21 January 2025

Ilika plc
('Ilika,' the 'Company,' or the 'Group')

Half-year Results

Delivering key milestones on the commercialisation roadmap for Stereax & Goliath

Ilika (AIM: IKA), a pioneer in solid-state battery technology, announces its unaudited half-year report for the six months ended 31 October 2024.

Commercial Acceleration:

During the period, significant progress has been made with both Ilika's thin-film Stereax® miniature solid-state batteries (SSBs) for powering medical devices and industrial wireless sensors in specialist environments, and its large-format Goliath cells for electric vehicles (EVs) and compact cordless appliances.

Graeme Purdy, CEO of Ilika, said:

"Ilika made significant progress with both our Stereax and Goliath product lines, during the period. On Stereax, we have been working closely with Cirtec, our manufacturing partner, to implement production equipment at their US facility. We are excited by the commercial opportunities in miniature medical devices, building on Cirtec's established position as a leading strategic outsourcing partner of complex medical devices and, crucially, we expect Stereax product revenues to commence this year.

"We have also made rapid progress with Goliath, successfully delivering against our ambitious technology roadmap and achieving two key milestones in the past six months. Furthermore, we have increased the energy capacity 5x since releasing our first prototypes to customers in the summer of 2024. Our Goliath battery helps EV designers address consumer concerns through its clearly differentiated safety features, enabling cost reduction and increased in range. We look forward to building on the commercial relationships we have established by releasing further prototypes in 2025."

Stereax (Medical Device Applications)

Substantially completed the installation of Ilika's key equipment required to manufacture Stereax cells at Cirtec Medical's expanded cleanroom facility in Lowell, MA, US; cathode manufacturing initially remaining at Ilika's UK facility as a sub-contract service to Cirtec.
Ongoing cooperation between Ilika and Cirtec to commission equipment and run trial batches of batteries to fully qualify the Stereax manufacturing process.
Progressing with plans for production runs to deliver commercial M300 samples in 2025.
Promoting Stereax, in cooperation with Cirtec, to a growing number of Active Implantable Medical Device (AIMD) applications.
Supporting portfolio of 21 customers with their development plans and launch schedules, capitalising on integration opportunities with Cirtec's platform technology portfolio.

Goliath (EV Applications)

Commenced commercial testing of 1st generation P1 prototype batteries in a customer-sponsored programme, allowing customers to validate Goliath's performance characteristics.
Shipped first batch of P1 prototype Goliath batteries to a Tier 1 customer.

Released third-party validated safety data and confirmed achievement of D5 development milestone demonstrating significant improvements relative to commercially available EV batteries, with resulting benefits in vehicle weight, cost and extended range.
Continued execution of the Faraday Battery Challenge, an £8.2m grant-funded HISTORY project to integrate high silicon content electrodes into Goliath, in collaboration with BMW and Fortescue Zero.
Trialled production-intent equipment at vendor sites and at Ilika's pilot facility.
Continued scale-up supported by Automotive Transformation Fund's £2.7m grant-supported SiSTEM project, in which Ilika is collaborating with MPac plc, UK Battery Industrialisation Centre (UKBIC) and Tata Sons subsidiary Agratas. This will result in the addition of a 1.5 MWh/a assembly line to Ilika's automated pilot line capability.
Continued interaction with automotive and consumer appliance customers including original equipment manufacturers (OEMs) and Tier 1 suppliers globally, resulting in a pipeline of evaluation agreements with 21 companies.

Financial Summary:

- Total revenue for the period of £1.0m (H1 2023/24: £1.3m), including grant funding of £0.9m (H1 2023/4: £1.3m) and £0.1m relating to Goliath commercial activity (H1 2023/4: £0m)
- EBITDA loss, excluding share-based payments, of £1.9m (H1 2023/24: £1.9m loss)
- Cash & Cash equivalents at period end of £10.1m (H1 2023/24: £13.2m)
- Successful £2.3 million (gross) fundraising to support the Goliath roadmap and Stereax commercialisation.

