

Directors' report

Report on the affairs of the Group

The Directors present their Annual Report together with the financial statements and auditor's report for the year ended 31 December 2022.

The Company has chosen, in accordance with section 414C(11) of the Companies Act 2006, to include matters of strategic importance in the Strategic Report which otherwise would be required to be disclosed in the Directors' report. An indication of likely future developments in the business of the Company and details of research and development activities and important events since the financial year-end are included in the Strategic Report. The following cross-referenced material is incorporated into this Directors' report.

Non-financial information statement – Subject Matter	Section/Page
Principal risks and uncertainties	Risk management on pages 48 to 57
Business model	Strategic Report on page 8
Employee engagement	Strategic Report on page 9 Stakeholder engagement on page 71 Directors' Remuneration report on page 86
Equality, diversity, inclusion and human rights	Sustainable and responsible business on pages 34 to 37
Disabled employees	Sustainable and responsible business on page 35
Supplier engagement	Stakeholder engagement on page 72
Engagement with customers and other business relationships (including community engagement)	Stakeholder engagement on page 72 Sustainable and responsible business on page 40
Greenhouse gas emissions and environmental policies	Sustainable and responsible business (TCFD) on pages 42 to 44 GHG statement on page 45
Political donations	Sustainable and responsible business on page 40
Ethics and governance, including Code of Conduct, anti-bribery and corruption policies	Sustainable and responsible business on page 34 Corporate Governance section on page 73

Branches

In addition to the subsidiaries disclosed in note 11 of the Company's separate financial statements on page 168, there is a branch in Stockholm, Sweden through which research and development activities are conducted.

Dividends

No interim or final dividend was proposed or paid for the year ended 31 December 2022.

 Details on dividends are set out in note 8 on page 167

Capital structure

Details of the issued share capital, together with details of the movements in the Company's issued share capital during the year, are shown in note 26. The Company has one class of ordinary shares which carries no right to fixed income. Each share carries the right to one vote at general meetings of the Company, except for shares held in the Xaar Share Incentive Plan trust, which hold no voting rights.


There are no specific restrictions on the size of a holding nor on the transfer of shares, which are both governed by the general provisions of the Articles of Association and prevailing legislation. The Directors are not aware of any agreements between holders of the Company's shares that may result in restrictions on the transfer of securities or on voting rights.

There are a number of employee share schemes, namely, Employee Share Option Schemes (ESOP), Long-Term Incentive Plans (LTIPs), Share Incentive Plans (SIP), and Share Save Schemes (SAYE). There is a Deferred Bonus Plan for the Executive Directors, as introduced in 2020.

- Details of the shareholding held in trust by Xaar Trustee Ltd and held by the Xaar plc ESOP trust are provided in note 28. These have voting rights exercised by the Trustees
- Details of other share-based payment schemes are set out in note 32. Shares held in Xaar plc SIP do not hold voting rights.

No person has any special rights of control over the Company's share capital and all issued shares are fully paid.

The business of the Company is managed by the Board, which may exercise all the powers of the Company subject to the Articles and the Companies Act.

 The powers of Directors are described in the Main Board terms of reference, copies of which are available on request, and the Corporate Governance statement, division of responsibilities on page 75

Capital allocation policy

The Company is committed to investing in the growth strategy of the business. This investment includes both capital investments within existing operations as well as pursuing inorganic growth opportunities that align with the Company's strategy, investing in capability and capacity to accelerate our strategy and future growth. The Company's objective is to maximise long-term shareholder returns through a disciplined deployment of capital and resources, and it has adopted the following capital allocation policy in support of this:

- **Organic growth:** The Company invests in capital projects and R&D relating to ongoing and new technology development to support demand in our chosen and target markets and product innovation;
- **Inorganic growth:** The Company continues to explore complementary inorganic growth and acquisition opportunities consistent with the growth strategy and supplementary to our existing innovation and product pipeline; and
- **Treatment of excess capital and shareholder distributions:** The Board keeps under review the Company's balance sheet and cash position in line with this policy and medium-term investment requirements. The Company returns excess capital to shareholders if and when the Board considers it appropriate by means of a dividend or a share repurchase. The Company assesses the underlying profitability and the future cash requirements of the business at least annually, as well as the distributable reserves available, to determine the appropriateness of paying a dividend to shareholders, and to review the appropriate policy to adopt.

