Financial Times, the Economist, Scientific American, Science News, the Wall Street Journal, Los Angeles Times, the Boston Globe, Fox News and BBC Television. Dr. Lawandy has also received a Presidential Young Investigator Award, an Alfred P. Sloan Fellowship, a Cottrell Award, a Rolex Award for Enterprise and a Samuel Slater Award for Innovation.

A Audit Committee
C Compensation Committee
G Government Security Committee
N Nominating Committee
Committee Chairman

DR. BARBARA PALDUS

Non-executive Director

A C N

Dr. Paldus has over 20 years of industry expertise in developing emerging domestic and international marketplaces, including bio-processing, personalized medicine, cell therapy, biotech beauty, and analytical process equipment. Dr. Paldus founded two companies whose combined revenue exceeded US$250 million in 2021. Dr. Paldus also has a doctorate in electrical and electronics engineering from Stanford University.

Dr. Paldus was a founder of Picarro in 1998, a leading provider of cavity-ring-down instruments (CRDS) and solutions to measure greenhouse gas (GHG) concentrations, and trace gases, and stable isotopes across many scientific applications, along with the energy, life science, and utilities markets where she successfully exited in 2006. In 2005 she founded Finesse Solutions, a leader in the development of scalable control automation systems and software for bioproduction. Its proprietary smart technology, which consists of sensors, controllers, and software, is designed to optimize the bioproduction workflow. Finess Solutions was sold to Thermo Fisher in 2017. Dr. Paldus is an operating partner of Sekhmet Ventures since 2018. Sekhmet focuses primarily on companies with science-based products in the beauty and wellness markets. Sekhmet provides capital with an extensive and mature distribution system for beauty products throughout the world.

Dr. Paldus is currently the CEO and founder of Codex Labs, a global collection of biotech-based skincare solutions based on disruptive plant-based biotech ingredients, cGMP manufacturing, industry-leading carbon footprint minimizing packaging, and data-driven clinical testing.

DONALD STANFORD

Non-executive Director

A C N

Mr. Stanford, who was from 1979 until 2001 the Chief Technical Officer of GTECH Corporation, is an Adjunct Professor of Computer Science and Engineering at Brown University and is an instructor in the Program in Innovation, Management, and Entrepreneurship (PRIME). Mr. Stanford is also on the faculty of Brown's School of Professional Studies. Mr. Stanford is a founding member of GTECH (renamed IGT) and, over the course of 30 years, he held every technical leadership position, including Vice President of Advanced Development and Chief Technology Officer. Mr. Stanford serves on several boards including YearUp Providence and the Business Innovation Factory. Mr. Stanford is a founding board member of Times2 STEM Charter School in Providence and served on its board for 20 years. In 2008, Mr. Stanford was re-engaged by IGT as a consultant.

Mr. Stanford is a past member of the RI Science and Technology Advisory Council. Mr. Stanford also served on the Brown advisory councils to the President and the School of Engineering. Mr. Stanford holds a BA in International Relations and an MS in Computer Science and Applied Mathematics, both from Brown University. In 1999, Mr. Stanford received both the Black Engineer of the Year Award for Professional Achievement and the Honorable Thurgood Marshall Award for Community Service from the NAACP. In 2002, Mr. Stanford received the Brown Graduate School's Distinguished Graduate Award and the RI Professional Engineers Award for Community Service.

JEREMY FRY

Non-executive Director

A C N

Mr. Fry has over 30 years of experience in finance and operations and in particular intellectual property. Following a successful executive international career with large scale enterprises, Mr. Fry, who is based in the UK, established his own consultancy business in 2005. Since forming the consultancy business, he has worked across a broad spectrum of business clients, advising start-ups to publicly listed enterprises. Over the past 15 years he has assumed numerous roles including Executive Chairman, Non-executive Chairman, Non-executive Director, CEO and COO leading and supporting a number of successful investor acquisitions and exits. More recently, he has been focused on advisory and non-executive initiatives including his appointment to the board of Sentrybay Limited, leading cyber-security companies working in financial services and regulated markets, where he is Chairman of the Audit Committee.

Through 2019 and into 2020, his time was spent working on a very significant restructuring of an industrial company involving negotiations with lenders and shareholders, addressing balance sheet and operational challenges. Mr. Fry, a Chartered Marketeer, holds a degree in Biochemistry and Molecular Biology from Cardiff Metropolitan University (formerly Llandaff Technical College), a postgraduate diploma in Marketing from the Chartered Institute of Marketing via Cardiff Business School and an Executive MBA from the University of Reading.

SENIOR MANAGEMENT

Our senior management team highlights our strong internal talent base, providing clear direction and support for all areas of the business.

EDWARD SPIES, Chief Financial Officer and Company Secretary

Mr. Spies is an experienced accounting and finance professional with over 25 years of expertise in financial planning and analysis, mergers and acquisitions, and business process improvement. He brings decades of experience in the technology industry, having started his career at PricewaterhouseCoopers, and worked in various finance leadership roles since then. Recently, he served as CFO of Mearthane Products Corporation, a polymer component manufacturer. Prior to that, he held positions as a Corporate Controller and VP of Finance at several VC and PE backed portfolio companies. He also helped build the CFO services practice for CFGI and embarked on a successful consulting career providing accounting and finance support for start-up and publicly traded companies. Mr. Spies has considerable expertise in manufacturing, cost and profit margin analysis, and financial management. He earned his CPA earlier in his career and holds a bachelor's degree from Clarkson University and an MBA/MS in Accounting from Northeastern University.

WILLIAM GOLTSOS, Vice President of Engineering N

Dr. Goltsos has been Spectra's Vice President, Engineering, from April 2000 to the present. From September 1996 to April 2000, Dr. Goltsos served as a Senior Systems Engineer for Spectra. Prior to that, from 1992 to 1996, Dr. Goltsos served as a Staff Member of the MIT/Lincoln Laboratory's Optical Communications Group. Dr. Goltsos holds a PhD in Physics from Brown University, an MS in Physics from Brown University, and a BS in Physics from Rensselaer Polytechnic Institute.

JAMES CHERRY, Director of Business Development

Mr. Cherry serves as Director of Business Development. Mr. Cherry joined the Company in 2002 from Auspex Systems, an enterprise network data storage system business, where he had been involved in marketing and product management for seven years. Prior to that, Mr. Cherry had worked for five years at DuPont in product management.

ANDREI SMUK, Director of Research and Development

Dr. Smuk, who joined the Company in 2000, was appointed Director of Research and Development in 2006. Dr. Smuk is responsible for the development of advanced materials and innovative sensor systems. Dr. Smuk received a PhD in Physics from Brown University in 2000 and an MS in Applied Physics from the Moscow Institute of Physics and Technology in 1994.

CHRISTOPHER LAL, Director of ICS Operations

Mr. Lal joined the Company in 2023 as Director of ICS Operations and is responsible for Spectra's lottery business. Mr. Lal has over 20 years' experience managing professional services delivery and software development in various roles across government, financial, pharmaceuticals, and education verticals. Recently, Mr. Lal worked for Appnovation Technologies where he ran his own business unit as Group Director responsible for delivery of professional services across North America for over six years focusing on portfolio and project management. Previously, Mr. Lal worked for Syscon Justice Systems as a Senior Project Manager responsible for successful enterprise-wide system implementations for several justice and public safety institutions. Mr. Lal holds a Bachelor of Arts, Economics from the University of British Columbia as well as a postgraduate diploma in Applied Information Technology from Information Technology Institute (ITI). Mr. Lal has been certified as a Project Management Professional (PMP) since 2009.

Chairman's statement

The Board of Directors recognizes the importance of sound corporate governance to give our shareholders and other stakeholders confidence in our business. As Chairman of the Board, I have ultimate responsibility for ensuring that the Board adopts and implements a recognized corporate governance code in accordance with our stock market listing on the AIM market of the London Stock Exchange. The Board has adopted the Quoted Companies Alliance (QCA) Corporate Governance Code 2018. The Chief Executive Officer (CEO) has responsibility for the implementation of governance throughout our organization under the direction of the Board.

The QCA Corporate Governance Code 2018 has ten key principles and we set out below how we apply those principles to our business.

The Honorable BJ Penn
Chairman of the Board
June 21, 2024

PRINCIPLE 1
Establish a strategy and business model which promote long-term value for shareholders

Please refer to pages 2 to 5 for the details of our strategy and business model. The Company is engaged in inventing, developing, manufacturing and selling technologically leveraged products. Technology leverage is at the core of our high margins and is the key to providing long-term value and growth for our shareholders.

PRINCIPLE 2
Seek to understand and meet shareholder needs and expectations

The Board is committed to understanding and meeting the needs and expectations of its shareholders and believes that maintaining good communications is the best way to do so. The Company informs shareholders through regulatory news announcements and on its corporate website. All shareholders are encouraged to attend the Annual General Meeting. Subject to confidentiality and regulatory restrictions, the CEO meets with shareholders by appointment, which the Board believes has been successful.

PRINCIPLE 3
Take into account wider stakeholder and social responsibilities and their implications for long-term success

The long-term success of the Company is dependent on its relationships with its various stakeholders: customers, suppliers and employees amongst others. The Company has built strong relationships with its customers and considers itself a business partner, helping its customers develop solutions to meet their needs. The management team is in constant contact with its customers and seeks feedback to determine customer needs. The Company also maintains relationships with its key suppliers to ensure it is updated on new developments that may be utilized to the benefit of its customers. Our employees are also a key factor in the successful growth of the Company. Management is in constant contact with its employees and encourages employees to generate new ideas. To align employees with the long-term success of the Company, key employees have been granted stock options.