Post Period End:

Confirmed completion of the Goliath D6 milestone which produced a 10Ah Goliath battery, a 5x increase in capacity relative to its P1 prototypes which were released to customers in summer 2024.

Outlook:

Commence recognition of Stereax product revenues in CY2025, with signed licensing agreement in place with Cirtec.
Progress Goliath roadmap to the completion of the Minimum Viable Product (MVP) by the end of 2025, after reaching the D7 and D8 development milestones by the end of the HISTORY programme grant in Q1 2025, underpinning licensing opportunities.
Manufacture and test 2nd generation Goliath prototype (P1.5) for customer evaluation by summer 2025. Prototype to be based on the D7 development point, with a capacity of 10Ah, which can be used as a building block of EV battery modules.
Complete the capacity increase of pilot production facility to 1.5 MWh/a enabled by an automated cell assembly line from MPac to accommodate automotive requests for quotation ('RFQ') with 3rd generation P2 prototypes by the end of 2025.
Capitalise on commercial interest and government grant support, which is expected to intensify as the Goliath product continues to mature.

CEO's Statement

Principal Activities

Ilika continues to rapidly develop its leading-edge intellectual property (IP), as it moves towards manufacturing at pilot scale and licensing Solid State Batteries (SSBs) for high performance markets. We use ceramic-based lithium-ion technology, which differentiates our products from existing batteries by offering competitive energy density and charge times, while being inherently safe and easier to recycle.

Ilika has two product lines: miniature Stereax® SSBs for powering medical devices and industrial wireless sensors in specialist environments, and large format Goliath SSBs for EVs and cordless appliances.

Review of Period

Stereax SSBs

Ilika's miniature Stereax cells are differentiated from other solid-state technology through its efficient, low temperature evaporation process that is capable of higher manufacturing rates than other miniature solid-state routes.

Stereax's benefits include :

- Lower cost of manufacture;
- Can be charged and discharged more times through use of silicon anodes;
- Less packaging;
- High temperature resilience; and
- Lower manufacturing carbon footprint.

These unique benefits make Stereax batteries ideal for medical implants and industrial applications. Miniature Stereax batteries can enable solutions in a form factor not currently achievable with conventional lithium-ion batteries. Their compact, high energy-density, high power characteristics allow for use in a range of medical implant applications covering blood pressure monitoring to neuro- stimulation. Industrial automation, or Industrial Internet of Things (IIoT), requires low maintenance batteries with a long lifetime, often in situations that require operation at temperatures exceeding the safety rating for standard lithium-ion batteries (typically 60 degrees Celsius).

Stereax Manufacturing and Commercialisation

Commercial production runs of M300 samples are expected in 2025 generating initial commercial revenues for Stereax.

This crucial milestone for Ilika stems from the successful initial batches of Stereax M300 batteries that were shipped to customers from its UK pilot manufacturing facility in May 2023. This led to the August 2023 agreement with Cirtec for a ten-year manufacturing licence to produce the Stereax range of mm-scale batteries at Cirtec's facility in Lowell, Massachusetts, US. Cirtec is an industry-leading strategic outsourcing partner of complex medical devices including minimally invasive and active implantable devices.

Ilika has been working with Cirtec to install and commission the Stereax machine sets at Cirtec's Lowell facility. The installation was substantially completed in the summer of 2024. There is ongoing cooperation between Ilika and Cirtec to commission the equipment and run trial batches of batteries to fully qualify the Stereax manufacturing process with production runs to deliver commercial M300 samples planned in 2025. Both companies are promoting Stereax for a growing number of Active Implantable Medical Device (AIMD) applications, supporting a portfolio of 21 current Stereax customers. Demand from applications such as smart orthopaedics, orthodontics, neurostimulation and smart contact lenses has created opportunities in the medical device sector, which is the sector generating the strongest demand. Commercial ramp up in this space usually takes three to five years, depending on the regulatory classification of the device.

