13 March 2024

Keywords Studios plc ("Keywords Studios", "Keywords", the "Group")

Full Year Results for the period to 31 December 2023

Resilient performance, extending our market leadership position

Keywords Studios, the global provider of creative and technology-enabled solutions to the video games and entertainment industries, is pleased to announce its results for the twelve months to 31 December 2023.

Financial Overview:

Results for the twelve-months ended 31 Dec		2023	2022	Change
Group revenue		**€ 780.4m**	**€ 690.7m**	**+ 13.0%**
Organic revenue growth	1			**+ 5.6%**
Adjusted EBITDA	2	**€ 158.3m**	**€ 146.9m**	**+ 7.8%**
Adjusted EBITDA margin		20.3%	21.3%	
EBITDA	2	€ 109.2m	€ 120.9m	(9.7)%
Adjusted operating profit	3	**€ 122.0m**	**€ 114.6m**	**+ 6.5%**
Adjusted operating profit margin		15.6%	16.6%	
Operating profit		€ 46.8m	€ 71.8m	(34.8)%
Adjusted earnings per share	4	**112.9c**	**113.5c**	**(0.5)%**
Earnings per share		25.3c	61.5c	(58.9)%
Final dividend per share		**1.76p**	**1.60p**	**+ 10.0%**
Adjusted cash conversion rate	5	**82.3%**	**100.1%**	
Net cash / (net debt)		**€ (67.5)m**	**€ 81.8m**	

Finance and Operating Highlights:

- Full year revenue growth of 13% to €780m (2022: €691m), 17% on a constant currency basis, driven by robust organic growth and acquisitions.
- Organic revenue growth[1], excluding impact of US strikes and FX, of ~9% (6% on a reported basis).
- Adjusted operating profit rose 6% to €122m (2022: €115m), with margin of 15.6%, ahead of guidance (2022: 16.6%), reflecting good cost control.
- Good Adjusted free cash flow[6] of €94m (2022: €112m) was driven by strong H2 cash generation, with Adjusted cash conversion of 82%, in line with guidance.
- Net debt of €68m (2022: net cash of €82m) primarily reflecting another year of strong acquisition activity.
- Recommended Final dividend of 1.76p per share (2022: 1.60p), giving a total 2023 dividend of 2.61p (2022: 2.37p), an increase of 10%.

Strategic Highlights:

- Continue to outperform the market due to our diversified, global platform, and strong strategic execution.
- Strategic partnerships bearing fruit, with revenues from Top 25 clients increasing comfortably ahead of the Group.
- Good traction with clients as we further develop and scale our AI post-production technology platform across Globalize and Engage.
- Record year for M&A, with five high-quality acquisitions for maximum consideration of €225m, extending high-value offerings in Create and Engage and adding €90m of pro-forma revenues.

- RCF increased to $400m, with maturity extended to 2027, cementing our long-term liquidity and flexibility to pursue our strong M&A pipeline.
- Positive recognition of ESG practices, with rating increased to AA at MSCI.

Current trading and outlook

- We expect to deliver strong revenue and profit growth and further extend our market leadership position in 2024.
- Driven by improving organic growth, recent M&A, and the maintenance of adjusted operating profit margins above 15% as we continue to manage our cost base and drive efficiencies across the Group.
- Our organic growth expectations are unchanged, progressively improving from H2 23 levels as we move through the year and as the industry's appetite for new content returns, as well as allowing time for the output from Hollywood to increase post the 2023 strikes.
- Extensive M&A pipeline of opportunities in 2024 and confident of continuing our long track record of adding significant value to our business and our clients through our highly value accretive acquisition strategy.

Bertrand Bodson, Chief Executive Officer of Keywords Studios, commented:

"In what was a difficult year for the industry, we delivered resilient performance in 2023 and continued to extend our market leadership position, reflecting our role as a diversified enabler of the industry. Whilst the industry back-drop remains tough in the near term, our diversified technology-enabled offering and strong client relationships means that we are incredibly well-positioned to continue to grow our market share as we support clients in the creation of ever more exciting and immersive experiences.

We made considerable progress against our strategic objectives and delivered a record year of M&A, bringing greater exposure to higher growth and margin Create services, and have an extensive pipeline of acquisitions in 2024. We will continue to successfully navigate the current market conditions and are excited by the opportunities that lie ahead as we deliver against our plans and become a +€1bn revenue business in the coming years."

Presentation and Webcast

A presentation of the full results will be made to analysts and investors at 9.00am this morning and the live webcast can be accessed via this link: https://brrmedia.news/KWS_FYR23

To register for dial in access, or for any enquiries, please contact MHP Group on keywords@mhpgroup.com.

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About Keywords Studios (www.keywordsstudios.com)

Keywords Studios is a global provider of creative and technology-enabled solutions to the video games and entertainment industries. Established in 1998, and now with over 70 facilities in 26 countries strategically located in Asia, Australia, the Americas, and Europe, it provides services across the entire content development life cycle through its Create, Globalize and Engage Divisions to a large blue-chip client base across the globe.

Keywords Studios has a strong market position, providing services to 24 of the top 25 most prominent games companies and contributing to over 70% of the 2023 Game Awards winners. Across the games and entertainment industry, clients include Activision Blizzard, Bandai Namco, Bethesda, Electronic Arts, Epic Games, Konami, Microsoft, Netflix, Riot Games, Square Enix, Supercell, TakeTwo, Tencent and Ubisoft. Recent titles worked on include Starfield, Baldur's Gate 3, Diablo IV, Hogwarts Legacy, Elden Ring, Fortnite, Valorant, League of Legends and Clash Royale. Keywords Studios is listed on AIM, the London Stock Exchange regulated market (KWS.L).

The Group reports a number of alternative performance measures (APMs) to present the financial performance of the business which are not GAAP measures as defined by International Financial Reporting Standards (IFRS). The Directors believe these measures provide valuable additional information for the users of the financial information to understand the underlying trading performance of the business. In particular, adjusted profit measures are used to provide the users of the financial statements a clear understanding of the underlying profitability of the business over time. For full definitions and explanations of these measures and a reconciliation to the most directly referenceable IFRS line item, please refer to the APMs section at end of the statement.

[1] *Organic revenue at constant exchange rates is calculated by adjusting the prior year revenues, adding pre-acquisition revenues for the corresponding period of ownership, and applying the 2022 foreign exchange rates to both years, when translating studio results into the euro reporting currency.*

[2] *EBITDA comprises Operating profit as reported in the Consolidated statement of comprehensive income, adjusted for amortisation of intangible assets, depreciation and impairment, and deducting bank charges. Adjusted EBITDA comprises EBITDA, adjusted for share-based payments expense, costs of acquisition and integration and non-controlling interest. In order to present the measure consistently year-on-year, the impact of other income is also excluded.*

[3] *Adjusted operating profit consists of the Operating profit as reported in the Consolidated statement of comprehensive income, adjusted for share-based payments expense, costs of acquisition and integration, and amortisation of intangible assets. In order to present the measure consistently year-on-year, the impact of other income is also excluded.*

[4] *The Adjusted earnings per share comprises the Adjusted profit after tax divided by the non-diluted weighted average number of shares as reported. The Adjusted profit after tax comprises the Adjusted profit before tax, less the Taxation expense as reported in the Consolidated statement of comprehensive income, adjusted for the tax impact of the adjusting items in arriving at Adjusted profit before tax.*

[5] *The Adjusted cash conversion rate is the Adjusted free cash flow as a percentage of the Adjusted profit before tax.*

[6] *Adjusted free cash flow is a measure of cash flow adjusting for capital expenditure that is supporting growth in future periods (as measured by capital expenditure in excess of maintenance capital expenditure).*

CEO Statement

Performance

The Group delivered resilient performance in 2023, with revenues growing 13% to €780m, despite a 4% headwind from foreign exchange, further extending our market leadership position.

Reported organic revenue growth of 6% included a 3% combined impact from the US entertainment strikes on our media and entertainment businesses, and foreign exchange movements. Excluding these factors, organic growth would have been around 9%, slightly behind our medium-term guidance, reflecting the current market and macro dynamics, which have led to pressures on certain parts of the business.

Operating margins were ahead of expectations at 15.6%, due to good cost control, which delivered adjusted operating profit of €122m (reported operating profit was €47m). This was 6% higher than 2022, despite the higher margin experienced in the comparative period.

The performance of each of the Group's three Divisions reflected the varied conditions in the market. We continued to see strong demand in Create, which now accounts for over 50% of Group profitability, offset by a temporary moderation of demand in our Globalize and, to a lesser extent, Engage Divisions, due to the current market conditions.

Cash generation remained strong, and as normal, was H2 weighted, primarily due to the timing of working capital, and we delivered adjusted free cash flow of €94m, giving an adjusted cash conversion rate of 82%.

We had another successful year of M&A, supported by our strong balance sheet, cash generation and expanded revolving credit facility, adding three high-quality game development studios to Create, and broadening Engage's digital and PR offerings, with two new US studios. As a result of this activity, we moved from a net cash position of €82m at December 2022 to a year-end net debt position of €68m, with significant headroom remaining in our facilities for further selective acquisitions.

Market opportunity

After a number of extremely strong years of growth, in 2023, the video gaming industry saw a mixed performance. Major titles that had been in production for a number of years were released to commercial success, such as Hogwarts Legacy, Starfield, Diablo IV and Baldur's Gate 3, but the broader industry saw publishers focus more on profitability than on taking risks around new content. This meant that we saw a focus on core IPs and smaller scopes for the launch of some titles, with an increase in the number of games being delayed or cancelled.

As we move into 2024, we expect a gradual improvement to market conditions and we remain confident in the medium-term market backdrop. Player numbers continue to rise, with another record year of average in-game players on Steam, and games such as Fortnite have attracted their highest ever monthly average users during Q4, demonstrating the popularity and longevity of high-quality games. The mobile market, which has been through a difficult period, also appears to be returning to growth after six consecutive quarters of declines. Hardware challenges have eased, with the PS5 now readily available and there is a market expectation that when Nintendo launches new hardware this will also drive further growth in content.

Industry forecasts point to continuing long term growth in the vast video-gaming market, with growth in the content creation segment expected to be above the overall market, with a five-year CAGR of 8%. External service provision is still expected to be the fastest growing segment, with a five-year CAGR of over 9% (Source: IDG) and this underpins our medium-term organic growth expectations.

Delivering against strategy

As the key player in this market, at more than 3x the size of the next largest competitor, yet with market share of 6%, we believe we remain incredibly well placed to grow our market share in a highly fragmented market. To do so, we are making good progress against the five pillars of our strategy, including utilising the power of our platform to drive strategic partnerships with the key market players, and investing in leading technology solutions to better serve our clients and enhance our economic and technology moat against competitors.

We have continued to work more closely with our largest clients as we seek to evolve our relationships to more **strategic partnerships**. This has seen increased access to CXO suites, more in-depth strategic partner reviews, and sessions with key partners on developments around AI, strengthening our position as thought-leaders in this field. These enhanced relationships are giving us the opportunity to partner with our clients on more projects, as well as taking on larger, longer-term projects. During the year, we were pleased to see revenues from our Top 25 clients grow meaningfully faster than the Group, demonstrating the power of the relationships and helping us to outperform the market.

Technology, the second major pillar of our strategy, goes hand-in-hand with our strategic partnership initiatives, as an important differentiator in the market, providing real benefits to clients, whether large or small. Our 4,500 dedicated engineers and technical experts in Create have a long track record of unlocking the benefits of multiple generations of new technologies to support the industry's "race to the top" to create the most immersive experience for players and we continue to build on our focus on responsibly harnessing AI and other technologies in recent years.

Through a combination of M&A and internal development, the business has also been building a post-production platform of AI-enabled products to meet client needs, supported by over 250 product engineers, enhancing our existing Globalize and Engage services, and enabling us to do more, faster, and more efficiently whilst enhancing quality for clients.

We saw good traction with Mighty Games' innovative AI-based testing solution, Mighty Build & Test, who have scaled their footprint and product offering, so that they are now able to test on any game engine. Mighty is increasingly becoming our internal testing solution, increasing automation across our game development studios globally and has an exciting client pipeline and product development roadmap ahead.

Helpshift, our digital first customer support solution saw good growth, powered by its ability to swiftly scale support for certain high performing mobile games in H2. The business has continued to broaden its offering whilst delivering an average of over 60% AI automation to clients. It is integrating Gen AI to aid the customer support journey, providing enhanced first contact resolution, delivering insights and providing sentiment analysis for clients. We were also excited to launch LanguageAI during the year, which is powered by KantanAI's machine translation technology to enable more languages to be supported within the Helpshift solution, and in early 2024, a VIP Services offering, utilising Helpshift's data insights to better support high-spending players.