At this current time, capital resources are focused on and deployed to supporting organic growth and inorganic growth. The Board keeps the Company's capital structure under regular review.

Treasury

The Group's policy enables it to use financial instruments to hedge foreign currency exposures. The main trading currency of the Group is GBP Sterling. The Group's use of financial instruments and the related risks are discussed further in notes 21 and 22.

At the 2022 AGM held on 25 May 2022, the Company's shareholders granted the Company authority to make one or more market purchases (within the meaning of section 693(4) of the Companies Act 2006) of ordinary shares of 10 pence each in the capital of the Company.

The Company did not purchase any shares for cancellation or to be held as treasury shares in 2022 or 2021.

Directors and their interests

The Directors who served during the year, and subsequent to the year-end, unless otherwise stated, were as follows:

Andrew Herbert

Chairman

John Mills

Chief Executive Officer

Ian Tichias

Chief Financial Officer

Chris Morgan

Non-Executive Director

Alison Littley

Senior Independent Director

 Brief biographical descriptions of the Directors are set out on page 63

Shareholdings in the Company

The interests of the Directors in the shares of the Company and its subsidiaries (all of which are beneficial) as at 31 December 2022 are as follows:

	Number of ordinary shares of 10p each 31 December 2022	Number of ordinary shares of 10p each 31 December 2021
Andrew Herbert	100,000	100,000
John Mills	125,000	125,000
Ian Tichias	50,000	50,000
Chris Morgan	-	-
Alison Littley	-	-

There have been no changes in the Directors' interests in shares of the Company between 31 December 2022 and 29 March 2023. Directors' interests in options in the Company and in deferred bonuses (in shares) are shown in the Directors' Remuneration report. The Executive Directors are required to receive a portion of their bonus in deferred shares.

Directors' liabilities

Xaar plc, the ultimate parent company, and its subsidiaries have granted an indemnity to all of the Directors of Xaar plc and of its subsidiaries against liability in respect of any potential proceedings that may be brought by third parties, subject to the conditions set out in the Companies Act 2006. Such qualifying third party indemnity provision was in place during the year and remains in force as at the date of approving the Directors' report.

Share capital

As at 31 December 2022 the Company had been notified in accordance with Chapter 5 of the Financial Conduct Authority's (FCA's) Disclosure and Transparency Rules of the following material interests in its share capital:

Top ten shareholders (by holding) – at 31 December 2022	Number of ordinary shares held	Percentage of issued share capital
Schroder Investment Mgt	22,327,769	28.45%
Odyssean Investment Trust	8,500,000	10.83%
Aberforth Partners	7,402,509	9.43%
Invesco OppenheimerFunds	6,099,203	7.77%
Columbia Threadneedle Investments	4,491,840	5.72%
Hargreaves Lansdown Asset Mgt	3,108,560	3.96%
Interactive Investor	2,589,831	3.30%
BMO Global Asset Mgt	1,745,108	2.22%
A J Bell Securities	1,394,013	1.78%
Barclays Wealth	1,304,775	1.66%
Total	58,963.608	75.13%

During the period 31 December 2022 to 28 March 2023, the Company had been notified in accordance with Chapter 5 of the FCA's Disclosure and Transparency Rules of the following material interests in its share capital:

Changes in material shareholdings since 31 December 2022	Number of ordinary shares held	Percentage of issued share capital
Odyssean Investment Trust	9,415,000	12.00%

Annual General Meeting

 The notice convening the Annual General Meeting is set out on pages 170 to 174

Resolutions 1 to 8 set out in the notice of the meeting deal with the ordinary business to be transacted at the meeting. The special business to be transacted at the meeting is set out in Resolutions 9 to 15.