PRINCIPLE 4
Embed effective risk management, considering both opportunities and threats, throughout the organization

As a small cap company quoted on the AIM market of the London Stock Exchange, the Board is sensitive to the impact of risks upon the Company. The Board meets with Company management on a regular basis to monitor the risks facing the Company and identify appropriate measures to mitigate any potential impact. The Board assures itself of the efficacy of risk management and related control systems through corporate performance and periodic reports.

CORPORATE GOVERNANCE STATEMENT continued

PRINCIPLE 5

Maintain the Board as a well-functioning, balanced team led by the Chair

The Board is responsible for formulating, reviewing and approving the Company's strategy, budgets and corporate actions. Please refer to pages 21 and 22 for the details of our Board structure and Committees. Given the size of the Board, Committee topics are often discussed by the full Board rather than limited to each Committee's members. This allows the full Board to stay informed of the particular issues being addressed by each Committee. Please refer to the Directors' report on page 21 for Board attendance.

PRINCIPLE 6

Ensure that between them the Directors have the necessary up-to-date experience, skills and capabilities

The Board of Directors brings a broad range of skills to address the challenges faced by a company that sells its products worldwide. The Board consists of highly experienced professionals with complementary backgrounds that meet the needs of the Company. Each Director is responsible for maintaining his or her own skill set, part of which is achieved by remaining active in industry. The Nominating Committee of the Board is tasked with finding and nominating qualified candidates to serve on the Board. Please refer to our Directors' biographies on pages 12 and 13 for more information on our Board of Directors. In addition to the Directors, our Chief Financial Officer and outside General Counsel attend all Board meetings and bring financial, legal and business acumen to Board discussions. The Board and its Committees will also seek external expertise and advice where required.

PRINCIPLE 7

Evaluate Board performance based on clear and relevant objectives, seeking continuous improvement

The Board evaluation process is designed to identify opportunities for improving the performance of the Board and to ensure it has the necessary skills and experience to fulfil its responsibilities both today and in the future, through adequate succession planning to the degree appropriate given the size of the Company. Given the current size of the Company, the evaluation process is performed internally, by the Board, on an ongoing basis. Any deficiencies identified will be addressed in a constructive manner and, if necessary, changes of the Board will be considered in conjunction with the Nominating Committee.

PRINCIPLE 8

Promote a corporate culture that is based on ethical values and behaviors

The transnational nature of our business operations requires firm action on our part to work with integrity. As a Company, we strive to conduct ourselves according to the highest standards of ethical conduct. Throughout its operations, Spectra seeks to avoid even the appearance of impropriety in the actions of its Directors, officers, employees and agents. The Board has implemented policies to promote ethical conduct and relies on the management team to ensure ethical values and behaviors are respected.

PRINCIPLE 9

Maintain governance structures and processes that are fit for purpose and support good decision making by the Board

The Board takes responsibility for the performance of the Company and ensures that all decisions are taken in the best interest of the Company. Although the Board has delegated the operational management of the Company to the CEO and other senior management, the Board retains oversight of their actions and retains approval authority for acquisitions, dividend payments and significant expenditures and contracts.

The Chairman is responsible for leadership of the Board and ensuring its effectiveness. The Chairman, with the assistance of the CEO, sets the Board's agenda and ensures that adequate time is available for proper discussion of all items.

The CEO is responsible for running the business and implementing the decisions and policies of the Board. The CEO is also responsible for accurate, appropriate and timely communications with shareholders.

While not a Board member, the CFO attends all Board meetings. The CFO is responsible for the Company's finances, human resources and compliance activities. The CFO seeks the advice of outside General Counsel when necessary.

The Non-executive Directors are appointed to provide strategic advice and independent oversight as well as to challenge the CEO.

The Board may create or disband Committees depending on the operations of the Company. The Board has established the following Committees to assist with oversight and governance: Audit, Compensation, Nominating and Government Security.

The Audit Committee has primary responsibility for monitoring the quality of internal controls and ensuring that the financial performance of the Company is properly measured and reported on. It will receive and review reports from the Company's management and auditor relating to the interim and annual accounts and the accounting and internal control systems in use throughout the Company. The Audit Committee intends to meet no less than three times each financial year and will have unrestricted access to the Company's auditor. The Audit Committee comprises Jeremy Fry as Chairman, Donald Stanford and Barbara Paldus.

The Compensation Committee reviews the performance of the CEO and makes recommendations to the Board on matters relating to his remuneration and terms of employment. The Committee also makes recommendations to the Board on proposals for the granting of share options and other equity incentives pursuant to any share option scheme or equity incentive scheme in operation from time to time. The Compensation Committee comprises Donald Stanford as Chairman, Jeremy Fry, BJ Penn and Barbara Paldus.

The Nominating Committee comprises BJ Penn as Chairman, Donald Stanford, Jeremy Fry and Barbara Paldus. The Committee seeks and nominates qualified candidates for election or appointment to Spectra's Board of Directors.

The Government Security Committee is responsible for ensuring the implementation within the Company of all procedures, organizational matters and other aspects pertaining to the security and safeguarding of information, including the exercise of appropriate oversight and monitoring of operations to ensure that protective measures are effectively maintained and implemented. The Government Security Committee comprises BJ Penn as Chairman and Nabil Lawandy.

PRINCIPLE 10

Communicate how the Company is governed and is performing by maintaining a dialogue with shareholders and other relevant stakeholders

The Board is committed to maintaining good communication with all of its stakeholders, including shareholders. The Company's website, and its Investor Relations section in particular, provides useful information to assist stakeholders in assessing the performance of the Company.

Results of shareholder meetings and details of votes cast will be publicly announced through the regulatory information system. The Board will seek to understand the reasons behind any significant votes cast against a resolution at any general meeting.

Board Committee reports are included on pages 18 and 19.

COMMITTEE REPORTS

Audit Committee report

Dear Shareholder

I am pleased to present our Audit Committee report for 2023 which describes our activities and areas of focus during the year ended December 31, 2023. The Board is satisfied that the members of the Audit Committee bring a wide range of skills, expertise, experience and competence relevant to the sector in which the Company operates and that Jeremy Fry possesses the necessary recent and relevant financial experience to effectively chair the Committee.

The main role of the Audit Committee includes:

- monitoring the integrity of the Company's financial statements, including reviewing its annual and half-year financial statements and accounting policies;
- reviewing the effectiveness of the internal controls and risk management; and
- overseeing the relationship with the Company's auditor, Miller Wachman LLP, and assessing the effectiveness of the external audit.

The Audit Committee intends to meet no less than three times each financial year. Given the size of the Company, all Board members typically attend the Audit Committee meetings. In addition, the Chief Financial Officer and the Company's outside General Counsel typically attend the Audit Committee meetings. During 2023, the Audit Committee:

- re-appointed Miller Wachman LLP as the Company's external auditor;
- reviewed and recommended to the Board the approval of the 2022 annual report and the 2023 half-year results announcement;
- reviewed the accounting treatment related to the recognition of revenue for certain development contracts;
- reviewed the provision for excess and obsolete inventory; and
- reviewed the audit approach and scope of the audit work to be undertaken by the external auditor and associated fee.

Jeremy Fry
Chairman
June 21, 2024

Nominating Committee report

Dear Shareholder

I am pleased to present our Nominating Committee report for 2023 which describes our activities and areas of focus during the year ended December 31, 2023. The main role of the Committee is to review the structure, size and composition of the Board, identify and propose to the Board suitable candidates to fill Board positions and keep under review the leadership needs of the Company.

Given the size of the Company, all Board members typically attend the Nominating Committee meetings. In addition, the Chief Financial Officer and the Company's outside General Counsel typically attend the Nominating Committee meetings. During 2023, the Nominating Committee:

- reviewed the composition, size and structure of the Board; and
- recommended the re-election of the existing Board members.

The Honorable BJ Penn
Chairman
June 21, 2024

Compensation Committee report

Dear Shareholder

I am pleased to present our Compensation Committee report for 2023 which describes our activities and areas of focus during the year ended December 31, 2023. The Compensation Committee reviews the performance of the CEO and makes recommendations to the Board on matters relating to his compensation and terms of employment. The Committee also makes recommendations to the Board on proposals for the granting of share options and other equity incentives pursuant to any share option scheme or equity incentive scheme in operation from time to time. The Compensation Committee aims to provide a competitive compensation package which will attract and retain Directors and management with the requisite experience and ability to manage the Company and generate superior long-term performance. The four main elements of the compensation package are: base salary, annual bonus, benefits and share options. Given the size of the Company, all Board members typically attend the Compensation Committee meetings. In addition, the Chief Financial Officer and the Company's outside General Counsel typically attend the Compensation Committee meetings.

During 2023, the Compensation Committee:

- assessed the 2022 performance of the Chief Executive Officer and approved a bonus of US$100,000 based on the excellent financial results for 2022.