KantanAI has continued to grow its partnership with Microsoft, and due to the benefits of its unique AI-assisted workflow with improved turn-around times and quality of service, has become increasingly embedded in service delivery for other clients. We have also broadened the Kantan suite of products, with Kantan Audiomate, which manages and stores audio digital assets, whilst automating and enhancing audio workflows, now in production with clients.

During the year, we recruited the former Head of Gaming AI from AWS Games to spearhead our AI Centre of Excellence ("CoE"), as part of our Innovation at Keywords team, led by Jamie Campbell. The CoE is continually mapping the landscape for AI tools that can be deployed in the game development cycle, knowledge sharing and coordinating the many initiatives across our studios and building partnerships, so that we can help clients navigate the fast-moving landscape and shape their AI strategies.

An example R&D initiative, sponsored by the Innovation team was Project Ava, where a team, initially from Electric Square Malta, attempted to create a 2D game solely using Gen AI. Over the six-month process, the team shared their findings across the Group, highlighting where Gen AI has the potential to augment the game development process, and where it lags behind. Whilst the project team started small, it identified over 400 tools, evaluating and utilising those with the best potential. Despite this, we ultimately utilised bench resource from seven different game development studios as part of the project, as the tooling was unable to replace talent.

One of the key learnings was that whilst Gen AI may simplify or accelerate certain processes, the best results and quality needed can only be achieved by experts in their field utilising Gen AI as a new, powerful tool in their creative process. As a research project, the game will not be released to the public, but has been an excellent initiative to rapidly spread tangible learnings across the Group, provide insights to clients and it demonstrates the power and level of cross-studio collaboration that currently exists. Alongside Project Ava, the team is undertaking a range of Gen AI R&D projects, including around 3D assets, to ensure that we are able to provide current insights in an ever-evolving part of the market.

An important element of our technology journey has been to ensure we have a strong technology spine within the Group. During the year, we have reshaped our internal teams to ensure we can support the different needs of each Division better and have made targeted investments to consolidate systems and begin to create a global platform that will, over time, enable enhanced customer experiences, data insights and increasingly frictionless customer collaboration.

Whilst the initiatives I have picked out are not exhaustive, this gives a good flavour of the success of the **One Keywords** pillar in driving collaboration and advantage across the Group. The consolidation of our service lines into Divisions has been a foundational step, for example in the Create Division alone, over 30% of projects had multiple studios working on them. With the support of operational excellence initiatives such as HR and IT business partnering and cross-studio initiatives like Project Ava, increased collaboration across our global platform is set to continue and with it the unique advantages it brings. We have also continued to embed our new Leadership Principles across the organisation, with a broad-ranging communications programme, and were very pleased with the seamless transition of Sperasoft into four new operating hubs in Eastern Europe, with production in Russia ceasing.

Even in a year of wide-spread job losses, it remains difficult to find high quality engineering **talent and capabilities** across the industry. Despite this, Keywords continued to grow, with our talent acquisition programmes, supporting good growth in this part of our business, with targeted efforts to identify and attract talent on a global basis. The recruitment of Rob Kingston as CFO in July meant that Jon Hauck was able to move across to the COO role to support the long-term growth of the business and complete the evolution of the leadership team. I believe we are building a leadership team and structure, with good strength in depth, to drive the future success of the business.

Our progress in **adjacent markets** has also been very encouraging with Lively, our dedicated LiveOps studio, experiencing strong growth and demand from a wide variety of clients. We also believe there is a significant opportunity within virtual production, both for turn-key services, and as a virtual art department within the broader production process and have launched services to address this opportunity. Towards the end of the year, we won virtual production and animation client mandates through both our Engage and Create Divisions.

We extended our media and entertainment offering in the US, through the acquisition of Digital Media Management, which works with some of the world's biggest franchises, including the recent Barbie movie, to enhance their reach online and in social media. With the convergence of gaming and film and television, as underscored by Disney's recent $1.5bn investment in Epic Games, we see meaningful opportunities ahead for us here.

M&A

A key and long-standing element of our strategy is to add significant value by reinvesting our free cash flow into consolidating a fragmented market in four M&A focus areas: game development, marketing, technology and adjacent markets. We were pleased to deliver a record year of M&A, acquiring five studios for total maximum consideration, including performance related contingent deferred consideration, of €225m. In 2023, the cash component of both the current and previous years' transactions amounted to €195m.

In line with our focus areas, three of the acquisitions broadened our game development capabilities, with The Multiplayer Group bringing extensive multiplayer game expertise, Hardsuit Labs bringing a deep understanding of Unreal Engine and Playboss Interactive providing one of our leading UK studios, Climax, a second location to grow from. We also broadened our Engage offering in the US, the largest global market for gaming, with the acquisitions of 47 Communications and Digital Media Management (DMM), with both enhancing our media and entertainment offering, and DMM bringing market-leading social media capabilities and an innovative Creator-focused technology platform.

The five acquisitions delivered pro forma revenues of €90m in 2023 (including pre-acquisition revenues), at margins above the current Group, and are expected to grow strongly in the coming years as we continue to evolve the Group towards higher-value services. We have a strong balance sheet and an extensive pipeline of opportunities that will lead to further attractive acquisitions during 2024. We expect to continue our long track record of adding significant value to our business and our clients through our highly value accretive acquisition strategy for many years.

Responsible business

Our responsible business agenda is centred around five key areas; our people, planet, community and our clients, underpinned by our commitment to good governance and ethics. We have made solid progress against our main priorities across the year, with a range of initiatives designed to enhance culture, employee engagement and diversity and inclusion. These included the expansion of our employee engagement initiatives, together with the continuing roll-out of our Leadership Principles across the Group. We continued to make progress with our diversity, equity, inclusion and belonging agenda, increasing the proportion of women in the Group once again, supporting the growth of the Women in Games Ambassador programme to more than 1,700 people, and hosting a very successful Women's Summit in Asia. We also began to increase efforts around broader diversity, especially given the prevalence of neurodiversity within the video gaming sector, and undertook training, and launched a thriving affinity group - Brain Space - which is providing the opportunity for connections and support.

In May, we celebrated 25 years of Keywords by planting 25,000 trees across the world and have continued to win a range of Best Company to Work For awards in a number of locations. We have continued our climate journey, expanding our emissions reporting, and enhancing our climate-related risk reporting, within our annual report. Our progress against our priorities has been increasingly recognised by third party ESG rating agencies, with MSCI now rating the business AA, the joint highest rating in our category.

US entertainment strikes

Whilst Keywords' primary market is video gaming, it has an increasing exposure to the broader media and entertainment industry, with the crossover between the two industries growing. Both our Globalize and Engage Divisions generate revenues from the media and entertainment industry, with a large proportion of this in post-production audio services and marketing in the US. In May, the Writers Guild of America (WGA) union commenced strike action following the failure of union negotiations around working conditions, residuals and AI usage. The WGA was followed on strike by the SAG-AFTRA union in mid-July, which meant a near complete stoppage of content generation in Hollywood.

These strikes continued for a number of months, with the WGA returning to work in September and SAG-AFTRA in November. As a result, our US businesses saw substantially reduced work volume, leading to around €20 million in lost second-half 2023 revenue. Whilst the strikes are now over, there remains considerable uncertainty around the pace of ramp-up in 2024, as the industry returns to normal, given the logistics involved in each project. However, the Group believes it is very well placed to benefit from the surge in demand, as the industry looks to increase its content output to meet viewer needs.

Driving efficiencies

2023 was a difficult year for our Globalize Division, and specifically for our Localization and Localization Testing businesses, as clients were particularly cost conscious, and looked to manage budgets carefully by focusing solely on those languages with the highest return on investment. During 2023, we carefully managed our cost base, more deeply integrating technology and enhancing collaboration across our locations. This process is continuing in 2024 and regrettably, we have rightsized headcount in Globalize by around 5% as we look to balance our costs and locations with meeting client requirements. It is expected that this programme, together with other changes, will lead to a one-time exceptional charge of €5m during 2024. Against this backdrop, and changes in post-Covid working patterns, we have also taken a non-cash impairment charge of €10m relating to onerous right-of-use leases, associated office improvements and historic IT investments. We have also launched a multi-year efficiency programme to enhance our operating model as we continue to look to provide best-in-class delivery for our clients and expect these actions to deliver meaningful annual savings, with the majority of the benefits being reinvested into growth.

Outlook

In a challenging year for the industry, we delivered resilient performance in 2023, continuing to grow our leadership position, reflecting our role as a diversified enabler of the industry. Whilst the industry back-drop remains tough in the near term, our leading technology-enabled global platform and strong client relationships means that we are incredibly well-positioned to continue to grow our market share as we support clients in the creation of ever more exciting and immersive experiences.

We had a record year of M&A in 2023, which has brought greater exposure to higher value Create services, and have an extensive pipeline of acquisitions for 2024, with our expanded RCF providing enhanced flexibility to invest. Having made significant strategic progress, we are better positioned than ever to benefit as content production in the video games and entertainment industries re-accelerates. We remain confident in our medium-term targets, expect to deliver strong revenue and profit growth in 2024 and are firmly on track to become a +€1bn revenue business.

I am, therefore, convinced that our unique position at the heart of the largest entertainment industries in the world, combined with our ongoing investments to augment our human creativity with leading technology, will create significant value for clients and shareholders.

Bertrand Bodson

Chief Executive Officer

Divisional Review

Create

Create combines Game Development and Art Services to deliver a range of content production services to clients and partners globally. It represents around 4,500 people across 4 continents.

	2023	2022	Change
Revenue €m	336.1	275.5	22.0%
Organic Revenue growth %	17.3%	25.9%	
Adjusted EBITDA €m	94.1	69.7	35.0%
Adjusted EBITDA margin %	28.0%	25.3%	2.7%

2023 Performance

Create performed strongly during the year, with total revenues up by 22% to €336m (2022: €276m) and Organic Revenue, which excludes the impact of acquisitions, growing by 17%, as we continued to see strong demand for our high-end services. H1 performance was exceptionally strong, with H2 normalising, as expected, given current industry dynamics.

This growth was primarily driven by our Australian and UK game development hubs, as we continued to expand our footprint in each region through a combination of new satellite studios and headcount additions.

We also won a number of larger engagements with key clients, both single studio and wider collaborative efforts, as we continue to demonstrate the benefits of working with a multi-studio or geographic set up to clients. Our art studios also performed strongly across the period, with enhanced collaboration between our game development and art studios supported our overall growth.

Aside from good execution at the studio level, which contributed to this success, we increased collaborations within the Division as we reacted to the changes in the market dynamics, keeping our utilisation high by using bench resources and managing recruitment cadence.

During the first half, Sperasoft completed its transition out of Russia into four new operating hubs in Eastern Europe. This was a major undertaking, and we are delighted that we were able to complete this with limited disruption to existing projects for our clients. Once the transition was complete, we were able to take on new work and were pleased with the growth during the second half of the year as the team won a number of new projects.

Adjusted EBITDA in Create grew 35% to €94m in 2023 (2022: €70m), with the Adjusted EBITDA margin of 28.0% in 2023 higher than the previous period (2022: 25.3%). This was primarily due to the increased weighting of game development in the Division, good central cost control and strong revenue growth.

We welcomed three new game development studios this year, The Multiplayer Group ("MPG") in Nottingham, Hardsuit Labs in Seattle, and Playboss Interactive in Liverpool. Together, these acquisitions broadened our service offering, footprint and added nearly 450 high-quality game engineers and artists to the Division. MPG is a market leader in providing multiplayer services, Hardsuit has deep expertise in Unreal Engine, and Playboss provides Climax, one of our largest UK studios, with a second location from which to continue its growth trajectory.

Outlook

Our expanded Create Division remains well positioned to capitalise on the continuing demand for its high-end services. We have good pipeline visibility into 2024 across both game development and art, with growth weighted towards the second half of the year. The increasing scale and depth of our expertise in Create means we believe we are uniquely placed to harness the benefits of Generative AI as a tool to support our clients if they wish to utilise it. We are seeing limited utilisation to date, with copyright and quality concerns currently a barrier to adoption for AAA publishers. Over time, we believe these technology advancements will be able to augment the creativity of our clients and teams and enable the delivery of ever more content for our clients.

Globalize

Globalize brings together our Audio, Testing and Localization businesses to create a global provider, with around 5,000 people across 5 continents.