Re-election of Directors

Resolutions 4 to 8

The Company's Articles of Association require the Directors to retire by rotation at least once every three years, with the number to retire by rotation at each Annual General Meeting being the number nearest to but not exceeding one third of the Board. However, the 2018 UK Corporate Governance Code provides that all Directors should be subject to re-election by their shareholders every year. In accordance with this provision of the 2018 UK Corporate Governance Code and in keeping with the Board's aim of following best corporate governance practice, all Directors retire at each Annual General Meeting and offer themselves for re-election.

The Board has considered succession plans and is actively seeking to appoint a new Non-Executive Director with a view to that person succeeding Chris Morgan as Chair of the Audit Committee. Chris is standing for re-election this year but, subject to a successful handover, has indicated his intention to stand down from the Board by the end of 2023.

Directors' Remuneration Policy

Resolution 9

This Resolution seeks shareholder approval for the Directors' Remuneration Policy.

 The Directors' Remuneration Policy can be found on pages 87 to 95 (inclusive) of the Annual Report and Financial Statements

Directors' Remuneration report

Resolution 10

This Resolution seeks shareholder approval for the Directors' Remuneration report.

 The Directors' Remuneration report can be found on pages 84 to 104 (inclusive) of the Annual Report and Financial Statements

In accordance with regulations which came into force on 1 October 2013, Resolution 10 offers shareholders an advisory vote on the Directors' Remuneration report.

Power to issue securities

Resolutions 11, 12 and 13

Under section 551 of the Companies Act 2006 (the 'Act'), the Directors may only allot shares or grant rights to subscribe for or convert any securities into shares if authorised by the shareholders to do so.

Resolution 11, which complies with guidance issued by the Investment Association, will, if passed, authorise the Directors to allot ordinary shares or grant rights to subscribe for or convert any securities into ordinary shares, up to an aggregate nominal value of £2,614,874 (corresponding to approximately one third of the issued share capital at 28 March 2023) and up to an additional aggregate nominal value of £5,229,749 (corresponding to approximately two thirds of the issued share capital at 28 March 2023) in the case of allotments only in connection with a fully pre-emptive rights issue. The Directors have no present intention to exercise the authority sought under this Resolution. However, the Directors may consider doing so if they believe it would be appropriate in respect of business opportunities that may arise consistent with the Company's strategic objectives.

This authority will expire no later than 15 months after the passing of the Resolution. It is the Board's current intention to seek renewal of such authority at each future Annual General Meeting of the Company.

Disapplication of pre-emption rights

Resolutions 12 and 13

Under section 561(1) of the Act, if the Directors wish to allot equity securities (as defined in section 560 of the Act) they must in the first instance offer them to existing shareholders in proportion to their holdings. In addition, there may be occasions when the Directors will need the flexibility to finance business opportunities by the issue of shares without a pre-emptive offer to existing shareholders. This cannot be done under the Act unless the shareholders have first waived their pre-emption rights.

Resolutions 12 and 13 seek authority from shareholders in line with the Pre-Emption Group's Statement of Principles (as updated in March 2015 (the '2015 Statement of Principles'), and the template resolutions published by the Pre-Emption Group in May 2016.

The Board notes that the Pre-Emption Group published a revised statement of principles and template resolutions for the disapplication of pre-emption rights in November 2022, which include increased thresholds in relation to the disapplication of pre-emption rights. At this time, the Board considers it appropriate to follow the 2015 Statement of Principles but will continue to keep this under review.

Under Resolution 12, to be proposed as a Special Resolution, authority is sought to allot shares:

- (i) in relation to a pre-emptive rights issue only, up to an aggregate nominal amount of £5,229,749 (being the nominal value of approximately two thirds of the issued share capital of the Company); and
- (ii) in any other case, up to an aggregate nominal amount of £392,231 (representing 5% of the issued share capital of the Company).

The Directors do not currently have an intention to exercise the authority.