Donald Stanford
Chairman
June 21, 2024

Directors' interests

The Directors' beneficial interests in the common stock of the Company were as follows:

	December 31,	
Ordinary shares	2023	2022
N. Lawandy	2,247,736	2,247,736
B. Penn	107,436	107,436
J. Fry	—	—
D. Stanford	30,797	30,797
B. Paldus	—	—
	2,387,991	2,387,991

Directors' compensation

The following table details Directors' earned compensation for the year ended December 31, 2023:

	Salary and bonus	Benefits	Board fees	Total compensation
Executive Directors				
N. Lawandy	$ 493,750	$ 19,996	$ —	$ 513,746
Non-executive Directors				
B. Penn	—	—	31,500	31,500
J. Fry	—	—	31,500	31,500
D. Stanford	—	—	31,500	31,500
B. Paldus	—	—	31,500	31,500
Total	**$ 493,750**	**$ 19,996**	**$ 126,000**	**$ 639,746**

Directors' share options

At December 31, 2023, Directors had options or warrants to purchase ordinary shares under the Company's stock option plan as follows:

	Options held at December 31, 2023	Weighted average exercise price	Options vested at December 31, 2023
N. Lawandy	2,031,063	$ 0.44	1,931,063
B. Penn	100,000	0.32	100,000
J. Fry	60,000	2.29	40,000
D. Stanford	100,000	0.32	100,000
B. Paldus	60,000	1.62	20,000
	2,351,063	**$ 0.50**	**2,191,063**

DIRECTORS' REPORT

for the year ended December 31, 2023

The Directors present their report and the audited consolidated financial statements for the year ended December 31, 2023.

Domicile

Spectra Systems Corporation is a C corporation and is registered and domiciled in the United States of America.

Principal activity

The principal activity of the Company is to invent, develop and sell integrated optical systems that provide customers with increased efficiency, security tracking and product life. The integrated systems combine consumables and engineered optical materials with software and hardware for use in applications. The Company also provides software tools to the lottery and gaming industries for fraud, money laundering and match fixing detection, as well as statistical analysis.

Results and dividends

The Company's consolidated statements of income and comprehensive income are set out on pages 25 and 26 and show the results for each year.

There are nominal federal and state income tax liabilities on the respective income tax returns due to timing differences arising between items of income and expense recorded on the books and those reported on the tax returns.

The Directors intend to pay a dividend of US$0.116 per share on or about June 28, 2024 to shareholders of record as of June 14, 2024.

Review of business and future developments

A review of the operations of the Group is contained in the Spectra at a glance review on pages 1–3.

Principal risks and uncertainties and financial risk management

Complex products

Certain of the products produced by the Company are highly complex and are designed to be used in complex systems. Failure to correct errors or other problems identified after deployment could result in events that may have a negative effect on the Company's business and financial condition.

Technological change

Markets for the Company's products may become characterized by rapidly changing technology, evolving industry standards and increasingly sophisticated customer requirements. The introduction of products embodying new technology and the emergence of new industry standards could render the Company's existing products obsolete and unmarketable and may exert pricing pressure on existing products.

If the Company could not then develop products that remain competitive in terms of technology and price and that meet customer needs, this could have a negative impact on the business.

Expiry of patents

All patents have a limited duration of enforceability. US patents generally have a duration of 20 years from the filing date. Once a patent expires, the invention disclosed in the patent may be freely used by the public without accounting to the patent owner, as long as there are no other unexpired patents that embrace an aspect of the invention. There is no certainty that any improvement, new use or new formulation will be patented to extend the protection of the underlying invention or provide additional coverage to adequately protect the invention. As a result, the public may have the right to freely use the invention described in and previously protected by an expired patent.

Dependence on key personnel

The success of the Company's revenues is dependent on a limited number of employees, in particular the Chief Executive Officer and other managers with technological and development input. The Company has endeavored to ensure that its key employees are incentivized but cannot guarantee the retention of these staff.

Forward-looking statements

All statements, other than statements of historical fact, contained in this document constitute "forward-looking statements". In some cases, forward-looking statements can be identified by terms such as "may", "intend", "might", "will", "should", "could", "would", "believe", or the negative of these terms and similar expressions. Such forward-looking statements are based on assumptions and estimates, and involve risks, uncertainties and other factors which may cause the actual results, financial condition, performance or achievements of the Company, or industry results to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. New factors may emerge from time to time that could cause the Company's business not to develop as it expects and it is not possible for the Company to predict all such factors. Given these uncertainties, investors are cautioned not to place any undue reliance on such forward-looking statements. Except as required by law, the Company disclaims any obligation to update any such forward-looking statements in this document to reflect future events or developments.

Key performance indicators (in thousands):

- revenue of US$20,288k (2022: US$19,627k);
- adjusted EBITDA of US$8,394k (2022: US$8,077k);
- adjusted PBTA of US$8,231k (2022: US$7,765k); and
- adjusted earnings per share of US 13.9 cents (2022: US 14.5 cents).

Post-reporting date events

None.

Financial instruments

Details of the use of financial instruments by the Company are contained in note B of the financial statements.

Directors' responsibilities

The Directors are responsible for preparing the Directors' report and the financial statements on the basis of preparation set out in note A of the financial statements and in accordance with United States Generally Accepted Accounting Principles (US GAAP). The Directors of the Company are responsible for the document in which the financial information is included.

In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and accounting estimates that are reasonable and prudent; and
- state whether they have been prepared in accordance with US GAAP, subject to any material departures disclosed and explained in the financial statements.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions, disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with all legal requirements. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Substantial shareholdings

The following shareholders held 3% or more of the issued common stock of the Company at December 31, 2023:

	Ordinary shares	% issued
Close Asset Management Limited	4,739,416	10.30
Charles Stanley Group	4,731,826	10.29
Mr. and Mrs. N. Slater	4,190,914	9.11
Sandon Capital	4,005,000	8.71
Hargreaves Lansdown PLC	2,995,675	6.51
N. Lawandy	2,247,736	4.89
abrdn plc	2,204,873	4.79
	25,115,440	54.59

Corporate governance

As of December 31, 2023, the Board comprised one Executive Director, Nabil Lawandy, and four independent Non-executive Directors, BJ Penn as Chairman, Jeremy Fry, Donald Stanford and Barbara Paldus. The Board usually meets at least every three months to closely monitor the progress of the Company towards the achievement of budgets, targets and strategic objectives.

Board attendance in 2023

N. Lawandy	President and Chief Executive Officer	4/4	100%
B. Penn	Non-executive Chairman	4/4	100%
J. Fry	Non-executive Director	4/4	100%
D. Stanford	Non-executive Director	4/4	100%
B. Paldus	Non-executive Director	4/4	100%

DIRECTORS' REPORT continued

for the year ended December 31, 2023

Corporate governance continued

The Board also operates four Committees, the Audit Committee, the Compensation Committee, the Nominating Committee and the Government Security Committee.

The Audit Committee comprised Jeremy Fry as Chairman, Donald Stanford and Barbara Paldus. It has primary responsibility for monitoring the quality of internal controls and ensuring that the financial performance of the Company is properly measured and reported on. It will receive and review reports from the Company's management and auditor relating to the interim and annual accounts and the accounting and internal control systems in use throughout the Company. The Audit Committee intends to meet no less than three times each financial year and will have unrestricted access to the Company's auditor.

The Compensation Committee comprised Donald Stanford as Chairman, BJ Penn, Jeremy Fry and Barbara Paldus. It reviews the performance of the Executive Directors and makes recommendations to the Board on matters relating to remuneration and terms of employment. The Committee also makes recommendations to the Board on proposals for the granting of share options and other equity incentives pursuant to any share options scheme or equity incentive scheme in operation from time to time.

The Nominating Committee comprised BJ Penn as Chairman, Donald Stanford, Jeremy Fry and Barbara Paldus. The Committee seeks and nominates qualified candidates for election or appointment to Spectra's Board of Directors.

The Government Security Committee comprises BJ Penn as Chairman and Nabil Lawandy. It is responsible for ensuring the implementation within the Company of all procedures, organizational matters and other aspects pertaining to the security and safeguarding of information, including the exercise of appropriate oversight and the monitoring of operations to ensure that protective measures are effectively maintained and implemented.

The Board intends to comply with Rule 21 of the AIM Rules relating to Directors' dealings and will also take all reasonable steps to ensure compliance by the Company's applicable employees. The Company has adopted a share dealing code for this purpose on substantially the same terms as the Model Code.

Website publication

The Directors are responsible for ensuring the annual report and the financial statements are made available on a website. Financial statements are published on the Company's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Company's website is the responsibility of the Directors. The Directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

Auditor

All of the current Directors have made themselves aware of any information needed by the Company's auditor for the purpose of its audit and have established that the auditor is aware of that information. The Directors are not aware of any relevant information of which the auditor is unaware.

Miller Wachman LLP has expressed its willingness to continue as the Company's auditor and a resolution to re-appoint Miller Wachman LLP will be proposed at the Annual General Meeting.

By order of the Board

Edward Spies
Chief Financial Officer and Company Secretary
June 21, 2024

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors and stockholders of Spectra Systems Corporation

Opinion

We have audited the accompanying consolidated financial statements of Spectra Systems Corporation and subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2023 and 2022, and the consolidated related statements of income and comprehensive income, stockholders' equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of management for the financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the consolidated financial statements are available to be issued.