	2023	2022	Change
Revenue €m	279.5	300.9	(7.1)%
Organic Revenue growth %	(4.3)%	23.4%	
Adjusted EBITDA €m	48.5	61.6	(21.3%)
Adjusted EBITDA margin %	17.4%	20.5%	(3.1%)

2023 Performance

Globalize experienced more difficult trading conditions in 2023 and was impacted by the US entertainment strikes and foreign exchange movements, with total revenues falling by 7% to €280m (2022: €301m). Organic Revenue declined by 4% and excluding the impact of the strikes, organic growth would have declined slightly, significantly outperforming the core gaming post-production market, which was estimated to have declined by 5% in 2023 (Source: IDG).

Whilst performance was below expectations at the start of the year, it was a resilient result given market conditions, as there has been an elevated level of project cancellations, delays and reduced scopes which has impacted the Division given its broad reach across the industry. In addition to this, the US entertainment strikes, had a significant impact on our audio businesses during the second half of the year.

We were, however, pleased that Functional testing continued to deliver robust results, with the addition of some larger scale contracts in lower cost locations such as Poland and with our operations in Mexico beginning to scale up. This was offset by our embedded services testing business and our localization businesses which experienced a tougher period. Localization clients were particularly cost conscious and looked to manage their budgets carefully, by only focusing on key languages where the best returns could be generated. Audio faced tough comparators in H1 and then was heavily impacted by the US entertainment strikes, which are now resolved.

We have continued to make good progress in developing and integrating our post-production technology platform. As part of this we developed our Mighty Build and Test solution and significantly scaled the team and the product offering during 2023. Mighty is now able to operate on Unreal, Unity and custom/proprietary game engines and has expanded its external client base as well as operating as the QA tool at a number of our large internal studios. We have an exciting pipeline of client opportunities as we move into 2024 and are continuing to deliver against our product development roadmap to broaden its functionality.

Adjusted EBITDA of €49m was 21% lower than 2022 (€62m), with Adjusted EBITDA margins of 17.4% moderately lower than 2022 (20.5%). Margins were expected to normalise following exceptional demand in 2022 and were impacted by the lower utilisation of resources compared to the 2022, with pricing more of a focus for clients.

During 2023, we carefully managed our cost base, whilst integrating technology more deeply and enhancing collaboration across studios. This process is continuing in 2024, and, regrettably, we have rightsized the headcount in Globalize by around 5% as we look to balance our costs and locations with client demands. We continuously look to enhance our operating model to generate efficiencies and provide best-in-class delivery for our clients, reinvesting savings into growth.

Outlook

Globalize has a leading position with major publishers within the industry and is well placed to benefit when the content cycle turns and as Hollywood rebounds to previous output levels through the year. We also believe that there is a significant opportunity over time to support clients moving from fixed to variable costs as they look to manage their budgets and cost base. We will continue to carefully manage our cost base, enhancing our delivery model and efficiencies across our global footprint, and will further integrate technology into our workflows to differentiate our offering in the market.

Engage

Our Engage Division brings together our Marketing Services and Player Engagement businesses to create a holistic offering focused on attracting, retaining, and supporting fans across the video games and entertainment industries, encompassing around 2,500 people across 3 continents.

	2023	2022	Change
Revenue €m	164.8	114.3	44.2%
Organic Revenue growth %	2.3%	9.7%	
Adjusted EBITDA €m	15.7	15.6	0.6%
Adjusted EBITDA margin %	9.5%	13.6%	

2023 Performance

Engage saw a resilient performance during the year, with the higher revenue growth of 44% to €165m (2022: €114m) driven by a number of acquisitions as we built out the capabilities of the Division. Organic Revenue, which excludes the impact of acquisitions, grew by 2% despite the backdrop and the significant impact from the US entertainment strike. Excluding the impact of the strikes, organic growth would have been around 9%.

Marketing delivered a robust performance, despite the macroeconomic environment leading to publishers reducing their marketing activity, with lower budgets and delays to projects. The US entertainment strikes had a major impact on organic revenue growth in H2, and despite the continued subdued level of activity, we still delivered strong underlying organic growth, with large projects being delivered for clients during the period.

We continue to enhance collaboration across our studios, both in the UK and in the US, in order to provide a more solution-based model for our clients' needs and enhance the cross-selling of multiple services. We were delighted to bring two high quality US studios into the service line during the period, with Digital Media Management (DMM) and 47 Communications greatly enhancing our social media, influencer and PR offerings respectively. We believe that DMM in particular is exceptionally well placed to benefit from the increasing share of social media in overall marketing budgets.

Player Engagement is primarily focused on the mobile market and was impacted by reduced player numbers and spend across the broader mobile market, although this stabilised during the second half. This meant that certain clients reduced the scale of the teams working on their games to reflect the reduced activity, although new business wins mitigated the reduced demand. We saw very good traction, despite the market, for our Helpshift AI solution, which we acquired in late 2022, and fully integrated into our existing offering to create a unique end-to-end technology enabled solution for clients. During the year we launched Language AI, to enhance our multi-lingual support offering, made good progress with our trust and safety offering in tandem with a number of technology partners and launched our VIP concierge service.

Adjusted EBITDA of €16m was slightly higher than 2022 (€16m), with the Adjusted EBITDA margin of 9.5% behind the prior year period (2022: 13.6%). Margins were impacted as the business has relatively fixed costs and was scaled for growth, but experienced lower utilisation rates as projects were delayed and lower revenues due to the US strikes. We have implemented cost control measures in certain studios and have reduced marketing headcount by approximately 8%, whilst retaining our capacity to support growth in future periods, as well as rationalising our footprint into larger hubs in London and Los Angeles.

Outlook

We continue to scale the Engage Division, by building out the full-service capabilities of our marketing offering and by creating a holistic technology-enabled player engagement offering through the addition of Helpshift’s automated solutions. Whilst the current market backdrop remains tougher, and it will take time for Hollywood to return to normal output, our Marketing studios are increasingly well placed with clients, our collaborative solutions are gaining traction, and we are exploring the use of AI and technology to support our client offerings. The technology first approach to Player Engagement, powered by Helpshift and a range of partnerships supporting offerings such as Trust & Safety and VIP services, is expected to enable continuing growth.

Financial and operating overview

Revenue

Revenue for 2023 increased by 13% to €780m (2022: €691m). This performance included the impact of acquisitions in 2022 and 2023 and a ~4% headwind from the impact of currency movements, when translating studio results from local currency into the euro reporting currency.

Reported Organic Revenue growth (which adjusts for the impact of acquisitions) was 6%. However, adjusting for the significant impact from the US entertainment strikes and from foreign exchange movements, organic revenue growth would have been 9%. Continuing strong performance in Create, was offset by more muted performance in Engage and difficult trading conditions in Globalize. Further details of the trading performances of each of the Divisions are provided in the Divisional Review.

Gross profit and margin

Gross profit in 2023 was €299m (2022: €267m), representing an increase of 12%. The gross margin of 38.3% was broadly in line with 2022 (38.7%) as the increased weighting of the higher margin Create Division largely offset lower margins in Globalize and Engage.

Operating costs

Adjusted operating costs increased by 17% to €141m (2022: €120m), reflecting the larger Group, but at 18.0% of revenue were slightly higher than 2022 (17.4%). This was due to continuing investment in the business, the larger office footprint, and the post-Covid return to normal of travel and business development costs.

EBITDA

EBITDA of €109m was 10% behind 2022 (€121m). Adjusted EBITDA increased 8% to €158m compared with €147m in 2022. The Adjusted EBITDA margin in 2023 of 20.3% was slightly lower than 2022 (21.3%), as expected, reflecting the lower gross margin and higher operating costs.

Net finance costs

Net finance costs of €12m compared to €4m in 2022. The €8m increase was primarily driven by interest costs due to the drawdown on the RCF to fund acquisitions, together with a €3m negative year-on-year foreign exchange impact.

Alternative performance measures (APMs)

The Group reports a number of APMs to present the financial performance of the business which are not GAAP measures as defined by IFRS. The Directors believe these measures provide valuable additional information for the users of the financial information to understand the underlying trading performance of the business. In particular, adjusted profit measures are used to provide the users of the financial statements a clear understanding of the underlying profitability of the business over time. A breakdown of the adjusting factors is provided in the table below:

	2023 €m	**2022** €m
Share-based payments expense	22.0	18.7
Costs of acquisition and integration	27.1	8.4
Amortisation of intangible assets	26.1	16.8
Foreign exchange and other items	4.5	0.1
Total	**79.7**	**44.0**

A total of 1.37m options were granted under incentive plans in 2023. This, together with grants from previous years, has resulted in a non-cash share-based payments expense of €22m in 2023 (2022: €19m).

Costs associated with the acquisition and integration of businesses amounted to €27m (2022: €8m). Of this, €10m was related to Globalize restructuring costs associated with onerous leases, office improvements and historic IT spend. The balance was primarily due to the accounting treatment of deferred consideration related to continuing employment, which has led to a charge of €9m, and the costs associated with the exit from Russia of €4m.

Amortisation of intangible assets increased by €9m to €26m (2022: €17m) due to the increased acquisition activity in recent years.

Foreign exchange and other items amounted to a net loss of €5m (2022: flat). This includes €3m for the unwinding of discounted liabilities on deferred consideration (2022: €3m) and a net foreign exchange loss of €1m (2022: gain of €2m). Keywords does not hedge foreign currency exposures in relation to net current assets. Whilst more material movements in foreign exchange can be impactful on revenues and expenses, the net impact on the Group's results of movements in exchange rates and the foreign exchange gains and losses incurred during the year mainly relate to the effect of translating net current assets held in foreign currencies.

A more detailed explanation of the measures used together with a reconciliation to the corresponding GAAP measures is provided in the APMs section at the end of the report.

Operating Profit

Reported Operating profit of €47m in 2023 was 35% lower than 2022 (€72m). Adjusted operating profit, which adjusts for the items described in the APMs section above increased to €122m, 6% ahead of 2022 (€115m). Adjusted operating profit margin of 15.6% was ahead of guidance, albeit slightly behind 2022 (16.6%) due to continuing investment in the business, the larger office footprint, and the post-Covid return to normal of travel and business development costs.

Profit before taxation

Reported Profit before tax of €35m in 2023 was 49% lower than 2022 (€68m). Adjusted profit before tax, which adjusts for the items described in the APMs section above increased to €115m, 2% ahead of 2022 (€112m). This reflects lower Adjusted operating profit margins and increased interest payments linked to acquisition activity.

Taxation

The tax charge reduced to €15m from €21m in 2022, largely reflecting the reduction in the Profit before tax of the business. After adjusting for the items noted in the APMs section above and the tax impact arising on these items, the Adjusted effective tax rate for 2023 was 22.3%, in line with 2022 (22.0%).

Earnings per share

Basic earnings per share of 25 cents was lower than 2022 (62 cents), primarily reflecting the reduction in the statutory Profit after tax. Adjusted earnings per share, which adjusts for the items noted in the APMs section above and the tax impact arising on these items, was 113 cents (2022: 114c), broadly flat year-on-year, with both Adjusted profit before tax and the basic weighted average number of shares increasing in similar proportions.

Cash flow and net debt

	2023 €m	2022 €m	Change €m
Adjusted EBITDA	**158.3**	**146.9**	**11.4**
MMTC, VGTR and similar incentives	(11.3)	(3.6)	(7.7)
Working capital and other items	(4.3)	0.6	(4.9)
Capex - property, plant and equipment (PPE)	(30.7)	(27.0)	(3.7)
Capex - intangible assets	(3.1)	(0.5)	(2.6)
Payments of principal on lease liabilities	(15.0)	(11.4)	(3.6)
Operating cash flows	**93.9**	**105.0**	**(11.1)**
Interest paid net of received	(7.1)	(1.5)	(5.6)
Free cash flow before tax	**86.8**	**103.5**	**(16.7)**
Taxation paid	(20.9)	(17.5)	(3.4)
Free cash flow	**65.9**	**86.0**	**(20.1)**
M&A - acquisition spend	(194.7)	(113.3)	(81.4)
M&A - cost of acquisition and integration cash outlay	(7.8)	(3.1)	(4.7)
Cash proceeds arising from share-based payments	2.6	7.3	(4.7)
Other income	-	1.1	(1.1)
Company funded acquisition of shares by EBT	(14.8)	-	(14.8)
Dividends paid	(2.2)	(2.0)	(0.2)
Underlying increase / (decrease) in net cash / (debt)	**(151.0)**	**(24.0)**	**(127.0)**
FX and other items	1.6	0.2	1.4
Increase in net cash / (debt)	**(149.4)**	**(23.8)**	**(125.6)**
Opening net cash / (debt)	81.8	105.6	
Closing net cash / (debt)	(67.6)	81.8	

The Group generated Adjusted EBITDA of €158m in 2023, an increase of €11m from €147m in 2022. There was an €8m increase in respect of the amounts due for Multi-Media Tax Credits (MMTCs) and Video Game Tax Credits (VGTRs), higher than 2022 (€4m), primarily due to timing of receipts under new incentive regimes in Australia and Serbia. Other working capital increased by €5m as we saw an outflow of €4m, compared to a small inflow in 2022, mainly due to an increase in accrued income from work in progress.