In addition, Resolution 13, which is also to be proposed as a Special Resolution, asks the shareholders to waive their pre-emption rights in relation to the allotment of equity securities or sale of treasury shares up to a further aggregate nominal amount of £392,231 (representing 5% of the issued share capital of the Company), with such authority to be used only for the purpose of financing (or refinancing, if the authority is to be used in the six months after the original transaction) a transaction which the Directors of the Company determine to be an acquisition or other capital investment of a kind contemplated by the Pre-emption Group's Statement of Principles on Disapplying Pre-Emption Rights.

The Directors will also have regard to the guidance in the 2015 Statement of Principles concerning cumulative usage of authorities within a three-year period. Accordingly, the Board confirms that it does not intend to issue shares for cash representing more than 7.5% of the Company's issued ordinary share capital in any rolling three-year period other than to existing shareholders, save as permitted in connection with an acquisition or specified capital investment as described above, without prior consultation with shareholders.

If Resolutions 12 and 13 are passed, the authorities will expire at the conclusion of the next Annual General Meeting of the Company, or, if earlier, the date which is 15 months after the date of passing of the Resolutions. It is the Board's current intention to seek renewal of such authorities at each future Annual General Meeting of the Company.

Authority to purchase own shares

Resolution 14

It is proposed by Resolution 14, by Special Resolution, to authorise the Company generally and unconditionally to purchase its own shares at a price of not less than the par value of the shares and not more than the higher of:

- (i) 5% above the average of the middle market quotations of the shares as derived from the London Stock Exchange Daily Official List for the five dealing days immediately preceding the day on which the purchase is made; and
- (ii) the higher of the price of the last independent trade and the highest current independent bid on the trading venue where the purchase is carried out (in each case exclusive of any expenses payable by the Company).

The authority will be for a maximum of 10% of the Company's issued share capital and will expire at the earlier of the next Annual General Meeting of the Company or within 15 months from the date of the passing of this Resolution. The Directors currently have no intention to exercise the authority and will only purchase shares if it is in the best interests of shareholders as a whole.

The total number of ordinary shares under option, which remain unexercised and outstanding as at 27 March 2023 (including options awarded under LTIP which may be satisfied by subscription for new shares), was 4,763,782. This represents 6.7% of the issued ordinary share capital at that date. If the Company was to buy back the maximum number of ordinary shares permitted pursuant to the passing of this Resolution, then the total number of ordinary shares under option which remain unexercised and outstanding as at 31 December 2022 would represent 6.1% of the reduced issued ordinary share capital.

Articles of Association

Resolution 15

It is proposed by Resolution 15, by Special Resolution, to adopt new articles of association. Further details of the proposed changes to the Articles of Association are set out on page 174.

 **Further details on the proposed changes to the Company's articles of association are set out in the Notice of Annual General Meeting on pages 170 to 174**

Action to be taken

As detailed in the notes to the notice convening the Annual General Meeting, you will not receive a Form of Proxy for the Annual General Meeting in the post. Instead, you can vote online at www.signalshares.com. To register, you will need your Investor Code, which can be found on your share certificate; once logged on, click on the 'Vote Online Now' button to vote. Proxy votes should be submitted as early as possible and in any event, no later than 48 hours before the start of the meeting (excluding weekends and public holidays). Shareholders attempting to attend the meeting will be refused admission.

You may request a hard copy proxy form directly from the registrars, Link Asset Services on 0871 664 0300. (Calls cost 12 pence per minute plus your phone company's access charge. If you are outside the United Kingdom, please call +44 371 664 0300. Calls outside the United Kingdom will be charged at the applicable international rate.) Lines are open between 9.00a.m. to 5.30p.m., Monday to Friday, excluding public holidays in England and Wales.

Additional information for shareholders

The following provides the additional information required for shareholders as a result of the implementation of the Takeovers Directive into UK law.

The structure of the Company's issued share capital is shown in note 26.

Details of ordinary shares held in trust owned by the Company can be found in note 28.

The Company is not aware of any agreements between shareholders that may result in restrictions on the transfer of securities and/or voting rights.

The Directors are authorised to issue and allot shares and to undertake purchases of the Company's shares. Appropriate resolutions to renew these authorities are proposed to be passed at the Annual General Meeting as detailed above and notice of which is on pages 170 to 174.