Once economies of scale are achieved, Ilika and Cirtec are anticipating being able to address larger volume applications in specialised sectors of Industrial IoT.

Large Format Goliath SSBs

Ilika's Goliath cells have the potential to enable longer range electric vehicles with battery packs that last longer and can be recycled more easily

Goliath cells are differentiated from other solid-state prototype cells through the Company's choice of materials, cell architecture and manufacturing process for its cathode, electrolyte and anodes. Different developers have selected distinct combinations of these materials to achieve an outcome suitable for their target markets and Ilika has chosen materials that deliver these distinct advantages in the EV sector.

Ilika's initial target market for Goliath in automotive is the higher performance sector, which is less cost-sensitive than higher volume segments and where enhanced vehicle range commands a premium price. To address this market, Ilika is driving forward its Goliath development programme. Following the achievement of its D4 technical milestone in November 2023 and shortly thereafter achieving lithium-ion energy density parity in December 2023, Ilika confirmed in May 2024 that it had commenced commercial testing of its P1 prototype batteries in a customer-sponsored programme. The P1 prototype is an intermediate milestone on Ilika's roadmap to its minimum viable product (MVP) in 2025. The P1 Goliath prototype is a solid-state pouch cell made from readily available materials including a lithium-nickel-manganese- cobalt oxide (NMC) cathode and a silicon anode. Ilika shipped its first batch of P1 prototype Goliath batteries to a Tier 1 customer, in July 2024.

In October 2024, Ilika confirmed it had met its D5 development milestone and released a set of third-party validated safety data demonstrating significant improvements relative to commercially available EV batteries, with resulting benefits in vehicle weight, cost and extended range.

Throughout the period, Ilika continued execution of the Faraday Battery Challenge 24-month, £8.2m grant-funded HISTORY project to integrate high silicon content electrodes into Goliath, steered with input from BMW and Fortescue Zero.

Ilika also continued the scale-up of its pilot line capability, supported by the Automotive Transformation Fund 16-month, £2.7m grant-supported SiSTEM project, in which Ilika is collaborating with Mpac plc, UK Battery Industrialisation Centre (UKBIC) and, since April 2024, Tata Sons subsidiary Agratas. Associated with this project, Ilika trialled production-intent equipment at vendor sites and at its pilot facility.

These technical activities underpinned Ilika's continued interaction with a portfolio of automotive and consumer appliance original equipment manufacturers (OEMs) and Tier 1 suppliers globally, resulting in a pipeline of evaluation agreements with 21 companies. Ilika is currently implementing a plan to increase the capacity of its pilot production facility using automation and larger scale items of equipment, such as the automated assembly line being built by MPac, to provide larger volumes of evaluation cells to customers. Ilika is targeting an installed capacity of 1.5 MWh/a to allow it to scale production volumes and mature its technology to the level required to respond to automotive requests for quotation (RFQ) by the end of 2025.

Ilika's experience working with automotive partners has shown that the industry expects suppliers to have reached what it defines as A-Sample readiness to respond to RFQs. Beyond 1.5 MWh/a, at B- and C-Sample readiness and volumes, Ilika will continue to work with manufacturing partners such as UKBIC to scale to higher levels of production capacity on equipment that could be used for mass production.

Goliath Funding

Ilika has financed its Goliath technology development programme with equity funding supplemented by grant funding from the Faraday Battery Challenge (FBC) and the Advanced Propulsion Centre (APC). In the first half of the current financial year, Ilika's development efforts have been supported specifically by the FBC 24-month, £8.2m grant-funded HISTORY project, steered with input from BMW and Fortescue Zero, to integrate high silicon content electrodes into Goliath. Since October 2023, Ilika's scale-up work has been supported by the Automotive Transformation Fund 16-month, £2.7m grant-supported SiSTEM project, in which Ilika is collaborating with Mpac plc and UKBIC.

In May 2024, Ilika had a successful £2.3 million (gross) fundraising to support the Goliath roadmap and Stereax commercialisation.