Investment in property, plant and equipment increased by €4m to €31m (2022: €27m) as we continued to invest in the footprint of the business, the new sites required to exit Russia, and took advantage of favourable pricing to purchase longer-term software licences. In addition, we incurred €3m of capitalised research and development costs as we developed our technology platform. Property lease payments of principal of €15m were €4m higher than the prior period (2022: €11m) mainly related to acquisitions in the period.

Operating cash flows of €94m were behind 2022 (€105m), primarily due to the change in working capital and the increased capex during the period.

There was a €3m increase in cash tax paid to €21m (2022: €18m) as payment schedules return to a more normal pattern. Net interest payments, which largely relate to interest from drawdowns on the RCF, and arrangement costs for the facility, were €7m compared to €2m in 2022.

This resulted in Free cash flow of €66m, €20m behind 2022 (€86m). Adjusted free cash flow, which adjusts for capital expenditure that is supporting growth in future periods, was €94m in 2023, behind 2022 (€112m), which resulted in an Adjusted cash conversion rate of 82%, in line with guidance.

Cash spent on acquisitions totalled €203m, of which €34m was in respect of the cash component of prior year acquisitions and €8m was in relation to acquisition and integration costs. This was €86m higher than the spend in 2022 due to the increased size and scale of acquisitions. The Group also spent €15m purchasing shares of behalf of the Employee Benefit Trust, to manage dilution at current share prices from long term incentive plans.

This resulted in an increase in net debt of €149m in 2023, leading to closing net debt of €68m (2022: net cash €82m).

Balance sheet and liquidity

The Group funds itself primarily through cash generation and a syndicated multi-currency Revolving Credit Facility. In July 2023, the Group entered a new RCF of $400m that matures in July 2027, replacing the previous €150m facility. The new RCF includes an accordion option to increase the facility up to $500m and an option to extend the expiry date by a further one-year period (both subject to lender consent). The majority of Group borrowings are subject to two financial covenants, minimum interest cover of 4x and maximum net leverage of 3x, that are calculated in accordance with the facility agreement. The Group retained considerable headroom against both of these covenants at year-end.

The Group entered the year with a strong balance sheet and deployed €195m of cash in the period to support its value accretive M&A programme and made €15m of share purchases on behalf of the Employee Benefit Trust. At the end of 2023, Keywords had net debt (excluding IFRS 16 leases) of €68m (31 December 2022: net cash of €82m) and undrawn committed facilities of $260m. The undrawn facilities, together with strong cash generation, leaves us well placed to continue to execute on our M&A programme.

Capital allocation

The Group continues be disciplined as it allocates capital to drive shareholder value creation. Its key priorities are to invest in driving organic growth, delivering value accretive M&A, whilst maintaining a strong balance sheet and delivering shareholder cash returns.

The Board is pleased to recommend a final dividend of 1.76p per share (2022: 1.60p) representing an increase of 10% on the 2022 final dividend. Together with the interim dividend of 0.85p this will bring the total dividend to 2.61p (2022: 2.37p). This is in line with the Board's progressive dividend policy which seeks to reflect the Group's continued growth in earnings and strong cash generation, balanced with the need to retain the resources to fund growth opportunities, particularly M&A, in line with our strategy.

Payments will be made on 28 June 2024 to shareholders on the register on 24 May 2024 and the shares will go ex-dividend on 23 May 2024. The final dividend payment will represent a total cost of approximately €1.6m of cash resources. Link Market Services Trustees Limited (Link) operates a Dividend Reinvestment Plan (DRIP) for the Group’s shareholders and instructions for shareholders on how to apply for the DRIP will be included in communications regarding the dividend, and any queries regarding the DRIP should be directed to Link.

Following the €15m of purchases for the Employee Benefit Trust in 2023, the Group intends to use its Employee Benefit Trust to undertake further market purchases of Company shares in H1 2024, amounting to an aggregate of up to €5m, in order to satisfy future exercises of LTIPs or stock options pursuant to relevant share plans, and may look to increase this amount during the year.

Guidance for 2024

We continue to trade robustly across the Group in continuing tough markets and expect to deliver strong revenue and profit growth in 2024, driven by improving organic growth, recent M&A, and the maintenance of adjusted operating profit margins above 15% as we continue to manage our cost base and drive efficiencies across the Group.

Our organic growth expectations are unchanged, progressively improving from H2 23 levels as we move through the year and as the industry's appetite for new content returns, as well as allowing time for the output from Hollywood to increase post the 2023 strikes.

The adjusted Effective Tax rate for the full year is expected to be in line with 2023 at around 22%. We continue to anticipate capex to be between 4.5-5% of annual revenues, as we continue to invest in the business, but we still expect a full year Adjusted Cash Conversion rate of around 80%. Net finance charges will fluctuate, depending on scale and timing of acquisition activity, but based on the current debt profile, we would expect the charge to be approximately €10m for the year.

Rob Kingston
Chief Financial Officer

Consolidated statement of comprehensive income

	Note	2023 €'000	2022 €'000
		Years ended 31 December	
Revenue from contracts with customers	4	**780,445**	690,718
Cost of sales	5	**(481,340)**	(423,452)
Gross profit		**299,105**	267,266
Other income	5	**-**	1,098
Share-based payments expense	23	**(21,964)**	(18,678)
Costs of acquisition and integration	5	**(27,140)**	(8,413)
Amortisation of intangible assets	11	**(26,060)**	(16,810)
Total of items excluded from adjusted profit measures		**(75,164)**	(43,901)
Other administration expenses		**(177,111)**	(152,653)
Administrative expenses		**(252,275)**	(196,554)
Operating profit		**46,830**	71,810
Financing income	6	**614**	1,986
Financing cost	6	**(12,450)**	(5,814)
Profit before taxation		**34,994**	67,982
Taxation	7	**(15,042)**	(20,612)
Profit after taxation		**19,952**	47,370
Other comprehensive income:			
Items that will not be reclassified subsequently to profit or loss			
Actuarial gain / (loss) on defined benefit plans		**12**	286
Items that may be reclassified subsequently to profit or loss			
Exchange gain / (loss) in net investment in foreign operations		**(8,317)**	(7,947)
Exchange gain / (loss) on translation of foreign operations		**(2,518)**	6,144
Non-controlling interest; recycled on disposal of subsidiary		**-**	162
Tax related to items taken to other comprehensive income	7	**1,238**	-
Total comprehensive income / (expense)		**10,367**	46,015
Profit / (loss) for the period attributable to:			
Owners of the parent		**19,952**	47,415
Non-controlling interest		**-**	(45)
		19,952	47,370
Total comprehensive income / (expense) attributable to:			
Owners of the parent		**10,367**	46,015
		10,367	46,015
Earnings per share		**€ cent**	€ cent
Basic earnings per ordinary share	8	**25.28**	61.54
Diluted earnings per ordinary share	8	**24.94**	58.86

The notes 1 to 29 form an integral part of these consolidated financial statements.

On behalf of the Board

Bertrand Bodson
Director
12 March 2024

Rob Kingston
Director

Consolidated statement of financial position

		At 31 December	
		2023	2022 Restated (note 21)
	Note	**€'000**	€'000
Non-current assets			
Intangible assets	11	**632,176**	469,953
Right of use assets	12	**41,950**	37,672
Property, plant and equipment	13	**50,237**	44,784
Deferred tax assets	21	**32,751**	31,157
Investments	14	**175**	175
		757,289	583,741
Current assets			
Cash and cash equivalents		**59,862**	81,886
Trade receivables	15	**89,940**	81,563
Other receivables	16	**83,993**	61,415
Corporation tax recoverable		**5,991**	6,503
		239,786	231,367
Current liabilities			
Trade payables		**14,294**	15,878
Other payables	17	**155,970**	139,355
Loans and borrowings	18	**-**	45
Corporation tax liabilities		**27,081**	22,028
Lease liabilities	19	**13,865**	12,414
		211,210	189,720
Net current assets / (liabilities)		**28,576**	41,647
Non-current liabilities			
Other payables	17	**12,002**	18,308
Employee defined benefit plans	20	**4,030**	2,861
Loans and borrowings	18	**127,380**	6
Deferred tax liabilities	21	**10,307**	17,017
Lease liabilities	19	**33,107**	30,105
		186,826	68,297
Net assets		**599,039**	557,091
Equity			
Share capital	22	**939**	924
Share capital - to be issued	22	**321**	2,467
Share premium	22	**54,518**	47,021
Merger reserve	22	**306,837**	286,655
Foreign exchange reserve		**183**	11,018
Shares held in Employee Benefit Trust ("EBT")	22	**(6,774)**	-
Share-based payments reserve		**80,416**	65,379
Retained earnings		**162,599**	143,627
Total equity		**599,039**	557,091

The notes 1 to 29 form an integral part of these consolidated financial statements. The financial statements were approved and authorised for issue by the Board on 12 March 2024.

On behalf of the Board

Bertrand Bodson
Director
12 March 2024

Rob Kingston
Director

Consolidated statement of changes in equity

	Share capital	Share capital - to be issued	Share premium	Merger reserve	Foreign exchange reserve	Shares held in EBT	Share-based payments reserve	Retained earnings	Total attributable to owners of parent	Non-controlling interest	Total equity
	€'000	€'000	€'000	€'000	€'000	€'000	€'000	€'000	€'000	€'000	€'000
At 01 January 2022	904	2,185	38,549	273,677	12,821	(1,997)	48,193	97,905	472,237	(117)	472,120
Profit / (loss) for the period	-	-	-	-	-	-	-	47,415	47,415	(45)	47,370
Recycled on disposal of subsidiary	-	-	-	-	-	-	-	-	-	162	162
Other comprehensive income	-	-	-	-	(1,803)	-	-	286	(1,517)	-	(1,517)
Total comprehensive income for the period	-	-	-	-	(1,803)	-	-	47,701	45,898	117	46,015
Contributions by and contributions to the owners:											
Share-based payments expense	-	-	-	-	-	-	18,577	-	18,577	-	18,577
Share options exercised	14	-	5,862	-	-	1,997	(1,492)	-	6,381	-	6,381
Employee Share Purchase Plan	-	-	909	-	-	-	101	-	1,010	-	1,010
Dividends	-	-	-	-	-	-	-	(1,979)	(1,979)	-	(1,979)
Acquisition-related issuance of shares	6	282	1,701	12,978	-	-	-	-	14,967	-	14,967
Contributions by and contributions to the owners	20	282	8,472	12,978	-	1,997	17,186	(1,979)	38,956	-	38,956
At 31 December 2022	**924**	**2,467**	**47,021**	**286,655**	**11,018**	**-**	**65,379**	**143,627**	**557,091**	**-**	**557,091**
Profit / (loss) for the period	-	-	-	-	-	-	-	19,952	19,952	-	**19,952**
Other comprehensive income	-	-	-	-	(10,835)	-	-	1,250	(9,585)	-	**(9,585)**
Total comprehensive income for the period	-	-	-	-	(10,835)	-	-	21,202	10,367	-	**10,367**
Contributions by and contributions to the owners:											
Share-based payments expense	-	-	-	-	-	-	21,964	-	21,964	-	**21,964**
Cash proceeds arising from share-based payments	5	-	1,462	-	-	-	1,145	-	2,612	-	**2,612**
Company funded acquisition of shares (note 22)	-	-	-	-	-	(6,774)	(8,072)	-	(14,846)	-	**(14,846)**
Dividends	-	-	-	-	-	-	-	(2,230)	(2,230)	-	**(2,230)**
Acquisition-related issuance of shares	10	(2,146)	6,035	20,182	-	-	-	-	24,081	-	**24,081**
Contributions by and contributions to the owners	15	(2,146)	7,497	20,182	-	(6,774)	15,037	(2,230)	31,581	-	**31,581**
At 31 December 2023	**939**	**321**	**54,518**	**306,837**	**183**	**(6,774)**	**80,416**	**162,599**	**599,039**	**-**	**599,039**