Auditor's responsibility

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control. Misstatements, including omissions, are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- exercise professional judgment and maintain professional skepticism throughout the audit;
- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed;
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements; and
- conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Miller Wachman LLP
Boston, Massachusetts
March 26, 2024

CONSOLIDATED BALANCE SHEETS

December 31, 2023 and 2022

		2023		2022
Assets				
Current assets				
Cash and cash equivalents	$	13,253,219	$	17,495,830
Accounts receivable, net of allowance for doubtful accounts of US$127,228 and US$nil in 2023 and 2022, respectively		3,777,129		3,676,782
Other receivables		1,394,480		1,132,664
Inventory		6,507,042		1,598,732
Prepaid expenses		1,206,954		759,926
Total current assets		26,138,824		24,663,934
Property, plant and equipment, net		11,098,278		2,101,763
Operating lease right-of-use assets, net		6,308,453		1,217,466
Other assets				
Investments		95,479		–
Intangible assets, net		13,513,836		7,055,141
Restricted cash		512,623		500,000
Deferred tax assets		1,844,042		1,881,000
Other assets		584,924		597,961
Total other assets		16,550,904		10,034,102
Total non-current assets		33,957,635		13,353,331
Total assets	$	60,096,459	$	38,017,265
Liabilities and stockholders' equity				
Current liabilities				
Accounts payable	$	2,752,989	$	928,830
Accrued expenses and other liabilities		812,110		503,817
Operating lease liabilities, short term		1,107,206		298,242
Third party loans – short term		1,454,285		–
Line of credit		561,241		–
Taxes payable		513,607		683,452
Deferred revenue – short term		6,058,427		4,626,126
Total current liabilities		13,259,865		7,040,467
Non-current liabilities				
Operating lease liabilities, long term		5,275,020		974,868
Third party loans – long term		4,129,094		–
Contingent consideration		3,819,090		–
Deferred revenue		1,499,927		1,679,257
Total non-current liabilities		14,723,131		2,654,125
Total liabilities		27,982,996		9,694,592
Stockholders' equity				
Common stock – US$0.01 par value; 125,000,000 shares authorized at December 31, 2023 and 2022; 46,006,608 and 45,011,001 shares issued and outstanding as of December 31, 2023 and 2022, respectively		460,066		450,110
Additional paid-in capital – common stock		56,152,570		53,177,719
Accumulated other comprehensive loss		(210,832)		(174,065)
Accumulated deficit		(24,860,954)		(25,727,077)
Total Spectra Systems Corporation stockholders' equity		31,540,850		27,726,687
Non-controlling interest		572,613		595,986
Total stockholders' equity		32,113,463		28,322,673
Total liabilities and stockholders' equity	$	60,096,459	$	38,017,265

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF INCOME

for the years ended December 31, 2023 and 2022

		2023		2022
Revenues				
Product	**$**	**13,401,736**	$	11,207,801
Service		**6,452,511**		6,680,483
Royalty		**433,954**		1,738,453
Total revenue		**20,288,201**		19,626,737
Cost of sales		**6,664,330**		7,350,526
Gross profit		**13,623,871**		12,276,211
Operating expenses				
Research and development		**1,450,197**		1,507,034
General and administrative		**4,197,974**		3,023,263
Sales and marketing		**824,331**		752,974
Total operating expenses		**6,472,502**		5,283,271
Income from operations		**7,151,369**		6,992,940
Other income (expense)				
Interest income		**375,889**		17,591
Foreign currency loss		**(72,991)**		(7,993)
Total other income		**302,898**		9,598
Income before provision for income taxes		**7,454,267**		7,002,538
Provision for income taxes		**1,429,719**		901,400
Net income		**6,024,548**		6,101,138
Net loss attributable to non-controlling interest		**(23,373)**		(46,236)
Net income attributable to Spectra Systems Corporation	**$**	**6,047,921**	$	6,147,374
Earnings per share				
Basic	**$**	**0.13**	$	0.14
Diluted	**$**	**0.12**	$	0.13
Weighted average number of common shares				
Basic		**45,074,264**		45,189,208
Diluted		**48,761,954**		47,321,818

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the years ended December 31, 2023 and 2022

	2023	2022
Net income	**$ 6,024,548**	$ 6,101,138
Other comprehensive (loss) income		
Unrealized loss on currency exchange	**(109,758)**	(45,177)
Reclassification for realized loss in net income	**72,991**	7,993
Total other comprehensive loss	**(36,767)**	(37,184)
Comprehensive income	**5,987,782**	6,063,954
Net loss attributable to non-controlling interest	**(23,373)**	(46,236)
Comprehensive income attributable to Spectra Systems Corporation	**$ 6,011,155**	$ 6,110,190

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

for the years ended December 31, 2023 and 2022

	Common stock						
	Shares	Amount	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Non-controlling interest	Total stockholders' equity
Balance at December 31, 2021	**45,303,644**	**$453,036**	**$53,833,233**	**$(26,870,037)**	**$(136,881)**	**$642,222**	**$27,921,573**
Compensation cost related to amortization of stock options	–	–	142,981	–	–	–	142,981
Reclassification for realized gain in net income	–	–	–	–	7,993	–	7,993
Unrealized loss on currency exchange	–	–	–	–	(45,177)	–	(45,177)
Exercise of stock options	207,357	2,074	3,852	–	–	–	5,926
Repurchase and retirement of shares	(500,000)	(5,000)	(802,347)	–	–	–	(807,347)
Dividends paid	–	–	–	(5,004,414)	–	–	(5,004,414)
Net income	–	–	–	6,147,374	–	(46,236)	6,101,138
Balance at December 31, 2022	**45,011,001**	**$450,110**	**$53,177,719**	**$(25,727,077)**	**$(174,065)**	**$595,986**	**$28,322,673**
Compensation cost related to amortization of stock options	–	–	180,224	–	–	–	180,224
Reclassification for realized gain in net income	–	–	–	–	72,991	–	72,991
Unrealized loss on currency exchange	–	–		–	(109,758)	–	(109,758)
Exercise of stock options	48,113	481	(481)	–	–	–	–
Investment in Cartor	947,494	9,475	2,795,108	–	–	–	2,804,583
Dividends paid	–	–	–	(5,181,798)	–	–	(5,181,798)
Net income	–	–	–	6,047,921	–	(23,373)	6,024,548
Balance at December 31, 2023	**46,006,608**	**$460,066**	**$56,152,570**	**$(24,860,954)**	**$(210,832)**	**$572,613**	**$32,113,463**

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31, 2023 and 2022

	2023	2022
Cash flows from operating activities		
Net income	$ 6,024,548	$ 6,101,138
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	1,054,959	916,679
Stock-based compensation expense	180,224	142,981
Lease amortization expense	194,509	287,062
Deferred taxes	(886,281)	(801,000)
Allowance for doubtful accounts	127,228	(3,565)
Provision for excess and obsolete inventory	238,956	694,000
Changes in operating assets and liabilities:		
Accounts receivable	1,965,121	(1,428,126)
Unbilled and other receivable	244,781	(502,856)
Inventory	(1,708,769)	(348,729)
Prepaid expenses	(436,628)	(463,000)
Other assets	(12,623)	(500,462)
Accounts payable	(345,389)	440,971
Operating leases	(177,026)	(285,246)
Accrued expenses and other liabilities	(189,740)	417,029
Deferred revenue	1,250,073	3,374,650
Net cash provided by operating activities	7,523,943	8,041,526
Cash flows from investing activities		
Acquisition of Cartor Holdings Limited, net of acquired cash	(6,200,986)	–
Payment of patent and trademark costs	(331,616)	(476,346)
Proceeds from sale of property and equipment	9,319	–
Purchases of property, plant and equipment	(150,808)	(988,165)
Net cash used in investing activities	(6,674,091)	(1,464,511)
Cash flows from financing activities		
Dividends paid	(5,181,799)	(5,004,414)
Deferred financing costs	(30,765)	–
Line of credit	112,501	–
Repurchase of shares	–	(807,347)
Proceeds from exercise of stock options	–	5,926
Net cash used in financing activities	(5,100,063)	(5,805,835)
Effect of exchange rate on cash and cash equivalents	7,600	(50,446)
Net (decrease) increase in cash and cash equivalents	(4,242,611)	720,734
Cash and cash equivalents, beginning of the year	17,495,830	16,775,096
Cash and cash equivalents, end of the year	$ 13,253,219	$ 17,495,830
Supplemental disclosures of cash flow information		
Cash paid for income taxes, net of refunds	$ 1,150,000	$ 1,280,000
Non-cash investing activities		
Contingent consideration for investment in Cartor Holding Group	3,819,090	–
Equity issued for investment in Cartor Holding Group	2,804,583	–
Acquisition of patents included in accounts payable	$ 70,670	$ 105,693

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO THE FINANCIAL INFORMATION

for the years ended December 31, 2023 and 2022

Note A – Corporate information

Spectra Systems Corporation ("the Company") develops and sells integrated optical systems that provide customers with increased efficiency, security tracking and product life. The integrated systems combine consumables and engineered optical materials with software and hardware for use in applications. The Company develops and sells its integrated solutions across a spectrum of markets, including currency manufacturing and cleaning, branded products, industrial logistics and other highly sensitive documents. The Company also provides software tools to the lottery and gaming industries for fraud, money laundering and match fixing detection, as well as statistical analysis.

The Company was incorporated on July 3, 1996 in Delaware as Spectra Acquisition Corp. On August 26, 1996, the Company purchased substantially all of the assets of SSC Science Corporation and changed its name to Spectra Science Corporation. The assets were purchased for US$1,654,000 in cash plus common stock warrants. The acquisition was accounted for using the purchase method of accounting.

On June 8, 2001, the Company changed its name to Spectra Systems Corporation.

