

22 January 2015

**Ilika plc**  
(‘Ilika,’ the ‘Company,’ or the ‘Group’)

### Half Yearly Report

Ilika (AIM: IKA), the accelerated materials innovation company, announces its unaudited half yearly report for the six months ended 31 October 2014, a period of continued progress with its solid state battery development programme, increased commercial interactions with its global customer base and strengthening of its IP portfolio.

Ilika accelerates the discovery of new and patentable materials using its unique high throughput technologies process for identified end uses in the energy, electronics, and aerospace sectors.

#### Operational Highlights

- Grant of two patents covering methods for producing solid state batteries
- 25 x increase in solid state battery size
- Proof of concept contract win with European partner for development of batteries for wireless sensor networks
- Keith Jackson, CTO of Meggitt plc, appointed as NED to the board
- Successful factory acceptance test of £3.3m pilot production line

#### Post Period End Events

- Official opening of pilot line by Rt. Hon Greg Clark MP
- 20 x larger deposition area of key battery materials
- 5 x increase in materials deposition rate

#### Financial Summary

- Total revenue for the period at £0.6m is in line with prior period (1H 2013: £0.6m)
- Loss per share has reduced to 2p (1H 2013: 3p per share)
- Net cash inflow in the period £0.1m (1H 2013: outflow £1.7m)
- Cash balance at period end £7.3m (1H 2013: £1.4m)

**Commenting on the results Graeme Purdy, CEO of Ilika, said:** “Ilika has continued to maintain both commercial and technical momentum since the exciting announcement in January of 2014 of its “world’s first” for the fabrication of a solid state battery that can be manufactured as a continuous stack. By the summer of 2014, we were able to fabricate significantly larger batteries on a footprint that is commercially relevant for our initial target markets.

“Commercial interest has been strong from the leading players in sensor network technology as well as global OEM’s, which are investing heavily in wearable technology. The remainder of this year will see our efforts focused on producing prototypes for our commercial partnerships.”

#### **Ilika plc**

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## **CEO's Statement**

### **Review of Period**

#### ***A World First for Ilika: Solid State Battery Technology***

2014 started with the exciting announcement that Ilika had achieved a unique and simple methodology for producing a stacked solid state battery that is likely to lead to significant out-licensing opportunities for the Company. It was explained that solid state batteries are currently available, but are restricted to very small capacities, limiting their commercial relevance and market opportunity. Ilika's innovation enables its commercial partners to make larger batteries suitable for mainstream battery applications, including consumer electronics.

Electrochemical testing of the stacked cells was completed in Q1 2014, confirming that Ilika's proprietary process had generated performance data that validates the stacked architecture, with two-cell stacks producing twice the voltage and power of a single cell. Further work then proceeded to increase the cross sectional area of the cells in order to make prototype batteries suitable for initial commercialisation in wireless sensor networks, as part of the "Internet of Things".

By July 2014, Ilika was able to announce that it had achieved a 25x increase in battery size, making the batteries on a footprint relevant for commercial applications in wireless sensor networks (WSN) and wearables.

#### ***Pilot Line Commissioning***

The next step was to complete the fabrication of a pilot line to allow the production of sufficient quantities of prototype batteries to allow commercial validation by chosen OEM partners. The pilot line produces batteries on a substrate which has a diameter of 15cm (6"), which is an area approximately 20 x larger than that used to initially develop the battery.

In September 2014, the Company announced it had signed off the factory acceptance test (FAT) of the pilot line. The next step was to disassemble the line, pack it and ship it to its destination in Southampton. This shipping process was successfully completed and it was re-assembled in time for an official opening in November 2014 by the Rt. Hon. Greg Clark MP, Minister for Science, Education and Cities.

At the time of issuing this half yearly report, the pilot line has substantially completed its site acceptance test (SAT). Official sign off is awaiting the delivery of a number of non-critical items included in the delivery scope of the principal system fabricator. The SAT has involved the production of the key materials making up a solid state battery. In particular, the battery production team has successfully deposited a functioning cathode over the complete 176 cm<sup>2</sup> area of the standard 6" substrate. The batteries required for WSN and wearable applications will be made by masking (dividing up) this 176 cm<sup>2</sup> area. In addition, the pilot line has been demonstrated to deposit materials 5x faster than Ilika's development workflow and a further doubling of that rate is expected to be achievable. This deposition rate has ensured that the batteries can be made at a price point that is commercially attractive on the industrial scale. Production cost models developed together with OEM's interested in Ilika's technology have demonstrated that the batteries can offer the expected technical benefits at a price point below incumbent technology.

#### ***Intellectual Property Reinforcement***

Clearly, the successful execution of Ilika's business model requires a robust and comprehensive IP portfolio that can be licensed as a package. Hence, it was reassuring that in May 2014, the grant of two British patent applications jointly filed with Toyota was confirmed. These patents contained methodology for producing solid state batteries.