Consolidated statement of cash flows

	Note	Years ended 31 December 2023 €'000	2022 €'000
Cash flows from operating activities			
Profit after taxation		**19,952**	47,370
Income and expenses not affecting operating cash flows			
Depreciation and impairment - property, plant and equipment	13	**28,903**	18,365
Depreciation and impairment - right of use assets	12	**15,948**	14,585
Amortisation and impairment of intangible assets	11	**26,060**	16,810
Taxation	7	**15,042**	20,612
Share-based payments expense	23	**21,964**	18,678
Fair value movements in deferred and contingent consideration	5	**9,177**	2,282
Non-cash movements included in costs of acquisition and integration	5	**2,677**	-
Unwinding of discounted liabilities - deferred consideration	6	**3,279**	2,922
Unwinding of discounted liabilities - lease liabilities	6	**1,447**	969
Interest receivable	6	**(614)**	(309)
Fair value adjustments to employee defined benefit plans		**1,025**	514
Interest expense	6	**5,768**	1,261
Unrealised foreign exchange (gain) / loss		**(4,559)**	766
		126,117	97,455
Changes in operating assets and liabilities			
Decrease / (increase) in trade receivables		**(284)**	(11,771)
Decrease / (increase) in MMTC and VGTR receivable		**(11,260)**	(3,591)
Decrease / (increase) in other receivables		**(6,785)**	(6,457)
(Decrease) / increase in accruals, trade and other payables		**7,470**	18,785
		(10,859)	(3,034)
Taxation paid		**(20,853)**	(17,505)
Settlement of deferred and contingent consideration related to continuous employment	17	**(3,900)**	-
Net cash generated by / (used in) operating activities		**110,457**	124,286
Cash flows from investing activities			
Current year acquisition of subsidiaries net of cash acquired	27	**(160,380)**	(87,494)
Settlement of deferred liabilities on acquisitions	17	**(30,428)**	(25,800)
Acquisition of property, plant and equipment	13	**(30,689)**	(27,007)
Investment in intangible assets	11	**(3,052)**	(501)
Interest received		**614**	309
Net cash generated by / (used in) investing activities		**(223,935)**	(140,493)
Cash flows from financing activities			
Cash proceeds, where EBT shares were utilised for the exercise of share-based payments		**1,145**	505
Repayment of loans	18	**(97,379)**	(79)
Drawdown of loans	18	**227,322**	-
Payments of principal on lease liabilities	19	**(15,038)**	(11,361)
Interest paid on principal of lease liabilities	19	**(1,447)**	(969)
Dividends paid	9	**(2,230)**	(1,979)
Company funded acquisition of shares by EBT		**(14,846)**	-
Shares issued for cash	22	**1,467**	6,785
Interest paid		**(6,282)**	(828)
Net cash generated by / (used in) financing activities		**92,712**	(7,926)
Increase / (decrease) in cash and cash equivalents		**(20,766)**	(24,133)
Exchange gain / (loss) on cash and cash equivalents		**(1,258)**	309
Cash and cash equivalents at beginning of the period		**81,886**	105,710
Cash and cash equivalents at end of the period		**59,862**	81,886

1 Basis of Preparation

Keywords Studios plc (the "Company") is a company incorporated in the United Kingdom. The consolidated financial statements include the financial statements of the Company and its subsidiaries (the "Group") made up to 31 December 2023.

The consolidated financial statements have been prepared in accordance with UK-adopted international accounting standards, and in conformity with the requirements of the Companies Act 2006. Unless otherwise stated, the financial statements have been prepared in thousands ('000) and the financial statements are presented in euro (€) which is the functional currency of the Company.

Going Concern Basis of Accounting
After making enquiries, the Directors consider it appropriate to continue to adopt the going concern basis in preparing the Consolidated and Company financial statements. In doing so the Directors have considered the following:

- The cash position of the Group;
- The strong cash flow performance of the Group through the year;
- The continued demand for the Group's services;
- The ability to operate most of its services in a work from home model where studios are temporarily closed;
- The historical resilience of the broader video games industry in times of economic downturn; and
- The ability of the Group to flex its cost base in response to a reduction in trading activity.

The Directors have also considered the Group's strong liquidity position with cash and cash equivalents of €60m as at 31 December 2023, and committed undrawn facilities of €237m under the Revolving Credit Facility ("RCF").

The Directors have applied downside sensitivities to the Group's cash flow projections to assess the Group's resilience to adverse outcomes. This assessment included a reasonable worst-case scenario in which the Group's principal risks manifest to a severe but plausible level. Even under the most severe case, the Group would have sufficient liquidity and remain within its banking covenants. The Directors have a reasonable expectation that the Company and the Group have adequate resources to continue to operate and meet liabilities as they fall due for the foreseeable future, a period considered to be at least twelve months from the date of these financial statements and therefore the going concern basis of preparation continues to be appropriate.

New Standards, Interpretations and Amendments effective 01 January 2023
The following amendments effective for the period beginning 01 January 2023 are expected to be impactful on the Group moving forward:

- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2): The Group has implemented amendments to IAS 1 related to the application of materiality in relation to the disclosure of accounting policies, requiring companies to disclose their material accounting policies rather than their significant accounting policies, clarifying that accounting policies related to immaterial transactions, other events or conditions are themselves immaterial and as such need not be disclosed; and clarifying that not all accounting policies that relate to material transactions, other events or conditions are themselves material to a company's financial statements. Whereas all Significant Accounting Policies were disclosed in the past, the Group now discloses only material accounting policies in note 2.
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12): Amendments effective 01 January 2023 narrow the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offsetting temporary differences e.g. Right of use assets and Lease liabilities. As a result in 2023, deferred tax assets and liabilities associated with leases are now recognised gross from the beginning of the earliest comparative period presented, As outlined in note 21, the comparative periods presented have been re-stated to reflect the impact of adoption on the carrying value of Right of Use Assets and Lease Liabilities, with any cumulative effect recognised as an adjustment to retained earnings or other components of equity.

New standards, interpretations and amendments not yet effective
There are a number of standards, amendments to standards, and interpretations which have been issued by the IASB that are effective in future accounting periods that the Group has decided not to adopt early.

The following amendments effective for the period beginning 01 January 2024:

- Lease Liability in a Sale and Leaseback (Amendment to IFRS 16); and
- IAS 1 Presentation of Financial Statements (Amendment – Classification of Liabilities as Current or Non-Current, with Covenants).

The Group does not expect these other amendments, or any other standards issued by the IASB but not yet effective, to have a material impact on the Group.

2 Material Accounting Policies

Basis of Consolidation
Where the Company has control over an investee, it is classified as a subsidiary. The Company controls an investee if all three of the following elements are present: power over the investee, exposure to variable returns from the investee, and the ability of the investor to use its power to affect those variable returns. Control is reassessed whenever facts and circumstances indicate that there may be a change in any of these elements of control.

De facto control exists in situations where the Company has the practical ability to direct the relevant activities of the investee without holding the majority of the voting rights. In determining whether de facto control exists, the Company considers all relevant facts and circumstances, including:

- The size of the Company's voting rights relative to both the size and dispersion of other parties who hold voting rights;
- Substantive potential voting rights held by the Company and by other parties;
- Other contractual arrangements; and
- Historic patterns in voting attendance.

The consolidated financial statements present the results of the Company and its subsidiaries ("the Group") as if they formed a single entity. Intercompany transactions and balances between Group companies are eliminated in full.

Business Combinations
The consolidated financial statements incorporate the results of business combinations using the purchase method. The results of acquired operations are included in the consolidated financial statements from the date on which control is obtained. They are consolidated until the date on which control ceases. In the Consolidated statement of financial position, the acquired identifiable assets, liabilities and contingent liabilities are initially recognised at their fair values at the acquisition date. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the valuation of the fair value of assets and liabilities acquired is still in progress. Those provisional amounts are adjusted when additional information is obtained about facts and circumstances which would have affected the amounts recognised as of that date, and any adjustments to the provisional values allocated to the consideration, identifiable assets or liabilities (and contingent liabilities, if relevant) are made within the measurement period, a period of no more than one year from the acquisition date.

Any contingent consideration payable is recognised at fair value at the acquisition date and is split between current liabilities and long-term liabilities depending on when it is due. In general, in order for contingent consideration to become payable, pre-defined profit and / or revenue targets must be exceeded. The fair value of contingent consideration at acquisition date is arrived at through discounting the expected payment (based on scenario modelling) to present value. Where contingent consideration is dependent on the recipient remaining in employment, the payment is accounted for as post-acquisition remuneration accrued over the retention period, as required under IFRS 3. At each balance sheet date, the fair value of the contingent consideration liabilities are revalued, with the expected pay-out determined separately in respect of each individual acquisition and any change recognised in the statement of comprehensive income. For deferred consideration which is to be provided for by the issue of a fixed number of shares at a future defined date, where there is no obligation on Keywords to offer a variable number of shares, the deferred consideration is classified as an equity arrangement and the value of the shares is fixed at the date of the acquisition.

Acquisition-related costs are recognised immediately as an expense in the periods in which the costs are incurred and the services are received.

Intangible Assets
The Group's Intangible Assets comprise Goodwill, Customer Relationships and Other Intangible Assets.

Goodwill
Goodwill represents the excess of the cost of a business combination over the total acquisition date fair value of the identifiable assets, liabilities and contingent liabilities acquired. The cost comprises the fair value of assets given, liabilities assumed and equity instruments issued, plus the amount of any non-controlling interests in the acquiree plus, if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree. Contingent consideration is included at fair value on the acquisition date and, in the case of contingent consideration classified as a financial liability, re-measured subsequently through the profit and loss. Goodwill is capitalised as an intangible asset with any impairment in carrying value being charged to the Consolidated statement of comprehensive income.

Customer Relationships
Intangible assets, separately identified from goodwill acquired as part of a business combination (mainly Customer Relationships), are initially stated at fair value. The fair value attributed is determined by discounting the expected future cash flows generated from the net margin of the business from the main customers taken on at acquisition. The assets are amortised on a straight-line basis (to administration expenses) over their useful economic lives (typically five years is deemed appropriate, however, this is re-examined for each acquisition).

Other Intangible Assets
Other intangible assets include Intellectual Property and Music Licences, both acquired and internally developed. Other intangible assets are recognised once they meet the criteria under IAS 38, and are amortised on a straight-line basis over the period of its expected benefit, starting from the date of full commercial use of the product. Residual amounts, useful lives and the amortisation methods are reviewed at the end of every accounting period.

Following initial recognition of development expenditure as an intangible asset, the cost model is applied requiring the intangible asset to be carried at cost, less any accumulated amortisation and accumulated impairment losses. During the period of development, the asset is tested for impairment annually. If specific events indicate that impairment of an item of intangible asset may have taken place, the item's recoverability is assessed by comparing its carrying amount with its recoverable amount. The recoverable amount is the higher of the fair value net of disposal costs and the value in use.

Impairment
Impairment tests on goodwill and other intangible assets with indefinite useful economic lives are undertaken annually at the financial year end. Other non-financial assets are subject to impairment tests whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Where the carrying value of an asset exceeds its recoverable amount (i.e. the higher of value in use and fair value less costs to sell), the asset is written down accordingly.

Where it is not possible to estimate the recoverable amount of an individual asset, the impairment test is carried out on the smallest group of assets to which it belongs for which there are separately identifiable cash flows; its cash generating units ("CGUs"). Goodwill is allocated on initial recognition to each of the Group's CGUs that are expected to benefit from a business combination that gives rise to the goodwill.

Cash and Cash Equivalents
Cash and cash equivalents comprise cash in hand, deposits held on call with banks and other short-term highly liquid investments. Where cash is on deposit with maturity dates greater than three months, it is disclosed as short-term investments.

Foreign Currency
The consolidated financial statements are presented in euro, which is the presentation currency of the Group and the functional currency of the Parent Company.

Transactions entered into by Group entities in a currency other than the currency of the primary economic environment in which they operate (their "functional currency") are recorded at the rates ruling when the transactions occur. Foreign currency monetary assets and liabilities are translated at the rates ruling at the reporting date. Exchange differences arising on the retranslation of unsettled monetary assets and liabilities are recognised immediately in profit or loss.

On consolidation, the results of overseas operations are translated into euro at rates approximating when the transactions took place. All assets and liabilities of overseas operations, including goodwill arising on the acquisition of those operations, are translated at the rate ruling at the reporting date. Exchange differences arising on translating the opening net assets at opening rate and the results of overseas operations at actual rate are recognised in other comprehensive income and accumulated in the foreign exchange reserve.