On July 25, 2011, the Company raised US$20,241,179, net of offering costs, on the London Stock Exchange in a placing of 18,592,320 common shares at a placing price of £0.753 per new common share, representing 41.09% of the enlarged common share capital of the Company. As a result of the offering, anti-dilution provisions found in the Company's Amended and Restated Certificate of Incorporation converted all of the issued and outstanding preferred shares into 17,185,052 common shares, giving 26,659,050 common shares in issue at the time of the placing.

Note B – Significant accounting policies

Basis of presentation and consolidation

The Company has prepared the accompanying consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (US GAAP). The consolidated financial statements include the accounts of the Company, any wholly owned subsidiaries and variable interest entities (VIE) in which the Company is the primary beneficiary and entities in which the Company has a controlling interest. All material intercompany transactions and accounts are eliminated on consolidation.

Use of estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and judgments that affect the amounts reported in the financial statements and accompanying notes. The accounting estimates that require management's most difficult and subjective judgments include the assessment of recoverability of property, plant and equipment; the valuation of inventory; intangible assets; revenue recognition; stock-based compensation; and the recognition and measurement of income tax assets and liabilities. The actual results may differ materially from management's estimates.

Cash and cash equivalents

The Company considers highly liquid investment purchases with a maturity of 90 days or less at the date of acquisition to be cash equivalents.

Restricted cash

Restricted cash represents a certificate of deposit held as collateral for certain performance requirements in accordance with terms of a services contract. As of both December 31, 2023 and 2022, a service contract required that US$500,000 be maintained as collateral for contract performance. As of both December 31, 2023 and 2022, the Company collateralized the service contract with a certificate of deposit of US$513,623 and US$500,000, respectively.

Significant concentrations

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash and cash equivalents and trade accounts receivable. The Company's cash management policies restrict investments to low-risk highly liquid securities, and the Company restricts its transactions to financial institutions with good credit standing. The Company has cash and investments, including restricted, on deposit with financial institutions which are insured by either the Federal Deposit Insurance Corporation up to US$250,000 per institution, the Canadian Deposit Insurance Corporation up to CAD$100,000 per institution, the Financial Services Compensation Scheme up to £85,000 per institution or the France Deposit Insurance Fund up to €100,000 per institution. The Company also maintains cash on hand which is not subject to insurance. As of December 31, 2023, the amount of cash and investments, including restricted, not insured was approximately US$12,455,000.

Concentrations of credit risk with respect to trade accounts receivable are limited due to the concentration of business with domestic and foreign government entities. The Company's management attempts to minimize credit risk on its accounts receivable by monitoring credit exposure on a regular basis.

NOTES TO THE FINANCIAL INFORMATION continued

for the years ended December 31, 2023 and 2022

Note B – Significant accounting policies continued

Significant concentrations continued

The following table summarizes the number of customers that individually comprise greater than 10% of total accounts receivable and their aggregate percentage of the Company's total accounts receivable as of:

	December 31,	
	2023	2022
Number of significant customers	**3**	2
Percentage of total receivables	**48%**	84%

The following table summarizes the number of customers that individually comprise greater than 10% of total revenues and their aggregate percentage of the Company's total revenues for the years ended:

	December 31,	
	2023	2022
Number of significant customers	**2**	3
Percentage of total revenue	**70%**	77%

The following table summarizes the geographic concentration of revenue for the years ended:

	December 31,	
	2023	2022
United States of America	**$ 17,789,647**	$ 16,624,390
Europe	**1,511,831**	2,616,895
Rest of World	**986,723**	385,452
	$ 20,288,201	$ 19,626,737

Accounts receivable

Accounts receivable are stated at the amount management expects to collect from outstanding customer accounts. Management provides for uncollectible accounts through a provision for bad debt expense. As of December 31, 2023 and 2022, the Company had US$127,228 and US$nil, respectively, allowance for doubtful accounts.

Fair value of financial instruments

As of both December 31, 2023 and 2022, the carrying amounts of the Company's financial instruments, which include cash and cash equivalents, accounts receivable and accounts payable, are carried in the financial statements at amounts that approximate their fair market values due to their short-term nature.

Fair value is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Inputs that are generally unobservable and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

As of both December 31, 2023 and 2022, the Company has certificates of deposit of approximately US$513,000 and US$500,000 respectively, which are included in restricted cash and investments. The Company considers this certificate of deposit as a Level 2 investment.

Contingent consideration represents contingent milestones and performance obligations related to acquisition and is measured at fair value, based on significant inputs that are not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The valuation of contingent consideration uses assumptions we believe would be made by a market participant. We assess these assumptions on an ongoing basis as additional data impacting the assumptions is obtained. The fair value of contingent consideration is recorded in business acquisition liabilities on our consolidated balance sheets, and changes in the fair value of contingent consideration are recognized in acquisition related costs in the consolidated statements of income and comprehensive income.

Note B – Significant accounting policies continued

Foreign currency translation

The functional currency of the Company's foreign operations is the applicable local currency: the Canadian Dollar, the British Pound Sterling or the Euro. The functional currency is translated into US Dollars for balance sheet accounts using currency exchange rates in effect as of the balance sheet date and for revenue and expense accounts using an average exchange rate in effect during the applicable period. The translation adjustments are deferred as a separate component of stockholders' equity in accumulated other comprehensive loss.

Inventory

Inventories are stated at the lower of cost or net realizable value. Cost is determined using the first-in, first-out method. The Company regularly reviews inventory quantities on hand and records a provision to write down excess and obsolete inventory to its estimated net realizable value if less than cost. Inventory includes finished goods, raw materials, labor and overhead.

Intangible assets

Goodwill represents the excess of purchase price over the fair value of the net assets acquired. Goodwill is not amortized but is subject to at least an annual assessment for impairment or whenever events or circumstances indicate that it might be impaired. Due to the acquisition of Cartor Holdings Group Limited, goodwill was increased by US$3.5 million. There was no impairment noted during the year ended December 31, 2023.

Intangible assets consist of patents, trademarks and various intangible assets identified as part of a business combination such as contracts, customer relationships and technology. Patents and trademarks are recorded at cost. For intangible assets identified as part of a business combination, values are assigned using various valuation techniques, including the present value of expected future cash flows. Intangible assets are amortized using the straight-line method over their estimated useful lives ranging from seven to fifteen years. The Company evaluates the possible impairment of its intangible assets annually or whenever events or circumstances indicate the carrying value of the assets may not be recoverable.

Property and equipment

Property and equipment is stated on the basis of purchase price. Depreciation is calculated using the straight-line method over the following estimated useful lives:

Laboratory equipment	3–10 years
Computer and office equipment	3–5 years
Furniture and fixtures	7 years
Plant and machinery	3–15 years
Commercial vehicles	5 years
Leasehold improvements	Shorter of lease term or estimated useful life
Software	3–7 years

Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the assets and related allowances for depreciation and amortization are eliminated from accounts and any resulting gain or loss is reflected in net income.

Leases

The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use (ROU) assets and operating lease liabilities in our consolidated balance sheets. ROU assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at the commencement date of the lease based on the present value of lease payments over the lease term. Certain real estate leases include one or more options to renew, with renewal terms that can extend the lease term for up to five years. The exercise of lease renewal options are at the Company's sole discretion. When deemed reasonably certain of exercise, the renewal options are included in the determination of the lease term and lease payment obligation respectively. When readily determinable, the Company uses the rate implicit in the lease contract in determining the present value of lease payments. If the implicit rate is not provided, the Company uses its incremental borrowing rate based on information available at the lease commencement date, including the lease term. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Lease expense for lease payments is recognized on a straight-line basis over the lease term. The Company has lease agreements with lease and non-lease components and has elected to account for the lease and non-lease components as a single lease component.

Note B – Significant accounting policies continued

Investment in affiliates and other entities

During the course of business, the Company enters into various types of investment arrangements. The Company determines whether such investments involve a VIE. If the entity is determined to be a VIE, then management determines if the Company is the primary beneficiary of the entity and whether or not consolidation of the VIE is required. The primary beneficiary consolidating the VIE must normally have both (i) the power to direct the activities of a VIE that most significantly affect the VIE's economic performance and (ii) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE, in either case that could potentially be significant to the VIE. When the Company is deemed to be the primary beneficiary, the VIE is consolidated and the other party's equity interest in the VIE is accounted for as a non-controlling interest.

On December 10, 2020, the Company invested US$702,000 in Solaris BioSciences ("Solaris") and increased its equity interest from 4.79% to 48.65% on an as-converted basis. The Company concluded that Solaris was a VIE and the Company was the primary beneficiary. The Company has consolidated the accounts of Solaris since December 10, 2020.

The Company accounts for investments in affiliates under the cost method of accounting if the Company owns less than 20% of the affiliates' outstanding capital. As of December 31, 2023, the Company held a 19% ownership in an affiliate, SpectraMed. As SpectraMed had significant losses in prior years, the Company had previously reduced its investments in SpectraMed to US$nil.

On December 31, 2023, the Company acquired 100% of the shares of Cartor Holding Limited ("Cartor"). See Note P.

Acquisition

The Company applies the provisions of ASC 805 "Business Combinations" (ASC 805), in accounting for acquisitions. It requires us to recognize separately from goodwill the fair value of assets acquired and liabilities assumed on the acquisition date. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair value of the assets acquired and the liabilities assumed. Significant estimates and assumptions are required to value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable. These estimates are inherently uncertain and subject to refinement and typically include the calculation of an appropriate discount rate and projection of the cash flows associated with each acquired asset. As a result, during the measurement period, which may be up to a one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of income.