 **The notice of the Annual General Meeting is on pages 170 to 174**

Ordinary shares

On a show of hands at a general meeting of the Company every holder of ordinary shares present in person and entitled to vote shall have one vote for every ordinary share held and, on a poll, every member present in person or by proxy and entitled to vote shall have one vote for every ordinary share held. The notice of the Annual General Meeting on pages 170 to 174 specifies deadlines for exercising voting rights either by proxy notice or present in person or by proxy in relation to resolutions to be passed at the Annual General Meeting.

All proxy votes are counted and the numbers for, against or withheld in relation to each resolution are made available at the Annual General Meeting and are published on the Company's website after the meeting. No person holds securities carrying special rights with regard to control of the Company.

Restrictions

There are no restrictions on the transfer of ordinary shares in the Company other than:

- certain restrictions may from time to time be imposed by laws and regulations (for example, insider trading laws and market requirements relating to close periods); and
- pursuant to the Listing Rules of the FCA whereby all employees of the Company require the approval of the Company to deal in the Company's securities.

Articles of Association

The Company's Articles of Association may only be amended by a Special Resolution at a general meeting of the shareholders. Directors are reappointed by Ordinary Resolution at a general meeting of the shareholders.

Appointment and replacement of Directors

With regard to the appointment and replacement of Directors, the Company is governed by its Articles of Association, the UK Corporate Governance Code, the Companies Act and prevailing legislation.

The Board can appoint a Director but anyone so appointed must be elected by an Ordinary Resolution at the next general meeting. All Directors are required to submit themselves for reappointment every year at the AGM (see: Re-election of Directors, above) in line with the UK Corporate Governance Code.

A Director may be removed by the Company in certain circumstances set out in the Articles of Association or by an Ordinary Resolution of the Company.

Significant interests

 Directors' interests in the share capital of the Company are shown in the table on page 99

 Major interests (i.e. those greater than 3%) of which the Company has been notified are shown on page 66

Company share schemes

The Xaar plc ESOP Trust holds 0.9% (2021: 0.9%) of the issued share capital of the Company in trust for the benefit of employees of the Group and their dependants. The voting rights in relation to these shares are exercised by the Trustees.

Change of control

The Company is not party to any agreements which take effect, alter or terminate upon a change of control of the Company following a takeover bid. There are no agreements between the Company and its Directors or employees providing for compensation for loss of office or employment (whether through resignation, purported redundancy or otherwise) that occurs because of a takeover bid. Depending on the achievement of performance conditions, share-based payment arrangements may vest on change of control but this is subject to the approval and exercise of the discretion of the Remuneration Committee.

Going concern

 The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Strategic Report on pages 16 to 25 and business performance on pages 26 to 28

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Strategic Report on pages 16 to 25. Notes 21 and 22 include a description of the Company's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposure to credit risk and liquidity risk. The Group's day-to-day working capital requirements are expected to be met through the current cash and cash equivalent resources (including treasury deposits) at the balance sheet date of 31 December 2022 of £8.5 million. As set out in note 22, the Group has a £5 million invoice discounting facility, of which £0.4 million was drawn as at the balance sheet date.

The Group has prepared and reviewed monthly profit and cash flow forecasts which cover a period up to 30 June 2024, the going concern period. This base case forecast position has been compiled by considering the performance of the different businesses across the Group and each of their funding requirements which represents the current Board approved forecasts. These forecasts reflect existing technologies and products, existing OEM adoption, the committed order pipeline, an increasing customer install base and demand for consumables such as fluids across the customer base and no specific risks around creditworthiness. This creates a high degree of predictability within the short-term cash flows, which have been factored into the level of sensitivity testing and reverse stress testing performed below. As set out in note 6, there is no concentration of revenues from an individual customer. The operational steps described in the Strategic Report also provide increased predictability over future margins, which have been incorporated in this base case forecast. Using this base case, liquidity compliance has been assessed across the going concern period and is sufficient to enable the Group to settle its obligations as they fall due.