Exchange differences recognised in profit or loss in Group entities' separate financial statements on the translation of long-term items forming part of the Group's net investment in the overseas operation concerned are classified to other comprehensive income and accumulated in the foreign exchange reserve on consolidation.

Revenue from Contracts with Customers
Contracts are typically for services, performing agreed-upon tasks for a customer and can be time-and-materials or milestone-based. Most contracts are short term in duration (generally less than one month); however, milestone-based contracts can be longer term and extend to several months (or in some cases over a year). Where there are multiple performance obligations outlined in a contract, each performance obligation is separately assessed, the transaction price is allocated to each obligation, and related revenues are recognised as services or assets are transferred to the customer. Performance obligations are typically satisfied over time, as the majority of contracts meet the criteria outlined in IFRS 15 paragraph 35 (a) and (c).

Due to the nature of the services provided and the competitive nature of the market, contracts generally allocate specific transaction prices to separate performance obligations. Individual services or individual milestones generally involve extensive commercial negotiation to arrive at the specific agreed-upon tasks, and the related pricing outlined in the contract. Such negotiations extend further for milestone-based contracts to also include the criteria involved in the periodic and regular process of milestone acceptance by the customer. Such criteria may involve qualitative, as well as quantitative, measures and judgements.

In measuring progress towards complete satisfaction of performance obligations, the input method is considered to be the most appropriate method to depict the underlying nature of the contracts with customers, the interactive way the service is delivered, and projects are managed with the customer. For time-and-materials contracts, other than tracking and valuing time expended, significant judgement is not normally involved. For milestone-based contracts, progress is generally measured based on the proportion of contract costs incurred at the balance sheet date (e.g. worked days), relative to the total estimated costs of the contract, involving estimates of the cost to completion etc. Added to this, significant judgement can be involved in measuring progress towards customer acceptance of the milestone. Significant judgement may also be involved where circumstances arise that may change the original estimates of revenues, costs or extent of progress towards complete satisfaction of the performance obligations. In such circumstances estimates are revised. These revisions may result in increases or decreases in revenue or costs and are reflected in income in the period in which the circumstances that give rise to the revision became known. When the outcome of a contract cannot be measured reliably, contract revenue is recognised only to the extent that milestones have been accepted by the customer. Contract costs are recognised as incurred. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised immediately.

Revenue recognised represents the consideration received or receivable, net of sales taxes, rebates discounts and after eliminating intercompany sales. Revenue is recognised only where it is probable that consideration will be received. Where consideration is received and the related revenue has not been recognised, the consideration received is recognised as a contract liability (Deferred Revenue), until either revenue is recognised or the consideration is refunded. Revenue is derived from eight main service lines:

- Art Services – Art Services relate to the production of graphical art assets for inclusion in the video game, including concept art creation along with 2D and 3D art asset production and animation. Contracts can be either time-and-materials based or milestone-based, with performance obligations satisfied over time. Contracts are generally short term in duration; however, for longer contracts the input method is used to measure progress (e.g. worked days relative to the total expected inputs). Time-and-materials based contract revenue is recognised as the related services are rendered. For milestone-based contracts where progress can be measured reliably towards complete satisfaction of the performance obligation, revenue is recognised using the input method to measure progress. Where progress cannot be measured reliably, revenue is recognised on milestone acceptance.
- Game Development – Game Development relates to software engineering services which are integrated with client processes to develop video games. Contracts can be either time-and-materials based or milestone-based, with performance obligations satisfied over time. Contracts are generally longer term in duration. Time-and-materials based contract revenue is recognised as the related services are rendered. For milestone-based contracts where progress can be measured reliably towards complete satisfaction of the performance obligation, revenue is recognised using the input method to measure progress. Where progress cannot be measured reliably, revenue is recognised on milestone acceptance.
- Audio – Audio services relate to the audio production process for computer games and includes script translation, actor selection and talent management through pre-production, audio direction, recording, and post-production, including native language quality assurance of the recordings. Audio contracts may also involve music licensing or selling music soundtracks. Audio service contracts are typically milestone-based, with performance obligations satisfied over time. Audio services contracts are generally short term in duration;

however, for longer contracts where progress towards complete satisfaction of the performance obligation can be measured reliably, revenue is recognised using the input method to measure progress. Where progress cannot be measured reliably, audio services revenue is recognised on milestone acceptance. Music licensing and music soundtracks performance obligations are assessed separately, and related revenue is recognised on licence inception and on delivery of the soundtracks, respectively.

- Functional Testing – Functional Testing relates to quality assurance services provided to game producers to ensure games function as required. Contracts are typically time-and-materials based and performance obligations are satisfied over time. Contracts are generally short term in duration. Revenue is recognised as the related services are rendered.
- Localization – Localization services relate to translation and cultural adaptation of in-game text and audio scripts across multiple game platforms and genres. Contracts are typically time-and-materials based and performance obligations are satisfied over time. Contracts are generally short term in duration; however, for longer contracts the input method is used to measure progress. Localization contracts may also involve licensing translation software as a service. Such revenue is assessed separately. Revenue is recognised as the related services are rendered.
- Localization Testing – Localization Testing involves testing the linguistic correctness and cultural acceptability of computer games. Contracts are typically time-and-materials based and performance obligations are satisfied over time. Contracts are generally short term in duration. Revenue is recognised as the related services are rendered.
- Marketing – Marketing services include game trailers, marketing art and materials, PR and full brand campaign strategies. Contracts can be either time-and-materials based or milestone-based, with performance obligations satisfied over time. Contracts are generally short term in duration; however, for longer contracts the input method is used to measure progress. Time-and-materials based contract revenue is recognised as the related services are rendered. For milestone-based contracts where progress can be measured reliably towards complete satisfaction of the performance obligation, revenue is recognised using the input method to measure progress. Where progress cannot be measured reliably, revenue is recognised on milestone acceptance.
- Player Engagement – Player Engagement relates to the live operations support services such as community management, player engagement and associated services provided to producers of games to ensure that consumers have a positive user experience. Contracts are typically time-and-materials based and performance obligations are satisfied over time. Contracts are generally long term in duration. Player Engagement contracts may also involve digital support platform software as a service. Revenue is recognised as the related services are rendered.

Multimedia Tax Credits / Video Games Tax Relief and other tax credits related to staff costs

The multimedia tax credits ("MMTC") received in Canada, and video games tax relief in the UK together with similar reliefs in other jurisdictions ("VGTR"), are tax credits related to staff costs. Tax credits are recognised as income over the periods necessary to match the credit on a systematic basis with the costs that it is intended to compensate. Thus, credits are taken as a deduction against direct costs each period, but typically paid in the following financial year once the claims have been submitted and agreed. The nature of the grants is such that they are not dependent on taxable profits, and are recognised (under IAS 20), at their fair value when there is a reasonable assurance that the grant will be received and all attaching conditions have been complied with.

Share-based Payments

The Company issues equity-settled share-based payments to certain employees and Directors under a Share Option Scheme and a Long-Term Incentive Plan ("LTIP"). Conditional awards under the rules of the LTIP Plan ("Salary Shares") are also issued to certain employees and Directors.

The fair value determined at the grant date is expensed on a straight-line basis over the vesting period. Other than continuous service, grants do not have non-market-based vesting conditions. At each reporting date the Company adjusts for unvested forfeitures and the impact is recognised in profit or loss, with a corresponding adjustment to equity reserves. The Company has no legal or constructive obligation to repurchase or settle the options in cash.

Additional employer costs, including social security taxes, in respect of options and awards are expensed over the vesting period with a corresponding liability recognised. The liability recognised depends on the number of options that are expected to be exercised, and the liability is adjusted by reference to the fair value of the options at the end of each reporting period.

Where share-based payments are issued to employees of subsidiary companies, the annual cost of the options are recharged to the subsidiary company through an inter-company recharge.

Share Option Plan

These are measured at fair value on the grant date using a Black-Scholes option pricing model which calculates the fair value of an option by using the vesting period, the expected volatility of the share price, the current share price, the exercise price and the risk-free interest rate. The fair value of the option is amortised over the vesting period, with one-third of the options vesting after two years, one-third after three years, and the balance vesting after four years. The only vesting condition is continuous service. There is no requirement to revalue the option at any subsequent date.

LTIP

The exercise of LTIP awards is subject to certain vesting conditions. For the awards granted up to 2015, one-third of the share options vested if the Company exceeded the Total Shareholder Returns ("TSR") of the Numis Small Cap Index (excluding Investment Trusts) by 10%, two-thirds if the TSR exceeded the Index by 20% and full vesting if the TSR exceeded the Index by 30%. This was amended for the 2016 and 2017 awards to 100% vesting if the shareholder return exceeds the Index by 45%, and a prorated return between 10% if the TSR matches the Index, to 100% if the TSR exceeds the Index by 45%. The scheme was further amended in 2018 to 100% vesting if the TSR exceeds the Index by 20%, and a prorated return between 10% and 100% if the TSR exceeds the Index by between 0% and 20%. In 2019, the benchmark Index was amended for future grants to be the FTSE Small Cap Index, with the same performance conditions as 2018. In 2021, the benchmark Index was amended to be the FTSE250 Index (excluding investment trusts), and threshold vesting (25% of the award) will be earned for TSR in line with the Index and full vesting will be earned for exceeding the Index TSR by 20% over the performance period. A prorated return will be earned between 25% and 100% if the TSR exceeds the Index by between 0% and 20%.

These are measured at fair value, taking into account market vesting conditions but not non-market vesting conditions, at the date of grant, measured by using the Monte Carlo binomial model.

Salary Shares
Salary shares are measured at fair value on the grant date. As the only vesting condition is continuous service, the fair value of the shares is amortised over the vesting period.

Income Taxes and Deferred Taxation
Provision for income taxes is calculated in accordance with the tax legislations and applicable tax rates in force at the reporting date in the countries in which the Group companies have been incorporated.

Deferred tax assets and liabilities are recognised where the carrying amount of an asset or liability in the consolidated statement of financial position differs from its tax base, except for differences arising on:

- The initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting or taxable profit; and
- Investments in subsidiaries and jointly controlled entities where the Group is able to control the timing of the reversal of the difference and it is probable that the difference will not reverse in the foreseeable future.

The amount of the asset or liability is determined using tax rates that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax liabilities / (assets) are settled / (recovered).

Deferred tax assets and liabilities are offset when the Group has a legally enforceable right to offset current tax assets and liabilities and the deferred tax assets and liabilities relate to taxes levied by the same tax authority on either:

- The same taxable Group company; or
- Different Group entities which intend either to settle current tax assets and liabilities on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax assets or liabilities are expected to be settled or recovered.

Deferred tax assets and liabilities associated with leases and decommissioning liabilities are recognised on a gross basis, in accordance with IAS 12.

Property, Plant and Equipment
Property, plant and equipment comprise computers, leasehold improvements, and office furniture and equipment, and are stated at cost less accumulated depreciation. Carrying amounts are reviewed for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

Property, plant and equipment acquired through business combinations are valued at fair value on the date of acquisition.

Depreciation is calculated to write off the cost of fixed assets on a straight-line basis over the expected useful lives of the assets concerned. The principal annual rates used for this purpose are:

Computers and software	3 - 5 years
Office furniture and equipment	10 years
Leasehold improvements	over the length of the lease

Gains and losses on disposals are determined by comparing proceeds with carrying amount and are included in the Consolidated statement of comprehensive income.

Financial Assets
The Group's most significant financial assets comprise trade and other receivables and cash and cash equivalents in the Consolidated statement of financial position, whereas the Company's most significant financial assets comprise inter-group receivables.

Trade Receivables
Trade receivables, which principally represent amounts due from customers, are recognised at amortised cost as they meet the IFRS 9 classification test of being held to collect, and the cash flow characteristics represent solely payments of principal and interest. The Group's impairment methodology is in line with the requirements of IFRS 9. The simplified approach to providing for expected credit losses has been applied to trade receivables, which requires the use of a lifetime expected loss provision.

Accrued Income from Contracts with Customers
Other receivables include Accrued income from contracts with customers. The Group also applies the simplified approach to assessing expected credit losses in relation to such assets, as their maturities are less than twelve months.

Share Capital
Financial instruments issued by the Group are treated as equity only to the extent that they do not meet the definition of a financial liability. The Group's ordinary shares are classified as equity instruments.

Financial Liabilities
Trade payables, bank borrowings and other monetary liabilities are initially recognised at fair value and subsequently carried at amortised cost using the effective interest rate method.

Leased Assets
A lease is defined as “a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration”.