As the Goliath technology matures, Ilika continues to interact with a portfolio of 17 automotive and consumer appliance OEMs globally, in both grant-supported and commercially funded collaborations.

Outlook

2025 should represent a significant year for Ilika with a number of milestones with both our Stereax and Goliath product lines.

By the end of 2025 we expect to have generated initial commercial Stereax revenues through our licensing agreement with Cirtec. With Goliath, this calendar year should see us develop the production capacity to enable us Ilika to respond to formal RFQs from automotive OEMs with our 3rd generation P2 prototype batteries.

Overall, it is clear that commercial interest and government grant support is intensifying as we continue to develop our product lines. The Ilika team is well-positioned to capitalise on this interest and has the commercial skills to execute on the opportunity.

Graeme Purdy, CEO
Ilika plc

Consolidated statement of comprehensive income for the six months ended 31 October 2024 (unaudited)

	Notes	Unaudited Six months ended 31 Oct 2024 £ 000's	Unaudited Six months ended 31 Oct 2023 £ 000's	Audited Year ended 30 Apr 2024 £ 000's
Turnover		**982.1**	**1,335.0**	**2,090.6**
Revenue		**72.7**	**6.4**	**20.1**
UK grants		**909.4**	**1,328.6**	**2,070.5**
Cost of sales		**(429.0)**	**(924.8)**	**(1,081.9)**
Gross profit		**553.1**	**410.3**	**1,008.7**
Other Operating Income		**-**	**77.4**	**532.4**
Administrative expenses				
Administrative expenses		**(3,354.2)**	**(3,280.2)**	**(7,397.8)**
Share-based payment charge		**(292.0)**	**(292.0)**	**(383.1)**
		(3,646.2)	**(3,572.2)**	**(7,780.9)**
Operating loss		**(3,093.1)**	**(3,084.5)**	**(6,239.8)**
Financial income		**236.9**	**180.6**	**507.0**
Financial expense		**(12.8)**	**(20.4)**	**(33.0)**
Loss before tax		**(2,869.0)**	**(2,924.3)**	**(5,765.8)**
Taxation		**650.0**	**337.6**	**952.4**
Loss for period/total comprehensive income attributable to owners of parent		**(2,219.0)**	**(2,586.7)**	**(4,813.4)**
		£	**£**	**£**
Loss per share				
Basic and diluted	**2**	**(0.01)**	**(0.02)**	**(0.03)**

The results from the periods shown above are derived entirely from continuing operations.

Consolidated balance sheet as at 31 October 2024 (unaudited)

	Notes	Unaudited Six months ended 31 Oct 2024 £ 000's	Unaudited Six months ended 31 Oct 2023 £ 000's	Audited Year ended 30 Apr 2024 £ 000's
ASSETS				
Non-current assets				
Intangible assets		**4,127.4**	**3,358.0**	**3,721.0**
Property, plant and equipment		**3,651.9**	**3,932.4**	**3,758.6**
Right-of-use assets		**465.3**	**367.1**	**569.6**
Total non-current assets		**8,244.6**	**7,657.5**	**8,049.2**
Current assets				
Trade and other receivables		**3,141.3**	**1,847.2**	**2,304.2**
Current tax receivable		**1,176.2**	**1,676.1**	**526.4**
Other financial assets - bank deposits		**4,288.3**	**5,000.0**	**4,180.9**
Cash and cash equivalents		**5,839.7**	**8,236.0**	**7,764.4**
Total current assets		**14,445.5**	**16,759.3**	**14,775.9**
Total assets		**22,690.1**	**24,416.8**	**22,825.1**
Issued capital and reserves attributable to owners of parent				
Issued share capital		**1,674.7**	**1,590.6**	**1,591.4**
Share premium		**67,201.9**	**64,935.1**	**64,953.5**
Capital restructuring reserve		**6,486.1**	**6,486.1**	**6,486.1**
Retained earnings		**(54,598.3)**	**(50,535.8)**	**(52,671.4)**
Total equity		**20,764.4**	**22,476.0**	**20,359.6**
LIABILITIES				
Current liabilities				
Trade and other payables		**1,143.0**	**1,168.1**	**1,590.7**
Lease liabilities		**288.7**	**205.7**	**288.7**
Total current liabilities		**1,431.7**	**1,373.8**	**1,879.4**
Non-current liabilities				
Lease liabilities		**244.5**	**317.5**	**336.6**
Provisions		**249.5**	**249.5**	**249.5**
Total non-current liabilities		**494.0**	**567.0**	**586.1**
Total liabilities		**1,925.7**	**1,940.8**	**2,465.5**
Total equity and liabilities		**22,690.1**	**24,416.8**	**22,825.1**