#### ***Commercial Progress***

The commercialisation strategy for this technology involves three phases of engagement:

- optimisation of the battery architecture for specific applications
- validation and integration of the batteries into application systems
- technology transfer and licensing for manufacture

In the current financial year, the emphasis is on the first of these phases and therefore the announcement in July of a proof of concept contract with a European customer was an important indicator that this strategy was on track.

In October 2014, the announcement of the appointment of Keith Jackson, CTO of Meggitt plc, as Non-Executive Director was further evidence that the Company is preparing itself for commercialisation activities.

### ***Portfolio Progress***

Although the solid state battery programme makes up the majority of Ilika's technology development activities, the Company has a well-defined portfolio of opportunities at various stages of maturity.

One of the most advanced of these programmes is the commercialisation of platinum-free fuel cell catalysts. The Carbon Trust in 2012 funded the development of these catalysts through an equity investment. The Company has signed materials transfer agreements and delivered samples of the catalyst for confirmatory testing to OEMs in the USA, Japan and Europe. Initial feedback is encouraging and further testing is expected in this financial year. Post period end, Ilika received the news that its patent in Europe had not been opposed by any third parties in the statutory 9-month period after grant, resulting in Ilika having granted patents covering fuel cell catalyst technology in the USA, Japan and Europe.

An early stage technology programme at Ilika is the development of aerospace alloys. Ilika has announced collaborations with Rolls Royce and Boeing. Rolls Royce is interested in high temperature superalloys for use in aerospace engines, while Boeing is focused on high entropy alloys for deployment in aircraft structures. The Rolls Royce programme is supported by a £1.33 million grant from Innovate UK over a three year period, which started in April 2014.

### ***Outlook***

2015 promises to be an exciting year for Ilika, particularly for tackling the next steps in the development of the Company's solid state battery programme. Investors can expect to see announcements regarding both technical and commercial progress associated with the production of prototypes and the Company developing commercial relationships with OEM partners. The management team remains committed to bringing its technology programmes to successful conclusions to deliver attractive returns to its shareholders.

**Graeme Purdy, CEO**

## Consolidated statement of comprehensive income for the six months ended 31 October 2014

	Notes	Unaudited Six months ended 31 Oct 2014 £	Unaudited Six months ended 31 Oct 2013 £	Audited Year ended 30 Apr 2014 £
<b>Revenue</b>		606,328	612,999	1,049,879
Cost of sales		(339,458)	(345,894)	(586,869)
<b>Gross profit</b>		266,870	267,105	463,010
Administrative expenses		(1,866,561)	(1,781,279)	(3,569,696)
Other operating income		-	809	810
<b>Operating loss</b>		(1,599,691)	(1,513,365)	(3,105,876)
Financial income		27,080	10,292	22,131
Financial expense		-	(1,513)	(1,513)
<b>Loss before tax</b>		(1,572,611)	(1,504,586)	(3,085,258)
Taxation		167,500	152,528	287,171
<b>Loss for period/total comprehensive income attributable to owners of parent</b>		(1,405,111)	(1,352,058)	(2,798,087)
<b>Loss per share</b>	2			
Basic and diluted		(0.02)	(0.03)	(0.05)

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

Consolidated balance sheet as at 31 October 2014

Notes	Unaudited Six months ended 31 Oct 2014 £	Unaudited Six months ended 31 Oct 2013 £	Audited Year ended 30 Apr 2014 £
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	35,192	7,048	793
Property, plant and equipment	553,246	737,690	607,627
<b>Total non-current assets</b>	<b>588,438</b>	<b>744,738</b>	<b>608,420</b>
<b>Current assets</b>			
Trade and other receivables	636,454	992,499	572,304
Current tax receivable	137,975	113,548	248,191
Other financial assets – bank deposits	6,052,336	293,007	1,776,767
Cash and cash equivalents	1,202,433	1,129,738	5,329,967
<b>Total current assets</b>	<b>8,029,198</b>	<b>2,528,792</b>	<b>7,927,229</b>
<b>Total assets</b>	<b>8,617,636</b>	<b>3,273,530</b>	<b>8,535,649</b>
<b>Issued capital and reserves attributable to owners of parent</b>			
Issued share capital	658,836	499,104	632,660
Share premium	17,391,768	9,509,020	16,082,944
Capital restructuring reserve	6,486,077	6,486,077	6,486,077
Retained earnings	(16,831,890)	(13,995,750)	(15,426,779)
<b>Total equity</b>	<b>7,704,791</b>	<b>2,498,451</b>	<b>7,774,902</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	762,845	625,079	610,747
Provisions	150,000	150,000	150,000
<b>Total liabilities</b>	<b>912,845</b>	<b>775,079</b>	<b>760,747</b>
<b>Total equity and liabilities</b>	<b>8,617,636</b>	<b>3,273,530</b>	<b>8,535,649</b>