To support the going concern conclusion, a sensitivity analysis has been performed which models a 10% reduction in revenue and 2% reduction in gross margin in comparison to the base case and is below the reported FY22 actual result. The outcome of this sensitivity analysis is that the Group maintains liquidity across the going concern period and is able to meet all forecasted obligations as they fall due. A reverse stress scenario has also been performed to model the circumstances required to eliminate available liquidity during the going concern period. This includes reducing revenues and reducing gross margin. This reverse stress scenario requires a reduction in revenue in excess of 25% in comparison to the base case and is below the reported FY22 actual result, as is the assumed margin. The Directors believe the possibility of this combination of severe downsides arising to be remote given the recurring revenue base and predictability of forecasts, and that there are numerous controllable mitigating actions such as deferring non-committed capital expenditure and reducing performance related pay which could be taken to avoid a liquidity breach.

Should extreme downside scenarios occur, the Group has further options within their control to mitigate a cash shortfall which have not been factored into the above forecasts and stress testing, such as staffing reductions, further delaying/stopping capital and research and development expenditure and aligning performance related pay to actual results. The Group has also received credit pre-approval for a £5 million revolving credit facility. No drawdowns have been assumed during the going concern period, nor are they required in the sensitivity or reverse stress scenarios described above and as such the facility would provide additional liquidity headroom to the Group across the going concern period.

Based on the above, the Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the period to 30 June 2024. For this reason, we continue to adopt the going concern basis in preparing the financial statements.

Viability Statement

The long-term viability of the Group is assessed by the Directors as part of the risk management process and regular strategic reviews.

The Company has undertaken thorough strategic planning of all four business units which has resulted in a three-year plan which takes into consideration the principal risks, product portfolios and R&D roadmaps, the market opportunities, our competitive position, core capabilities, and the cost structure, effectiveness and efficiency of the organisation.

Details of which are outlined in the strategic review on pages 16 to 28

The plan forms the basis for strategic actions to be taken across the Company and the key objectives for each business. These objectives, and the key performance metrics associated with these, are regularly reviewed by the Directors.

The Company is aware that it operates in an uncertain environment and faces risks both internally and externally that could potentially impact on the Company's ability to achieve its strategy.

The principal risks and uncertainties faced by the Company are included on pages 48 to 57

As part of the process of reviewing these risks, and other potential risks, the Board assigns responsibility for these to members of the Executive Committee. It is the responsibility of the Executive Committee members to manage the risk and the mitigating actions. This ensures that the Company manages the risks it faces appropriately and that these are considered in all financial models.

The Board has assessed the viability of the Group over a three-year timeframe based on the development cycles of our competitors and those of our customers and the probability this could lead to technological advancements that disrupt the markets that Xaar operates in.

The Board has considered plausible principal risks and the financial impacts that these could have over a three-year period were conservatively assumed in the Group's mid-term planning exercise. The principal risks considered were: 5. Coronavirus (COVID-19), 9. Supply chain and 10. War in Ukraine and world economy and the further potential impacts of these were used to model a 'severe but plausible' scenario. The outcome of this scenario is an 8.4% reduction in revenue over the three-year period.

Taking account of the Company's current financial position, operating performance, and the principal risks and uncertainties, the Directors have assessed the prospects of the Company, and confirm that they have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due for the next three years, to December 2025.

Auditor

Ernst & Young LLP were re-appointed in 2022 and have expressed their willingness to continue in office as auditor and a resolution to reappoint them will be proposed at the forthcoming AGM.

Directors' statement as to disclosure of information to auditor

The Directors who were members of the Board at the time of approving the Directors' report are listed on pages 63

Having made enquiries of fellow Directors, each of these Directors confirm that:

- To the best of each Director's knowledge and belief, there is no information relevant to the preparation of their report of which the Group's auditor is unaware
- Each Director has taken all the steps a Director might reasonably be expected to have taken to be aware of relevant audit information and to establish that the Group's auditor is aware of that information

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Approval

The Directors' report was approved by the Board on 27 March 2023 and is signed on its behalf by:



John Mills
Chief Executive Officer