Accounting for stock-based compensation

In accounting for the employee stock option plan, the Company uses the Black-Scholes option pricing model to calculate compensation costs associated with options granted to employees. Total compensation costs are recorded over the option vesting period, generally three years using the straight-line attribution method. The Company recognizes the effects of forfeitures in compensation cost when they occur.

Revenue recognition

General

On January 1, 2018, the Company adopted ASC 606 "Revenue from Contracts with Customers" (ASC 606).

The Company's sources of revenues are as follows:

- product revenue includes sales of pigments and security taggants, sales of equipment, mail stamps, tax stamps, and passport and other government document printing;
- service revenue includes:
  - Secure Transactions software licensing and support as well as development services to customize our software to meet specific customer needs;
  - maintenance and repair services related to manufactured equipment; and
  - research and development services; and
- License and royalty for the use of the Company's know-how and technology.

Revenue is recognized when control of the promised goods or services is transferred to customers, in an amount that reflects the consideration expected to be entitled to in exchange for those goods or services. This condition normally is met when the product has been delivered or upon performance of services.

When contracts with customers include multiple performance obligations, significant judgment is involved in determining whether each performance obligation is distinct or should be combined with other performance obligations within the contract. In addition, the transaction price is allocated to each distinct performance obligation using an estimate of stand-alone selling price. Estimating the stand-alone selling price requires significant judgment and is generally based on observable prices or a cost plus margin approach.

Product revenue is generally recognized upon transfer of control of the product at a point in time upon delivery of the product to the customer pursuant to the terms of the contract. Product revenue is reported net of incentive rebates and discount.

Note B – Significant accounting policies continued

Revenue recognition continued

General continued

Revenues for maintenance and repairs and research and development services are generally recognized over time as the services are performed. Revenues for fixed-price services are generally recognized over time applying input methods to estimate progress to completion.

Generally, our software contracts contain multiple promised goods and services, including the following: (i) term software license; (ii) installation and training; (iii) unspecified future enhancements; (iv) maintenance and support; and (v) optional professional services in the future. The term software license, installation and unspecified future enhancements are considered one performance obligation as the software is dependent on the installation and the enhancements are critical to the utility of the software. As the enhancements are delivered over time, revenue is recognized ratably over the term of the contract. Maintenance and support services are provided over the term of the contract and revenue is recognized over time based on the term of the contact. Future professional services, if any, are recognized over time based on hours incurred.

During 2021, the Company initiated work on contracts with a central bank to develop new sensors for the authentication of its banknotes. During 2022, the Company and this customer executed a contract amendment that increased the number of new sensors being developed. The Company has combined the contracts and amendment per ASC 606 guidance, considered to be a package and therefore, a single performance obligation: prototype sensors. Revenue is recognized over time as the prototype sensors do not have an alternate use due to their specialized nature. Revenue is recognized on a percentage of completion basis using costs incurred to date relative to total estimated costs at completion to measure progress. Interim milestone payments are received as work progresses. During 2023, continued progress completed certain milestones and revenue was recognized accordingly.

During 2022, the Company entered into a contract with a central bank to procure critical long lead time materials for new sensors. Per ASC 606 guidance, as the Company satisfies its performance obligation of receiving, testing and accepting each long lead time material, ownership will be passed to the customer and revenue will be recognized.

The following table summarizes the type of revenue for the years ended:

	December 31, 2023	December 31, 2022
Product	$ 11,585,181	$ 11,207,801
Maintenance, repair and research and development services	6,452,511	5,217,390
License and royalty	433,954	1,738,453
Total Authentication Systems revenue	18,471,646	18,163,644
Security Printing revenue	146,064	—
Secure Transactions revenue	1,670,491	1,463,093
	$ 20,288,201	$ 19,626,737

Credit terms are predominately short term in nature. As such, there is not a significant financing component within the customer contracts.

Contract balances and other disclosures

Timing of revenue recognition may differ from the timing of invoicing to customers. The Company records an unbilled receivable when revenue is recognized prior to invoicing and a contract liability (deferred revenue) when cash payments are received or due in advance of performance. Software customers typically pay an upfront license fee and equipment maintenance contracts are typically billed annually in advance. Deferred revenue expected to be realized within one year is classified as a current liability. The following table summarizes the activity in our contract liabilities for the reporting period and the ending balance by operating segment:

	December 31, 2023	December 31, 2022
Balance, beginning of year	$ 6,305,383	$ 2,942,313
Currency translation	1,783	(11,580)
Deferral of revenue	7,557,762	10,206,066
Revenue recognized	(6,306,574)	(6,831,416)
Balance, end of year	$ 7,558,354	$ 6,305,383
Authentication Systems	6,510,911	5,045,764
Secure Transactions	1,047,443	1,259,619
	$ 7,558,354	$ 6,305,383

NOTES TO THE FINANCIAL INFORMATION continued

for the years ended December 31, 2023 and 2022

Note B – Significant accounting policies continued

Contract balances and other disclosures continued

As of December 31, 2023, there was an unbilled receivable of approximately US$1,270,907 within unbilled and other receivables on the balance sheet which will be invoiced in 2024. As of December 31, 2022, there was an unbilled receivable of approximately US$982,490 within unbilled and other receivables on the balance sheet which was invoiced in 2023.

Revenue allocated to remaining performance obligations represents contracted revenue that has not yet been recognized ("contracted not recognized revenue"), which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods. Contracted not recognized revenue was US$14,204,319 as of December 31, 2023; we expect to recognize approximately 53% of the revenue over the next twelve months, 18% over the following twelve months and the remaining 29% thereafter. This percentage depends on our estimate of future work performed which cannot be predicted with certainty.

Warranties

If a warranty is applicable, a warranty liability is recorded at the time of sale. The warranty liability is estimated by assessing historical experience to the current applicable population. Warranty costs may differ from those estimated if actual claim rates are higher or lower than our historical rates.

Research and development

Internal research and development costs are expensed as incurred. Certain third-party research and development costs are capitalized in connection with contracted work. These costs are expensed as certain milestones are achieved. Overhead, general and administrative and training costs are expensed as incurred.

Costs incurred internally in researching and developing a computer software product to be sold to customers are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, software costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. The amortization of these capitalized software costs is included in cost of revenue over the estimated life of the products which is estimated to be ten years.

Income tax

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income taxes. The benefits from net operating losses carried forward may be impaired or limited in certain circumstances. In addition, a valuation allowance can be provided for deferred tax assets when it is more likely than not that all or some portion of the deferred tax asset will not be realized. For 2023, estimated federal, state and foreign tax liabilities are US$283,000, US$95,000 and US$135,000, respectively. For 2022 estimated federal and state tax liabilities are US$318,000 and US$365,000, respectively.

Advertising costs

Advertising costs are charged to expense when incurred. Advertising expense was US$nil for both 2023 and 2022.

Shipping and handling

The Company reports the cost of shipping and handling as an operating expense. Shipping and handling expense was US$158,423 and US$146,996 for 2023 and 2022, respectively.

Recent accounting guidance

In November 2023, the FASB issued ASU No. 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures," which is intended to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. The disclosure requirements included in ASU No. 2023-07 are required for all public entities, including entities with a single reportable segment. The pronouncement is effective for fiscal years beginning after December 31, 2023, and interim periods within fiscal years beginning after December 15, 2024; early adoption is permitted. The guidance is required to be applied on a retrospective basis. We are currently evaluating the impact of the standard on our consolidated financial statement disclosures.

In December 2023, the FASB issued ASU No. 2023-09 "Income Taxes (Topic 740): Improvements to Income Tax Disclosures," which requires disclosure of disaggregated information about a reporting entity's effective tax rate reconciliation as well as disclosures on income taxes paid by jurisdiction. ASU No. 2023-09 is effective for annual periods beginning after December 15, 2024. The guidance is required to be applied on a prospective basis, with the option to apply the standard retrospectively. Early adoption is permitted. We are currently evaluating the impact of the standard on our consolidated financial statement disclosures.

Note C – Related party transactions

On September 30, 2015, the Company purchased certain assets from Solaris in exchange for US$213,917 in cash. The agreement required the Company to pay Solaris 10% of any revenues hereafter received by the Company from the commercial exploitation of the assets. The Chief Executive Officer of Solaris is also the Chief Executive Officer of Spectra. No royalty payments were made during the years ended December 31, 2023 and 2022.

Note D – Inventories

Inventories consist of the following:

	December 31, 2023	December 31, 2022
Raw materials	$ 5,540,541	$ 1,642,046
Work in process	1,172,391	105,875
Finished goods	1,477,065	1,294,811
Total	8,189,997	3,042,732
Less: reserve for excess and obsolete inventory	(1,682,955)	(1,444,000)
	$ 6,507,042	$ 1,598,732

Note E – Property and equipment

Property and equipment consists of the following:

	December 31, 2023	December 31, 2022
Laboratory equipment	$ 1,515,931	$ 1,491,395
Computer and office equipment	546,403	321,438
Furniture and fixtures	869,427	29,910
Plant and machinery	10,345,982	2,185,565
Commercial vehicles	9,923	—
Leasehold improvements	1,814,032	1,562,186
Software	488,154	486,349
Total	15,589,852	6,176,843
Less: accumulated depreciation	(4,491,574)	(4,075,080)
	$ 11,098,278	$ 2,101,763

Depreciation expense amounted to US$466,630 and US$321,429 for the years ended December 31, 2023 and 2022, respectively.