At lease commencement date, the Group recognises a right of use asset and a lease liability on the balance sheet. The right of use asset is measured at cost, which is made up of the initial measurement of the lease liability, any initial direct costs incurred by the Group, an estimate of any costs to dismantle and remove the asset at the end of the lease, and any lease payments made in advance of the lease commencement date (net of any incentives received).

The Group depreciates the right of use assets on a straight-line basis from the lease commencement date to the earlier of the end of the useful life of the right of use asset or the end of the lease term. The Group also assesses the right of use asset for impairment when such indicators exist. At the commencement date, the Group measures the lease liability at the present value of the lease payments unpaid at that date, discounted using the interest rate implicit in the lease if that rate is readily available or at the Group’s incremental borrowing rate.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in-substance fixed), variable payments based on an index or rate, amounts expected to be payable under a residual value guarantee, and payments arising from purchase and extension options reasonably certain to be exercised.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification, or if there are changes to in-substance fixed payments. When the lease liability is remeasured, the corresponding adjustment is reflected in the right of use asset, or profit and loss if the right of use asset is already reduced to zero.

The Group has elected to account for short-term leases and leases of low-value assets using the practical expedients. Instead of recognising a right of use asset and lease liability, the payments in relation to these are recognised as an expense in profit or loss on a straight-line basis over the lease term.

The Group has applied judgement to determine the lease term for contracts in which it is a lessee that include renewal options. The assessment of whether the Group is reasonably certain to exercise such options impacts the lease term, which significantly affects the lease liabilities and right of use assets recognised.

Employee Benefit Trust
Ordinary shares purchased by the Employee Benefit Trust on behalf of the parent company under the Terms of the Share Option Plan are deducted from equity on the face of the Consolidated statement of financial position. No gain or loss is recognised in relation to the purchase, sale, issue or cancellation of the parent company’s ordinary shares. Where such shares are utilised for employee share schemes, the cost of the shares is transferred to the Share-based payment reserve, with any cash proceeds credited directly to the Share-based payment reserve.

3 Critical Accounting Estimates and Judgements

The Group makes certain estimates and assumptions regarding the future. Estimates and judgements are continually evaluated based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. In the future, actual experience may differ from these estimates and assumptions.

Judgements
The judgements, apart from those involving estimations, that management have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the financial statements, are outlined below.

- **Group**
  - **Functional and Presentation Currency**: The Directors have considered the requirements of IAS 21 in determining the currency that most faithfully represents the economic effects of the underlying transactions, events and conditions to determine the functional currency of the Company. Detailed consideration has been given to both the Primary and Secondary Indicators in forming this conclusion. The Primary Indicators relate to revenues, regulation, competitive forces and costs, while the Secondary Indicators are mainly concerned with financing the business and the currency in which receipts from operating activities are usually retained. With a mix of currencies dominating the indicators, there is no clear single currency that influences the Group when all factors are considered. The Directors have determined the euro as the most appropriate presentation currency of the consolidated financial statements.
  - **Business Combinations (Customer relationships)**: When acquiring a business, the Group is required to identify and recognise intangible assets, the determination of which requires a significant degree of judgement. Acquisitions may also result in intangible benefits being brought into the Group, some of which qualify for recognition as intangible assets while other such benefits do not meet the recognition requirements of IFRS and therefore form part of goodwill. Customer relationships are recognised as separate assets where revenues are recurring in nature and material revenues have been generated with the customer for a continuous period of three years. For the Game Development service line, the key asset acquired is typically "know-how", an asset that is not readily measurable and thus intrinsically linked to goodwill. Relationships are typically fixed term contract based rather than relationship based. Therefore, neither customer contracts nor customer relationships are typically recognised on the acquisition of a Game Development business.
  - **IFRS 16 Leases:** The Group has determined that the Group's incremental borrowing rate is the appropriate rate to use to discount lease liabilities. The Group has applied judgement to determine the lease term for contracts in which it is a lessee that include renewal options. The assessment of whether the Group is reasonably certain to exercise such options impacts the lease term, which significantly affects the lease liabilities and right of use assets recognised.
  - **Business Combinations (put and call options over Non-controlling interest):** The Group acquired an 85% interest in Tantalus in March 2021, with the sellers retaining a minority shareholding. The shareholder agreement (signed with the purchase agreement) includes put and call options ("the Forward") that require the sellers to sell, or require the Group to buy, the remaining 15% shareholding after three years using a pre-determined valuation methodology linked to post-acquisition performance. IFRS 3 does not provide specific guidance on how such contracts should be accounted for in a business combination. The Board determined, taking into consideration all the contracts' terms and conditions, that the impact of the Forward put the Group in a similar position as if the Group had acquired a 100% interest in the subsidiary on the acquisition date, with deferred contingent consideration payable at a future date. In doing so, the Board considered whether the risks and rewards of ownership reside with the Non-controlling interest or had effectively transferred to the Group, and concluded that the Non-controlling interest arising on the acquisition had been extinguished by a combination of the Forward and other conditions in the agreements. Therefore, the Group has accounted for the acquisition as if a 100% interest was acquired on acquisition, accounting for the initial investment and the Forward as a single linked transaction in which 100% control is gained, with the Forward recognised at fair value, as a financial liability within Deferred and contingent consideration (note 17), and no Non-controlling interest recognised on the acquisition. Any subsequent re-measurement required due to changes in the fair value of the liability are recognised in the Consolidated statement of comprehensive income.
  - **Goodwill**: Goodwill is required to be tested for impairment at least annually or more frequently if changes in circumstances or the occurrence of events indicating potential impairment exist. The Group uses the present value of future cash flows to determine recoverable amounts. In calculating the value in use, significant judgement and estimation is required in forecasting cash flows of CGUs, in determining terminal growth values and in selecting an appropriate discount rate.

Estimates and Assumptions
A number of areas requiring the use of estimates and critical judgements impact the Group's earnings and financial position. These include revenue recognition, the computation of income taxes, the value of goodwill and intangible assets arising on acquisitions, the valuation of multimedia tax credits / video games tax relief, leasing and the valuation of defined retirement benefits. The Directors consider that no reasonably possible changes to any of the assumptions used in the estimates would in the view of the Directors give rise to significant risk of a material adjustment to the carrying value of the associated balances in the subsequent financial year.

4 Segmental Analysis and Revenue from Contracts with Customers

Segmental Analysis

	2023 €'000	2022 €'000
Revenue from external customers		
Create	**336,069**	275,570
Globalize	**279,490**	300,875
Engage	**164,886**	114,273
	780,445	690,718
Segment operating profit		
Create	**94,118**	69,748
Globalize	**48,477**	61,577
Engage	**15,710**	15,576
	158,305	146,901
Reconciliation of Segment operating profit		
Adjusted EBITDA^	**158,305**	146,901
Share-based payments expense	**(21,964)**	(18,678)
Costs of acquisition and integration	**(27,140)**	(8,413)
Amortisation of intangible assets	**(26,060)**	(16,810)
Depreciation - property, plant and equipment	**(23,128)**	(18,365)
Depreciation - right of use assets	**(13,907)**	(14,585)
Bank charges	**724**	662
Other income	**-**	1,098
Operating profit	**46,830**	71,810
Financing income	**614**	1,986
Financing cost	**(12,450)**	(5,814)
Profit before taxation	**34,994**	67,982

^ The Group reports a number of alternative performance measures ("APMs"), including Adjusted EBITDA, to present the financial performance of the business, that are not GAAP measures as defined under IFRS. Segmental results are reported in a manner consistent with these measures, with Segment operating profit equating to Adjusted EBITDA. A reconciliation of Adjusted EBITDA to the relevant GAAP measure is presented in the APMs section.

The Group is organised into three operating segments (as identified under IFRS 8 Operating Segments), and generates revenue across eight service lines under three divisions:

- Create – Game Development and Art Services;
- Globalize – Functional Testing, Localization Testing, Audio and Localization; and
- Engage – Marketing and Player Engagement.

Operating segments are reported in a manner consistent with the internal organisational and management structure, and the internal reporting information provided to the Chief Operating Decision Maker ("CODM") who is responsible for allocating resources and assessing performance of the operating segments. The CODM has been identified as the executive management team made up of the Chief Executive Officer, the Chief Operating Officer and the Chief Financial Officer.

Intersegment revenue is not material and thus not subject to separate disclosure.

Geographical analysis of non-current assets from continuing businesses*

	2023 €'000	2022 €'000
United States	**351,240**	264,117
United Kingdom	**216,416**	121,556
Canada	**49,997**	57,652
Australia	**49,179**	51,869
Italy	**15,308**	16,471
Poland	**12,859**	12,561
Switzerland	**9,786**	10,025
China	**9,573**	9,296
India	**7,495**	4,974
France	**7,044**	7,150
Other	**28,392**	28,070
	757,289	583,741

*The prior year comparatives have been re-classified to align to the current year ranking.

Revenue from Contracts with Customers

Revenue recognised in the reporting period arises from contracts with customers, and is predominantly recognised over time. There were no significant amounts of revenue recognised in the reporting period that were included in a contract liability balance at the beginning of the reporting period, or from performance obligations satisfied in the previous reporting period.

Geographical analysis of revenues, by production location*

	2023	2022
	€'000	€'000
United States	**174,550**	120,722
Canada	**158,199**	155,509
United Kingdom	**130,016**	115,017
Poland	**40,988**	42,731
Australia	**34,425**	22,211
Italy	**34,114**	39,195
China	**29,061**	26,759
India	**27,872**	25,290
Japan	**21,237**	22,716
Philippines	**20,591**	20,074
Other	**109,392**	100,494
	780,445	690,718

*The prior year comparatives have been re-classified to align to the current year ranking by production location.

For many contracts, operations are completed across multiple sites. Analysis of revenues by geographical regions is presented by production location, which may not reflect the jurisdiction from which the final invoice to the client is raised, or the region of the Group's customers, whose locations are worldwide.

One customer was above 10% of revenues in 2023, accounting for 19.1% of total revenue (2022: 13.4%), with revenues spread across all divisions and service lines. The increase in concentration has been primarily due to the customer's acquisition activity over the past year.

Revenue Expected to be Recognised

For Game Development, games are developed to an agreed specification and time schedule, and often have delivery schedules and / or milestones that extend well into the future. The following are Game Development revenues expected to be recognised for contracts with a schedule of work that extends beyond one year, representing the aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied (or partially unsatisfied) as at the end of the reporting period:

Revenue expected to be recognised	**Total undelivered €'000**	**Scheduled completion within 1 year €'000**	**Scheduled completion 1-2 years €'000**	**Scheduled completion 2-5 years €'000**
At 31 December 2023	**69,113**	**57,712**	**10,947**	**454**
At 31 December 2022	82,060	77,448	4,612	-

For all service lines excluding Game Development, contracts do not extend to more than one year, therefore information concerning unsatisfied performance obligations are not disclosed, as allowed under the practical expedient exemption under IFRS 15. This practical expedient is also availed of for Game Development contracts of less than one year in duration.

5 Cost of Sales and Operating Profit

Cost of sales	2023 €'000	2022 €'000
Operating expenses	**499,186**	430,475
Multimedia tax credits / video games tax relief	**(38,215)**	(21,540)
Other direct costs	**20,369**	14,517
	481,340	423,452

Operating profit is stated after charging / (crediting):	2023 €'000	2022 €'000
Depreciation - property, plant and equipment	**23,128**	18,365
Depreciation - right of use assets	**13,907**	14,585
Amortisation of intangible assets	**26,060**	16,810
Costs of acquisition and integration	**27,140**	8,413
Auditor's remuneration	**870**	689
Short-term leases	**2,550**	2,140
Other income	**-**	(1,098)

Costs of acquisition and integration	2023 €'000	2022 €'000
Acquisition and integrations costs re: current year acquisitions (note 27)	**2,345**	1,177
Acquisition and integrations costs re: prior acquisitions	**390**	631
Fair value adjustments to contingent consideration (note 17)	**300**	2,282
Deferred consideration related to continuing employment	**8,877**	3,266
Costs associated with ceasing operations in Russia (note 29)	**3,893**	-
Acquisition team and related costs	**593**	671
Globalize restructuring - Right of use assets impairment	**2,041**	-
Globalize restructuring - Property, plant and equipment impairment	**5,755**	-
Globalize restructuring - Other provisions	**2,677**	-
Other reorganisation and restructuring costs	**269**	386
	27,140	8,413

In December 2023, the Board approved an initiative to enhance the Globalize operating model, by managing its cost base, more deeply integrating technology and enhancing collaboration across our locations to provide best in class service delivery for clients. Against this backdrop there was a charge of €10.5m relating to restructuring of the Globalize service line arising from €2.0m in Right of use assets, €5.8m relating to property, plant and equipment and €2.7m of other related contracts that were identified as onerous or impaired.