Consolidated cash flow statement for the six months ended 31 October 2024 (unaudited)

	Unaudited Six months ended 31 Oct 2024	Unaudited Six months ended 31 Oct 2023	Audited Year ended 30 Apr 2024
	£ 000's	£ 000's	£ 000's
Cash flows from operating activities			
Loss before taxation	**(2,869.0)**	**(2,924.3)**	**(5,765.8)**
Adjustments for:			
Amortisation	**19.6**	**20.8**	**41.7**
Depreciation	**859.9**	**919.5**	**1,694.4**
Equity settled share-based payments	**292.0**	**292.0**	**383.1**
Profit on disposal of plant, property and equipment	**5.0**	**-**	**14.8**
Net financial expense/ (income)	**(224.1)**	**(160.2)**	**(474.0)**
Operating cash flow before changes in working capital, interest and taxes	**(1,916.6)**	**(1,852.2)**	**(4,105.8)**
Decrease/(increase) in trade and other receivables	**(837.0)**	**91.3**	**(365.6)**
Increase /(decrease) in trade and other payables	**(447.7)**	**(103.0)**	**319.6**
Decrease in provisions	**-**	**-**	**-**
Cash utilised by operations	**(3,201.3)**	**(1,863.9)**	**(4,151.8**
Tax received	**-**	**(77.4)**	**1,687.1**
Net cash flow from operating activities	**(3,201.3)**	**(1.941.3)**	**(2,464.7)**
Cash flows from investing activities			
Interest received	**236.9**	**180.6**	**507.0**
Purchase of intangible assets	**(406.3)**	**(435.4)**	**(819.3)**
Purchase of property, plant and equipment	**(673.4)**	**(324.4)**	**(842.5)**
Sale of Property, Plant and equipment	**-**	**-**	**7.8**
Increase in other financial assets	**(107.4)**	**(4,227.3)**	**(3,408.2)**
Net cash used in investing activities	**(950.2)**	**(4,806.5)**	**(4,555.2)**
Cash flows from financing activities			
Proceeds from issuance of ordinary share capital	**2,477.0**	**(1.5)**	**17.7**
Cost of share issue	**(145.3)**	**-**	**-**
Capital element of finance leases repaid	**(92.1)**	**(95.3)**	**(301.4)**
Lease Payments interest	**(12.8)**	**(20.4)**	**(33.0)**
Net cash from financing activities	**2,226.8**	**(117.2)**	**(316.7)**
Net (decrease)/ increase in cash and cash equivalents	**(1,924.7)**	**(6,865.0)**	**(7,336.6)**
Cash and cash equivalents at the start of the period	**7,764.4**	**15,101.0**	**15,101.0**
Cash and cash equivalents at the end of the period	**5,839.7**	**8,236.0**	**7,764.4**

Consolidated statement of changes in equity (unaudited)