NOTES TO THE FINANCIAL INFORMATION continued

for the years ended December 31, 2023 and 2022

Note F – Leases

The Company holds four real estate leases. During 2018, the Company signed a lease agreement for corporate office space which expires in October 2023. The Company extended its lease agreement for manufacturing and warehouse space in East Providence through October 2027. To support the Secure Transactions Group, the Company signed a lease which has been extended through January 2025. The Company's lease for laboratory space in East Providence has been extended through May 2028. In September 2023, the Company signed a new lease to extend the current and secure additional laboratory space to support customer requirements and will run through May 2033. Certain real estate leases include one or more options to renew, with renewal terms that can extend the lease term for up to five years. Operating lease costs were US$413,460 and US$411,767 for the years ended December 31, 2023 and 2022, respectively. As part of the Cartor acquisition, the Company now leases the office and manufacturing facility in Wolverhampton, UK, at an annual lease cost of US$581,775 over a ten-year term commencing January 1, 2024. In addition, Cartor has several lease obligations terms of one to five years.

Future minimum lease payments are as follows:

Year ending December 31,		
2024	$	962,725
2025		970,166
2026		957,168
2027		937,893
2028		806,748
Thereafter		3,682,384
	$	8,317,084

Supplemental information related to leases are as follows:

		December 31, 2024
Weighted average remaining lease term	**$**	**9.23**
Weighted average discount rate	**$**	**7.30**

Note G – Intangible assets

Intangible assets consist of the following:

	December 31,			
		2023		2022
Patents	**$**	**5,583,454**	$	5,267,821
Customer relationships		**4,871,556**		3,043,000
Non-compete agreements		**188,440**		188,440
Developed technology		**1,502,000**		1,502,000
Trade name		**1,346,337**		30,000
Goodwill		**6,597,897**		3,040,607
Trademarks		**222,251**		206,269
Total		**20,311,935**		13,278,137
Less: accumulated amortization		**(6,798,099)**		(6,222,996)
	$	**13,513,836**	$	7,055,141

Amortization expense amounted to US$575,104 and US$582,026 for the years ended December 31, 2023 and 2022, respectively.

Note G – Intangible assets continued

Estimated amortization expense is as follows:

		Year ending December 31,
2024	$	873,225
2025		860,721
2026		777,575
2027		758,976
2028		732,667
Thereafter		2,912,775
	$	6,915,939

Goodwill by operating segment is as follows:

	December 31,			
		2023		2022
Authentication Systems	$	1,763,661	$	1,763,661
Secure Transactions		1,276,946		1,276,946
Security Printing		3,557,290		—
	$	6,597,897	$	3,040,607

Note H – Other assets

Other assets consist of the following:

	December 31,			
		2023		2022
Supplier deposits	$	500,000	$	500,000
Rental deposits		18,799		18,611
Capitalized software costs, net		66,125		79,350
	$	584,924	$	597,961

Amortization expense of capitalized software costs amounted to US$13,225 for both of the years ended December 31, 2023 and 2022.

Note I – Accrued expenses and other liabilities

Accrued expenses and other liabilities consist of the following:

	December 31,			
		2023		2022
Employee compensation	$	384,594	$	289,727
Sales allowance and rebates		40,773		41,486
Professional fees		214,359		105,645
Property and franchise taxes		9,680		10,246
Other		162,704		56,714
	$	812,110	$	503,818

NOTES TO THE FINANCIAL INFORMATION continued

for the years ended December 31, 2023 and 2022

Note J – Third party loans

The Company through its wholly owned subsidiary, Cartor, has several third party collateralized and non-collateralized capital loans totalling US$5.6 million at December 31, 2023. These loans commenced on various dates from April 2018 through October 2023. The average remaining term is 3.5 years, and the average annual interest rate is 1.96%.

The following table summarizes the notes outstanding at December 31, 2023.

Type		Balance	Interest rate	Maturity	Collateral
Equipment	$	1,773,126	0.2% – 11%	2024 – 2027	Equipment
Operational	$	3,462,556	0% – 0.5%	2026 – 2027	None
Other	$	347,697	0.96%	January 2028	Property
Total	$	5,583,379			

The five-year maturity payments are as follows:

		Year ending December 31,
2024	$	1,544,561
2025		1,526,524
2026		1,319,046
2027		1,098,864
2028		83,343
Thereafter		11,041
	$	5,583,379

Note K – Line of credit

The Company, through its wholly owned subsidiary Cartor, has four separate overdraft facilities with one-year terms at rates between 5.39% and 8.5%. The maximum borrowing of the overdrafts ranges from US$125,000 to US$400,000. The balance as of December 31, 2023, was US$561,241.

Note L – Income taxes

The approximate components of the income tax provision are as follows:

	December 31,			
		2023		2022
Income tax provision (benefit) computed at:				
Federal statutory rate – current	$	1,793,000	$	2,463,000
State statutory rate – current		598,000		821,400
Foreign – current		(95,000)		—
Federal deferred		(626,000)		(1,554,000)
State deferred		(209,000)		(519,000)
Foreign – deferred		(32,000)		—
Change in valuation allowance		—		(310,000)
Income tax expense	$	1,429,000	$	901,400

A reconciliation of the statutory federal income tax rate with our effective income tax rate was as follows:

	December 31,	
	2023	2022
Statutory federal rate	21.0%	21.0%
State income taxes, net of income tax benefit	3.3%	5.3%
Non-deductible expenses and other	(5.1)%	86.6%
Change in valuation allowance	—	(100.0)%
Effective tax rate	19.2%	12.9%

Note L – Income taxes continued

Approximate net deferred income tax assets are as follows:

	December 31,			
		2023		2022
Deferred income tax assets				
Deferred revenue	$	2,116,000	$	1,766,000
Inventory		404,000		404,000
ROU assets		6,000		—
Net operating loss carryforward – foreign		711,000		—
Valuation allowance – foreign		(325,000)		—
Deferred income tax liabilities				
Depreciation and amortization		(1,048,000)	$	(289,000)
Other		(20,000)		—
Total deferred income tax assets	$	1,844,000	$	1,881,000

As of December 31, 2022, the Company fully utilized net operating loss and tax credit carryforwards to offset federal income tax.

As of December 31, 2023, the tax losses arose from the Cartor acquisition and are expected to be utilized to offset foreign tax.

The Company accounts for the effect of any uncertain tax positions based on a “more likely than not” threshold to the recognition of the tax positions being sustained based on the technical merits of the position under scrutiny by the applicable taxing authority. If a tax position or positions are deemed to result in uncertainties of those positions, the unrecognized tax benefit is estimated based on a “cumulative probability assessment” that aggregates the estimated tax liability for all uncertain tax positions. The Company is not currently under examination by any taxing jurisdiction. The Company’s federal and state income tax returns are generally open for examination for three years following the date filed.

Note M – Commitments and contingencies

The Company is involved from time to time in litigation incidental to the conduct of its business. The Company is not currently a party to any lawsuit or proceeding.

Supply agreements

As of December 31, 2023, the Company had commitments to purchase approximately US$1,353,000 of materials and services during 2024.

Employment contracts

The Company has made contractual commitments to certain employees providing for severance payments, including salary continuation, upon the termination of employment by the Company without substantial cause or by the employee for good reason. The contracts also generally provide for certain protections in the event of a change in control of the Company. These protections include the payment of certain severance benefits, such as salary continuation, upon the termination of employment following a change in control.

Note N – Stockholders’ equity

Common and preferred stock

On July 25, 2011, the Company raised US$20,241,179, net of offering costs, on the London Stock Exchange in a placing of 18,592,320 common shares at a placing price of £0.753 per new common share, representing 41.09% of the enlarged common share capital of the Company. As a result of the offering, anti-dilution provisions found in the Company’s Amended and Restated Certificate of Incorporation converted all of the issued and outstanding preferred shares into 17,185,052 common shares, giving 26,659,050 common shares in issue at the time of the placing. At December 31, 2023 there were 46,006,608 common shares outstanding and no preferred shares in issue.

Share repurchases

On April 9, 2019, the Board of Directors approved, for an extendable period of twelve months therefrom, a share buy-back authority in respect of up to 4,500,000 common shares of the Company. The Board has extended this share buy-back authority through March 31, 2023. All shares repurchased are retired and restored to authorized and unissued shares. The Company repurchased a total of 500,000 shares at a total cost of US$807,347 during the year ended December 31, 2022. As of December 31, 2023, a total of 1,646,000 shares have been repurchased under the share buy-back authority.

Note N – Stockholders' equity continued

Dividends

The Board of Directors declared the following dividends:

Declaration date	Record date	Payment date	Dividend per share		Amount
March 21, 2023	June 5, 2023	June 23, 2023	$ 0.115	$	5,181,799
March 18, 2022	June 6, 2022	June 24, 2022	$ 0.11	$	5,004,414

Stock option plan

In May 2007, the Company adopted the 2007 Stock Plan (the "2007 Plan"), which provided for the grant of incentive stock options and nonqualified stock options, stock awards and stock purchase rights for the purchase of up to 14,100,000 shares of the Company's common stock to officers, employees, consultants and Directors of the Company. The Board of Directors is responsible for administration of the 2007 Plan. The Board determines the term of each option, the option exercise price, the number of shares for which each option is granted and the rate at which each option is exercisable. Incentive stock options (ISO) may be granted to an officer or employee at an exercise price per share of not less than the fair value per common share on the date of the grant (not less than 110% of fair value in the case of holders of more than 10% of the Company's voting stock) and with a term not to exceed ten years from the date of the grant (five years for ISOs granted to holders of more than 10% of the Company's voting stock). As the 2007 Plan is over ten years old, tax regulations prevent the issuance of further ISOs. Nonqualified stock options may be granted to consultants or Directors at an exercise price per share of not less than 85% of the fair value of the common stock. Stock options generally vest over three years and are exercisable over a period up to ten years from the date of grant. As of December 31, 2023, options to purchase 3,475,667 shares of common stock were outstanding and 1,327,492 shares of common stock have been issued under the 2007 Plan. As of December 31, 2023, 9,296,841 shares of common stock were available for grant under the 2007 Plan.

