

**26 November 2024**

**Microsaic Systems plc**

("Microsaic", "Microsaic Systems" or the "Company")

**Operational Update**

Microsaic Systems plc (AIM: MSYS), an international developer and provider of testing solutions for unique and underserved public health and environmental markets, is pleased to present an operational update.

As recently presented in the interim update issued on 12 November 2024 ("**H1 24 Interims**"), the Company is focused on developing a strong business in the water and environmental testing markets. Given the unique position of its small-scale technologies the Company believes it can become a leading mobile and point-of-use water testing technology provider. The Company's technologies are versatile and can provide testing results in minutes rather than hours and can be summed up as a "lab in a box."

The Company is working on the following operational and product development projects in the water and environmental testing markets, focused on generating early revenues and improvements in gross margins.

**Qatar project update**

Further to its announcement of 27 March 2024, the Company is pleased to confirm that all 27 Continuous Toxic Monitoring systems (CTMs) have now been installed in Doha. Commissioning is underway with the Company's regional partner, Avanceon, which is a leading installer of industrial solutions, including for the water industry, with a wide presence in Asia and Middle East countries.

The Company's CTM network in Doha will constantly monitor the region's potable water and is an early warning system for the presence of any toxic chemicals present enabling fast network shutdown if needed. Over 2,700 potential toxins have been scientifically identified that can be detected by the MicroTox<sup>®</sup> reagents used in the CTMs and is therefore one of the most comprehensive systems on the market. All related consumables are expected to be shipped by the end of the year for project completion.

The end user, Kahramaa (Qatar General Electricity and Water Corporation), is currently undergoing training to operate the CTMs and final acceptance is expected soon after. The total value of this contract to the Company is €571k and the Company has invoiced 80% of the total amount in two tranches for work completed. A second phase of the project is already under discussion for 2025, which could mean the purchase of more CTMs for new sites in Qatar.

**MicroTox<sup>®</sup> Instrumentation upgrades**

The Company has significantly invested in upgrading the design and operation of its MicroTox<sup>®</sup> driven devices. This brings them up to date with the latest electronics to meet customer requirements, including improved user interfaces. The Company believes the upgrades are expected to result in an increase in sales of instruments all of which use various forms of our MicroTox<sup>®</sup> reagents.

**MicroTox<sup>®</sup> LX**

Production has just started of our newly upgraded laboratory based MicroTox<sup>®</sup> LX device having received initial firm orders of eight units, with five to be shipped in December to international customers. The MicroTox<sup>®</sup> LX is an industry standard laboratory device for early screening of toxins in water. Showcased initially at Weftec (largest North America water industry exhibition) in October the upgraded MicroTox<sup>®</sup> LX is attracting considerable industry interest turning into firm orders and sales.

**MicroTox<sup>®</sup> FX**

The Company is evaluating wider market interest in its small handheld instrument which can be used for screening potable water in real time in the field, called MicroTox<sup>®</sup> FX. For possible military use the MicroTox<sup>®</sup> FX is being showcased in Q1

water in real-time, in the field, called MicroTox™ FX. For possible military use the MicroTox™ FX is being showcased in Q1 2025 at the permanent UK Defence and Security Exports exhibition site at Larkhill, England, where allied overseas armed forces can examine and try new products suitable for military use.

#### **Tethys Purity® Initiative**

'Tethys Purity®' is a system of multi-instruments and MicroTox® reagents solutions for online/automated water safety testing. Instruments from Modern Water, Microsaic Systems, and other selected partners are being networked to deliver bespoke solutions to customers that require constant live and online data monitoring capability.

The networking of the Tethys Purity® devices for continuous centralised dashboard data monitoring and analysis using machine learning software (AI) is currently under review. The Company, in collaboration with Siemens and their technical support provider CAD-IT, is starting trials of their specialist software for the digital transformation and centralised data recording of the Company's instruments. The Company is planning to launch the Tethys Purity® system in early 2025. The Company is working with regional offices of the British Department for Business and Trade (DBT) to promote the Tethys Purity® solution in GCC countries and elsewhere.

#### **Pathogen Detector Development & Consortium**

The Company's new Pathogen Detector system, initially designed by Microsaic Systems as a Covid-19 detector in water, is being repurposed to detect Cryptosporidium (found in sewage polluted water) initially and later multiple (possibly up to nine) water-borne pathogens at the same time. As previously announced, the Company will be working with Aptamer Group plc (in York, England) supported by other specialist contractors to develop the detector system.

The system will be portable and easily transportable therefore offering a significant step forward for in-line real-time detection and identification of multiple pathogens including viruses. The Company believes this system will be unique and allow customers to detect pathogens in water tailored to their needs for fast response analysis in minutes.