**Consolidated cash flow statement for the six months ended 31 October 2014**

	<b>Unaudited Six months ended 31 Oct 2014 £</b>	<b>Unaudited Six months ended 31 Oct 2013 £</b>	<b>Audited Year ended 30 Apr 2014 £</b>
<b>Cash flows from operating activities</b>			
Loss before taxation	(1,572,611)	(1,504,586)	(3,085,258)
<i>Adjustments for:</i>			
Amortisation	4,644	2,378	8,632
Depreciation	190,999	366,088	556,795
Equity settled share based payments	-	-	15,000
(Profit)/loss on disposal of plant, property and equipment	-	(145)	(145)
Net financial income	(27,080)	(8,779)	(20,618)
<b>Operating cash flow before changes in working capital, interest and taxes</b>	<b>(1,404,048)</b>	<b>(1,145,044)</b>	<b>(2,525,594)</b>
Decrease/(increase) in trade and other receivables	(64,150)	(414,994)	5,200
Increase /(decrease) in trade and other payables	152,098	138,433	116,560
<b>Cash utilised by operations</b>	<b>(1,316,100)</b>	<b>(1,421,605)</b>	<b>(2,403,834)</b>
Tax received	277,716	268,980	269,266
<b>Net cash flow from operating activities</b>	<b>(1,038,384)</b>	<b>(1,152,625)</b>	<b>(2,134,568)</b>
<b>Cash flows from investing activities</b>			
Interest received	27,080	10,292	29,390
Sale of property plant and equipment	1,625	2,450	2,450
Purchase of property, plant and equipment	(177,285)	(377)	(61,021)
(Increase)/ Decrease in other financial assets	(4,275,570)	1,162,085	(321,675)
<b>Net cash used in investing activities</b>	<b>(4,424,150)</b>	<b>1,174,450</b>	<b>(350,856)</b>
<b>Cash flows from financing activities</b>			
Proceeds from issuance of ordinary share capital	1,335,000	712,500	7,716,912
Share issue costs	-	(3,500)	(300,434)
Capital element of finance leases	-	(7,544)	(7,544)
Interest element of finance leases	-	(1,513)	(1,513)
<b>Net cash from financing activities</b>	<b>1,335,000</b>	<b>699,943</b>	<b>7,407,421</b>
<b>Net (decrease)/ increase in cash and cash equivalents</b>	<b>(4,127,534)</b>	<b>721,768</b>	<b>4,921,997</b>
<b>Cash and cash equivalents at the start of the period</b>	<b>5,329,967</b>	<b>407,970</b>	<b>407,970</b>
<b>Cash and cash equivalents at the end of the period</b>	<b>1,202,433</b>	<b>1,129,738</b>	<b>5,329,967</b>

## Consolidated statement of changes in equity (unaudited)

	Share capital £	Share premium account £	Capital restructuring reserve £	Retained earnings £	Total £
<b>As at 30 April 2013</b>	<b>475,354</b>	<b>8,823,770</b>	<b>6,486,077</b>	<b>(12,643,692)</b>	<b>3,141,509</b>
Issue of shares	23,750	685,250	-	-	709,000
Loss and total comprehensive income	-	-	-	(1,352,058)	(1,352,058)
<b>As at 31 October 2013</b>	<b>499,104</b>	<b>9,509,020</b>	<b>6,486,077</b>	<b>(13,995,750)</b>	<b>2,498,451</b>
Issue of shares	133,556	6,874,357	-	-	7,007,913
Expenses of share issue	-	(300,433)	-	-	(300,433)
Share based payment	-	-	-	15,000	15,000
Loss and total comprehensive income	-	-	-	(1,446,029)	(1,446,029)
<b>As at 30 April 2014</b>	<b>632,660</b>	<b>16,082,944</b>	<b>6,486,077</b>	<b>(15,426,779)</b>	<b>7,774,902</b>
Issue of shares	26,176	1,308,824	-	-	1,335,000
Loss and total comprehensive income	-	-	-	(1,405,111)	(1,405,111)
<b>As at 31 October 2014</b>	<b>658,836</b>	<b>17,391,768</b>	<b>6,486,077</b>	<b>(16,831,890)</b>	<b>7,704,791</b>

### 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 2014 does not constitute the full statutory accounts for that period. The Annual Report and Accounts for 30 April 2014 have been filed with the Registrar of Companies. The Independent Auditors’ Report on the Annual Report and Accounts for 2014 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 2014, amounted to £7,254,769. 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 2014 Number	Unaudited Six months ended 31 Oct 2013 Number	Audited Year ended 30 Apr 2014 Number
Weighted average number of equity shares	65,626,980	49,691,004	52,153,675
	£	£	£
Loss, being loss after tax	(1,405,111)	(1,352,058)	(2,798,087)

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.