Information related to stock options granted by the Company is summarized as follows:

	December 31, 2023		December 31, 2022	
	Number of shares under option	Weighted average exercise price	Number of shares under option	Weighted average exercise price
Outstanding at beginning of year	3,593,667	$ 0.80	3,012,667	$ 0.51
Granted	270,000	2.14	1,008,000	1.82
Exercised	48,113	0.60	(207,357)	0.44
Forfeited/canceled	339,887	1.85	(219,643)	1.35
Outstanding at end of year	3,475,667	$ 0.84	3,593,667	$ 0.80

The following table summarizes information about stock options outstanding at December 31, 2023:

	Options outstanding			Options exercisable	
Exercise price range	Number of outstanding shares	Weighted average contractual life (years)	Weighted average exercise price	Number of shares	Weighted average exercise price
US$0.30–US$0.49	2,394,667	2.42	$ 0.34	2,394,667	$ 0.34
US$1.31–US$2.23	1,081,000	8.24	1.94	359,000	1.83
	3,475,667	4.23	$ 0.84	2,753,667	$ 0.53

As of December 31, 2023, the weighted average contractual life for exercisable stock options was 3.04 years.

The Company's stock price closed at US$2.97 (£2.33) on December 31, 2023. As of December 31, 2023, the aggregate intrinsic value for outstanding and exercisable stock options was US$7,417,576 and US$6,725,769, respectively. Intrinsic value for stock options is defined as the difference between the current market value of the stock and the exercise price. The intrinsic value represents the value that would have been received by the option holders had the option holders exercised all of their options as of that date.

The Company currently uses the Black-Scholes option pricing model to determine the fair value of its stock options. The valuations determined using this model are affected by assumptions regarding a number of complex and subjective variables including stock price, volatility, expected life of options, risk free interest rates, and expected dividends, if any. The weighted average grant date fair value of stock options granted was US$2.14 and US$1.82 for the years ended December 31, 2023 and 2022, respectively. The assumptions used to value stock option grants are as follows for the years ended December 31, 2023 and 2022:

Note N – Stockholders' equity continued

Stock option plan continued

	December 31,	
	2023	2022
Risk free rate	**4.15%**	3.73%
Expected life (years)	**6.5**	6.5
Assumed volatility	**39.32%**	42.75%
Expected dividends	**5.80%**	5.80%

The following table summarizes stock-based compensation expense for the year ended:

	December 31,			
		2023		2022
Research and development	**$**	**57,711**	$	60,076
General and administrative		**89,665**		65,549
Sales and marketing		**32,868**		17,356
	$	**180,224**	$	142,981

As of December 31, 2023, there was approximately US$274,747 of unrecognized compensation cost, related to unvested stock-based payments granted to our employees and Directors, which is expected to be recognized over a weighted average period of 1.5 years. Total unrecognized compensation cost will be adjusted for future changes in forfeitures and recognized over the remaining vesting periods of the stock grants.

Note O – Employee retirement plan

During 1999, the Company adopted a defined contribution plan, established under the guidelines of Section 401(k) of the Internal Revenue Code (IRC), which covers all employees. Employees are eligible to participate in the employee retirement plan (the "Plan") at the beginning of the first month following the date of hire. Employees may contribute up to the maximum allowed by the IRC of eligible pay on a pretax basis. The Company made a matching contribution of 50% of employee contributions up to 4% of eligible salary. Company-matched contributions vest at 25% after one year of service, 50% at the end of two years of service and 100% at the end of three years of service. For the years ended December 31, 2023 and 2022, the Company's matching contributions were US$47,740 and US$45,580, respectively.

Note P – Business combinations

On December 21, 2023, the Company acquired 100% of the shares of Cartor Holdings Limited ("Cartor") in a cash and stock deal for a maximum consideration of £10.5 million. At completion, the Company paid £5.5 million in cash, issued 947,494 new shares of common stock of US$0.01, at an issue price of £2.11 per share, and assumed £5.5 million in third party loans. Another £3 million of shares will be to seller subject to certain contingent contract and milestone performance in the first 18 months post-acquisition. Total consideration was approximately US$13.4 million.

The purchase price allocation is as follows:

Estimates of fair value acquired		$'000
Cash	$	376
Accounts receivable		2,672
Inventory		3,396
Fixed assets		9,244
Investments		96
Current liabilities		(2,480)
Debt		(5,628)
Brand name		1,151
Customer relationships		2,066
Deferred tax asset		(805)
Net asset fair value		10,088
Goodwill		3,310
Total consideration	**$**	**13,398**

Acquisition related costs charged to general and administrative expenses in 2023 were approximately US$800,000.

NOTES TO THE FINANCIAL INFORMATION continued

for the years ended December 31, 2023 and 2022

Note Q – Segment reporting

In accordance with ASC 280, management has identified four operating segments. The first is the Authentication Systems Group, which captures the hardware, software and materials related to the authentication of banknotes, tax stamps and other high-value goods. The second segment is the Secure Transactions Group, which provides an Internal Control System (ICS) software offering to the lottery and gaming industries. ICS provides tools for fraud, money laundering and match fixing detection, as well as statistical analysis. The third segment is the Security Printing Group, which delivers conventional and hybrid postage stamps, tax stamps, vouchers, coupons, certificates and high-security documents. The fourth segment is the Banknote Cleaning Group, which captures the technology related to cleaning and disinfecting banknotes.

Information for each reportable segment as of December 31, 2023 and 2022 is as follows:

			Gross revenue		Income (loss) from operations		Depreciation and amortization		Capital expense		Segment assets
2023	**Secure Transactions**	**$**	**1,670,492**	**$**	**80,376**	**$**	**31,766**	**$**	**10,270**	**$**	**1,975,342**
	Authentication Systems		**18,471,645**		**7,429,659**		**920,839**		**140,538**		**37,571,623**
	Security Printing		**146,064**		**(308,326)**		**52,014**		**—**		**20,125,610**
	Banknote Cleaning		**—**		**(50,340)**		**50,340**		**—**		**423,884**
	Total	**$**	**20,288.201**	**$**	**7,151,369**	**$**	**1,054,959**	**$**	**150,808**	**$**	**60,096,459**
2022	Secure Transactions	$	1,463,093	$	23,593	$	30,804	$	89,349	$	1,970,128
	Authentication Systems		18,163,644		7,015,510		838,928		898,816		35,595,128
	Banknote Cleaning		—		(46,163)		46,947		—		452,009
	Total	$	19,626,737	$	6,992,940	$	916,679	$	988,165	$	38,017,265

Note R – Earnings per share

The calculation of basic earnings per share is based on the net income divided by the weighted average number of common shares outstanding. Diluted earnings per share is calculated by considering the dilutive impact of common stock equivalents under the treasury stock method as if they were converted into common stock as of the beginning of the period or as of the date of grant, if later. Excluded from the calculation of diluted earnings per common share for the years ended December 31, 2023 and 2022 were 132,000 and 186,773 shares, respectively, related to stock options because their exercise prices would render them anti-dilutive. The following table shows the calculation of basic and diluted earnings per common share:

	December 31,			
		2023		2022
Numerator				
Net income	**$**	**6,047,921**	$	6,147,374
Denominator				
Weighted average number of common shares outstanding		**45,074,264**		45,189,208
Effect of dilutive securities				
Stock options		**3,687,690**		2,132,610
Diluted weighted average number of common shares outstanding		**48,761,954**		47,321,818
Earnings per common share				
Basic	**$**	**0.13**	$	0.14
Diluted	**$**	**0.12**	$	0.13

Note S – Reclassifications

Certain amounts in the 2022 financial statements have been reclassified to conform to the 2023 presentation. There was no change in net income as a result of the reclassifications.

Note T – Subsequent events

The Company evaluated all events or transactions that occurred through April 2024, the date these financial statements were available to be issued.

On December 7, 2023, the CEO exercised 1,881,063 options at £0.25. The CEO elected to utilize the net cashless exercise feature and has surrendered 209,940 shares to the Company at the prevailing market price of £2.24 on 11 December 2023. The CEO was issued a net total of 1,671,123 shares in January 2024.

On March 27, 2023, the Company declared a dividend of US$0.116 per share to be paid on or around June 28, 2024 to shareholders of record as of June 14, 2024.

SHAREHOLDER AND CORPORATE INFORMATION

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Its knowledge of optical physics in incorporating taggants and high-speed reading of covert features enables Spectra to provide the highest level of banknote security worldwide.

Spectra Systems (SPSY.L) is listed on the London Stock Exchange.

Spectra Systems
CORPORATION

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Spectra Systems Corporation Annual report and accounts 2023