	Share capital	Share premium account	Capital restructuring reserve	Retained earnings	Total
	£ 000's	£ 000's	£ 000's	£ 000's	£ 000's
As at 30th April 2023	**1,590.6**	**64,936.6**	**6,486.1**	**(48,241.1)**	**24,772.2**
Share-based payment	**-**	**-**	**-**	**292.0**	**292.0**
Issue of Shares	**-**	**(1.5)**	**-**	**-**	**(1.5)**
Loss and total comprehensive income	**-**	**-**	**-**	**(2,586.7)**	**(2,586.7)**
As at 31 October 2023	**1,590.6**	**64,935.1**	**6,486.1**	**(50,535.8)**	**22,476.0**
Share-based payment	**-**	**-**	**-**	**91.1**	**91.1**
Issue of shares	**0.8**	**18.4**	**-**	**-**	**19.1**
Loss and total comprehensive income	**-**	**-**	**-**	**(2,226.7)**	**(2,226.7)**
As at 30th April 2024	**1,591.4**	**64,953.5**	**6,486.1**	**(52,671.4)**	**20,359.5**
Share-based payment	**-**	**-**	**-**	**292.0**	**292.0**
Issue of shares	**83.3**	**2248.4**	**-**	**-**	**2,331.7**
Loss and total comprehensive income	**-**	**-**	**-**	**(2,218.9)**	**(2,218.9)**
As at 31 October 2024	**1,674.7**	**67,201.9**	**6,486.1**	**(54,598.3)**	**20,764.3**

Share capital
The share capital represents the nominal value of the equity shares in issue.

Share premium account
When shares are issued, any premium paid above the nominal value is credited to the share premium reserve.

Retained earnings
The retained earnings reserve records the accumulated profits and losses of the Group since inception of the business.

Capital restructuring reserve
The capital restructuring reserve arises on the accounting for the share for share exchange. It represents the difference between the value of the issued equity instruments of Ilika Technologies Limited immediately before the share for share exchange and the equity instruments of Ilika plc along with the shares issued to effect the share for share exchange.

Notes to the consolidated financial statements

1. Accounting policies

Basis of preparation

The interim financial statements, which are unaudited, have been prepared on the basis of accounting policies consistent with International Financial Reporting Standards ("IFRSs") adopted by the European Union. The accounting policies are the same as applied in the Group's latest financial statements.

The interim financial statements do not include all of the information required for full annual financial statements and do not comply with all the disclosures in IAS 34 'Interim Financial Reporting'. Accordingly, whilst the interim financial statements have been prepared in accordance with IFRS they cannot be construed as being in full compliance with IFRS.

The financial information for the year ended 30 April 2024 does not constitute the full statutory accounts for that period. The Annual Report and Accounts for 30 April 2024 have been filed with the Registrar of Companies. The Independent Auditors' Report on the Annual Report and Accounts for 2024 was unqualified and did not include references to any matters which the auditors drew attention by way of emphasis without qualifying their report and did not contain statements under Section 498(2) or 498(3) of the Companies Act 2006.

Going concern

The financial statements are prepared on a going concern basis which the directors believe continues to be appropriate. The Group meets its day to day working capital requirements through existing cash resources which, at 31 October 2024, amounted to £10.1m, including cash in hand at the bank (£5.8m) and cash held on long term deposit shown as a financial instrument (£4.3m). The directors have prepared projected cash flow information for the period ending twelve months from the date of their approval of these financial statements. On the basis of this cash flow information the directors believe that the Group will be able to continue to trade for the foreseeable future.

2. Loss per share

Loss per ordinary share have been calculated using the weighted average number of shares in issue during the relevant financial periods. The weighted average number of equity shares in issue and the earnings, being loss after tax, are as follows:

	Unaudited Six months ended 31 Oct 2024 Number	Unaudited Six months ended 31 Oct 2023 Number	Audited Year ended 30 Apr 2024 Number
Weighted average number of equity shares	**166,124,565**	**158,580,748**	**159,036,098**
	£ 000's	**£ 000's**	**£ 000's**
Loss, being loss after tax	**(2,219.0)**	**(2,586.6)**	**(4,813.4)**

The loss attributable to ordinary shareholders and weighted average number of ordinary shares for the purpose of calculating the diluted earnings per ordinary share are identical to those used for basic earnings per share. This is because the exercise of share options and warrants would have the effect of reducing the loss per ordinary share and is therefore not dilutive under the terms of IAS 33.

- Ends -