The Company expects to move the project to proof-of-concept shortly and commercialisation could be planned, subject to resources, by the end of 2025.

#### **PFAS & Acrylamide Systems**

Polyfluoroalkyl (PFAS) substances are a group of manmade chemicals designed to be non-stick, waterproof, and flame-resistant that have been linked to various health problems, including certain cancers which are of major concern in key markets like the US. The Company's Microsaic mass-spectrometer technology is well positioned to address this market due to its portability and accuracy of testing (parts per trillion) and aims to be the leading 'point of use' system for PFAS detection and measuring systems. The Company believes this embryonic but rapidly developing market provides another example where its unique and proprietary technology can service a current unmet need for very small minimum detection systems.

Despite the testing challenges posed by PFAS, the Board believes this testing market could be a significant opportunity for its system. Companies that can offer innovative, cost-effective solutions will find themselves in high demand in a market that is already growing rapidly. The global [PFAS testing market](#) was valued at 336 million in 2023, and it is expected to grow at a CAGR of 9.33% and reach 893 million by 2034 (Source: Market Research.Com 8 October 2024).

A wide range of PFAS chemicals, including the most common ones found in the environment, can be detected by the Company's system and the Company is working with Swansea University to identify and analyse the broadest range of PFAS chemicals possible. The Company can also confirm it is in early-stage partnership discussions with multiple companies also interested in this important environmental market.

The Company continues to monitor the market for detection of potentially carcinogenic acrylamide in heat treated foods. Customer trials of our detection equipment based on the MiD4500 mass spectrometer are expected to begin in H1 2025 collaborating with a specialist partner in combination with their automated sample preparation method for testing for acrylamide in crisp products.

#### **MiD4500 Manufacturing**

The Company has decided to reduce manufacturing costs and improve the profitability of the Company's mass spectrometer MiD4500 by ceasing subcontract manufacturing and bring manufacturing in-house. The Company will open a smaller in-house manufacturing facility in Woking, England, which will be considerably lower-cost, more adaptable and capable of building the new PFAS Detector as market demand develops.

The Company has also recently appointed a new European distributor, Avantor, which is now trained on the system for new

customers in Europe. Avantor is a leading life science tools company and global provider of mission critical products and services to the life sciences and advanced technology industries.

#### **Sulphate Reducing Bacteria Kits**

The Company has seen growing demand in the Middle East Gulf region and elsewhere for Sulphate-Reducing Bacteria test kits (SRB kits), which were previously sold under the QuickChek® brand. The Company has therefore acquired the design and rights to manufacture and supply QuickChek® through the acquisition of its Modern Water business in January 2024. Production is expected to start in 2025.

#### **Board Composition**

The Company recognises that good corporate governance is important both for the interests of shareholders and to support the future growth of the business. The Board is committed to strengthening the Board through the addition of at least one reputable, skilled and sector experienced independent non-executive director to the board in early 2025.

#### **Cash**

The Company confirms that there has been no material change to its current cash position and cash flow forecasts remain as presented in its H1 24 Interim update on 12 November 2024."

#### **Comment**

Bob Moore, Microsaic Systems' Acting Executive Chairman, commented: "*We are cognisant and appreciative that shareholders have had to be very patient with us over the past year. With a small but highly skilled team we have been busy stabilising the business and unlocking the substantial potential of our Company demonstrated by how contracts, such as the one in Qatar, are developing. We have been through a period of considerable restructuring and required capital investment in our comprehensive and new product range, and we are very encouraged by the nature of enquiries and rewards that are coming our way. We look forward to providing further updates to the market in due course.*"

#### **Microsaic Systems plc**

Bob Moore, Acting Executive Chairman

**+44 (0) 20 3657 0050**

via Turner Pope

#### **Singer Capital Markets (Nominated Adviser & Joint Broker)**

Alex Bond / Oliver Platts

**+44 (0)20 7496 3000**

#### **Turner Pope Investments (TPI) Limited (Joint Broker)**

Andy Thacker / James Pope

**+44 (0) 20 3657 0050**

#### **About Microsaic Systems Group**

Microsaic is highly experienced in the development, manufacture and supply of microelectronics instrumentation for markets requiring analytical testing in public and environmental health markets. The Company has recently acquired and integrated the assets of Modern Water with Microsaic Systems' technologies resulting in comprehensive water testing and other toxic testing capabilities. Microsaic's products and solutions are commercially available through global markets via a network of regional and country specific distributors and partners.

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact [ms@seg.com](mailto:ms@seg.com) or visit [www.ms.com](http://www.ms.com).

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our [Privacy Policy](#).

END

UPDBELLZFLFBB