Auditor's remuneration	2023 €'000	2022 €'000
Audit services:		
Parent company and Group audit	**387**	318
Subsidiary companies audit	**496**	358
Non-audit services:		
Audit-related assurance services	**11**	13
	894	689

Other income	2023 €'000	2022 €'000
Gain on disposal of investment	**-**	(1,098)
	-	(1,098)

Other income represents the gain on disposal of the Group’s investment in AppSecTest in April 2022 (including related Non-controlling interest re-cycled on disposal).

6 Financing Income and Cost

	2023 €'000	2022 €'000
Financing income		
Interest received	**614**	309
Foreign exchange gain	**-**	1,677
	614	1,986
Financing cost		
Bank charges	**(724)**	(662)
Interest expense	**(5,768)**	(1,261)
Unwinding of discounted liabilities - lease liabilities	**(1,447)**	(969)
Unwinding of discounted liabilities - deferred consideration	**(3,279)**	(2,922)
Foreign exchange loss	**(1,232)**	-
	(12,450)	(5,814)
Net financing income / (cost)	**(11,836)**	(3,828)

7 Taxation

	2023 €'000	2022 €'000
Current income tax		
Income tax on profits	**26,469**	25,844
Deferred tax (note 21)	**(11,427)**	(5,232)
	15,042	20,612

The tax charge for the year can be reconciled to accounting profit as follows:

	2023 €'000	2022 €'000
Profit before tax	**34,994**	67,982
Tax charge based on the Effective tax rate*	**6,582**	12,156
Income tax prior year (over) / under provision	**1,524**	(653)
Deferred tax prior year (over) / under provision and impact of change in tax rates	**(602)**	(204)
Items disallowed for tax purposes	**11,826**	7,468
Exempt and non-taxable income	**26**	(72)
Tax incentives	**(4,220)**	(924)
Current year tax losses utilised	**(17)**	(250)
Current year tax losses where deferred tax has not been provided	**54**	346
State and other direct taxes	**869**	932
Other differences - net	**(1,000)**	1,813
Total tax charge	**15,042**	20,612
*Effective tax rate - being the statutory tax rate relative to the profit before tax in each jurisdiction	**18.8%**	17.9%

The Group's subsidiaries are located in different jurisdictions and are taxed on their residual profit in those jurisdictions. The effective tax rate will vary year on year due to the effect of changes in tax rates and changes in the proportion of profits in each jurisdiction.

Tax effects relating to each component of other comprehensive income	2023 €'000	2022 €'000
Exchange gain / (loss) in net investment in foreign operations	**(8,317)**	(7,947)
Tax (expense) / benefit	**1,238**	993
Net of tax amount	**(7,079)**	(6,954)
Actuarial gain / (loss) on defined benefit plans	**12**	286
Tax (expense) / benefit	**-**	-
Net of tax amount	**12**	286
Exchange gain / (loss) on translation of foreign operations	**(2,518)**	6,144
Tax (expense) / benefit	**-**	-
Net of tax amount	**(2,518)**	6,144

8 Earnings per Share

	2023 € cent	2022 € cent
Basic	**25.28**	61.54
Diluted	**24.94**	58.86

Earnings	**€'000**	€'000
Profit for the period from continuing operations	**19,952**	47,370

Weighted average number of equity shares	**Number**	Number
Basic (i)	**78,910,471**	76,979,596
Diluting impact of share options (ii)	**1,084,796**	3,502,301
Diluted (i)	**79,995,267**	80,481,897

(i) Includes (weighted average) shares to be issued:

	Number	Number
	67,827	67,802

(ii) Contingently issuable ordinary shares have been excluded where the conditions governing exercisability have not been satisfied:

	Number	Number
LTIPs	**3,334,569**	409,728
Share options	**450,994**	511,411
	3,785,563	921,139

Details of the number of share options outstanding at the year end are set out in note 23.

9 Dividends

Dividends paid	**In respect of**	**Approval date**	**€ cent per share**	**Pence STG per share**	**Total dividend €'000**	**Payment date**
Final	2021	Mar-22	1.70	1.45	1,305	Jun-22
Interim	2022	Sep-22	0.90	0.77	674	Oct-22
Dividends paid to shareholders 2022			2.60	2.22	1,979	
Final	**2022**	**Mar-23**	**1.85**	**1.60**	**1,461**	**Jun-23**
Interim	**2023**	**Sep-23**	**0.97**	**0.85**	**769**	**Oct-23**
Dividends paid to shareholders 2023			**2.82**	**2.45**	**2,230**	

Recommended	**In respect of**	**Approval date**	**Expected € cent per share**	**Pence STG per share**	**Expected total dividend €'000**	**Expected payment date**
Final	**2023**	**Mar-24**	**2.03**	**1.76**	**1,609**	**Jun-24**

At 31 December 2023, Retained earnings available for distribution (being Retained earnings plus Share-based payments reserve) in the Company were €94.5m (2022: €77.6m). In addition, certain amounts within Merger reserve are considered distributable (see note 22).

The Directors do not foresee any impediment in continuing to implement the dividend policy of the Group moving forward.

The Group does not recognise deferred tax on unremitted retained earnings, as, in general, retained earnings (as dividends) are only remitted where there are minimal or no tax consequences.

10 Staff Costs

Total staff costs (including Directors)	2023 €'000	2022 €'000
Salaries and related costs	**414,818**	345,857
Social welfare costs	**37,926**	27,788
Pension costs	**8,167**	7,222
Share-based payments expense	**21,964**	18,678
	482,875	399,545

Average number of employees	2023	2022
Operations	**11,307**	10,272
General and administration	**1,033**	869
	12,340	11,141

Key management compensation	2023 €'000	2022 €'000
Salaries and related costs	**2,452**	2,258
Social welfare costs	**323**	431
Pension costs	**75**	54
Share-based payments expense	**2,025**	1,142
	4,875	3,885

The key management compensation comprises compensation to nine Directors of Keywords Studios plc during the year (2022: ten).

11 Intangible Assets

	Goodwill €'000	Customer relationships €'000	Intellectual property / Development costs €'000	Total €'000
Cost				
At 01 January 2022	325,037	68,325	4,114	397,476
Recognition on acquisition of subsidiaries	70,482	34,695	25,914	131,091
Additions	-	-	501	501
Disposals	(159)	-	-	(159)
Exchange rate movement	1,373	1,317	(134)	2,556
At 31 December 2022	**396,733**	**104,337**	**30,395**	**531,465**
Recognition on acquisition of subsidiaries	**152,001**	**45,859**	**-**	**197,860**
Additions	**-**	**-**	**3,052**	**3,052**
Adjustment to the carrying value of prior year business combinations	**(2,967)**	**-**	**-**	**(2,967)**
Exchange rate movement	**(7,352)**	**(3,353)**	**(899)**	**(11,604)**
At 31 December 2023	**538,415**	**146,843**	**32,548**	**717,806**
Accumulated amortisation				
At 01 January 2022	147	40,708	2,678	43,533
Amortisation charge	-	16,285	525	16,810
Disposals	(147)	-	-	(147)
Exchange rate movement	-	1,308	8	1,316
At 31 December 2022	**-**	**58,301**	**3,211**	**61,512**
Amortisation charge	**-**	**20,142**	**5,918**	**26,060**
Exchange rate movement	**-**	**(1,826)**	**(116)**	**(1,942)**
At 31 December 2023	**-**	**76,617**	**9,013**	**85,630**
Net book value				
At 01 January 2023	396,733	46,036	27,184	469,953
At 31 December 2023	**538,415**	**70,226**	**23,535**	**632,176**

Customer relationships and intellectual property / development costs are amortised on a straight-line basis over five years. Customer relationships amortisation commences on acquisition, whereas intellectual property / development costs amortisation commences when the product is launched.

Adjustment to the carrying value of prior year business combinations

IFRS 3 allows a twelve-month measurement period from acquisition date to complete the initial accounting. When Keywords acquired Helpshift in December 2022, a provisional estimate of deferred tax assets ("DTA") was recognised related to pre-acquisition tax losses. As US regulations limit the use of net operating losses in certain cases following ownership changes, an expert report was commissioned to clarify the availability of the pre-acquisition losses to offset future tax liabilities. Following this study, an uplift of €3.0m in Helpshift DTAs was recorded with a corresponding reduction in the Goodwill recognised on the Helpshift acquisition. As the adjustment is not significant the prior period has not been restated.

Impairment tests for goodwill

The Group assesses the carrying value of goodwill each year on the basis of budget projections for the coming year extrapolated using a 1 to 5 year growth rate and a terminal value calculated using a long-term growth rate projection. The (pre-tax) discount rate used of 10.0% (2022: 10.0%) is based on the Board's assessment of the weighted average cost of capital ("WACC") of the Group.

A cash-generating unit ("CGU") is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets. The CGUs represent the lowest level within the Group at which the associated goodwill is assessed for internal management purposes and are not larger than the operating segments, as outlined in note 4, determined in accordance with IFRS 8 Operating Segments. The Board have determined the service lines as CGUs, and Goodwill acquired in business combinations has been allocated to the CGUs that are expected to benefit from business combinations to date.

A summary of the allocation of the carrying value of goodwill by segment and by CGU is presented below:

Segment	CGU	2023 €m	2022 €m
Create:	Game Development	**296**	218
	Art Services	**19**	19
Globalize:	Functional Testing	**14**	15
	Localization Testing	**14**	14
	Audio	**33**	33
	Localization	**18**	19
Engage:	Marketing	**110**	35
	Player Engagement	**34**	44
		538	397

The value in use calculations were consistently calculated year over year, with no significant changes in the assumptions made. The result of the value in use calculations was that no impairment is required in this period.

Key assumptions	Actual		Sensitivity analysis			
	2023	2022	**2023**	2022	**2023**	2022
1 to 5 year growth rate assumption	**10%**	10%	**15%**	15%	**5%**	5%
Long-term growth rate assumption	**2%**	2%	**2%**	2%	**2%**	2%
Value in use (€m) - all CGUs	**1,369**	1,295	**1,641**	1,552	**1,159**	1,096
Carrying value - goodwill (€m)	**538**	397				

Sensitivity analysis has been performed across all the CGUs to flex the growth rate by 5% and separately to flex the discount rate by 1%. Under both scenarios there would have been no requirement for the Group to recognise any impairment charge in either period presented, in any individual CGU. The Directors consider that no reasonably probable change in the assumptions would result in an impairment.

12 Right of Use Assets

The Group has entered into leases, across the business, principally relating to property. These property leases have varying terms and renewal rights.

	2023 €'000	2022 €'000
Cost		
At 01 January	**65,849**	63,840
Additions	**14,074**	15,249
Recognition on acquisition of subsidiaries	**6,151**	580
De-recognition of expired leases	**(9,993)**	(14,186)
Exchange rate movement	**(389)**	366
At 31 December	**75,692**	65,849
Accumulated depreciation		
At 01 January	**28,177**	27,849
Depreciation charge	**13,907**	11,753
De-recognition of expired leases	**(9,993)**	(14,186)
Impairment charge (note 5)	**2,041**	2,832
Exchange rate movement	**(390)**	(71)
At 31 December	**33,742**	28,177
Net book value		
At 01 January	**37,672**	35,991
At 31 December	**41,950**	37,672

13 Property, Plant and Equipment

	Computers and software €'000	Office furniture and equipment €'000	Leasehold improvements €'000	Total €'000
Cost				
At 01 January 2022	43,049	9,214	14,928	67,191
Exchange rate movement	(94)	(109)	105	(98)
Additions	21,962	1,129	3,916	27,007
Acquisitions through business combinations at fair value	243	131	48	422
Disposals	(1,132)	(490)	(828)	(2,450)
At 31 December 2022	**64,028**	**9,875**	**18,169**	**92,072**
Exchange rate movement	**(1,509)**	**(165)**	**(394)**	**(2,068)**
Additions	**25,974**	**2,136**	**2,579**	**30,689**
Acquisitions through business combinations at fair value	**2,792**	**393**	**277**	**3,462**
Disposals	**(3,757)**	**(304)**	**(450)**	**(4,511)**
At 31 December 2023	**87,528**	**11,935**	**20,181**	**119,644**
Accumulated depreciation				
At 01 January 2022	24,568	4,310	2,295	31,173
Exchange rate movement	47	71	82	200
Depreciation charge	12,539	799	5,027	18,365
Disposals	(1,133)	(490)	(827)	(2,450)
At 31 December 2022	**36,021**	**4,690**	**6,577**	**47,288**
Exchange rate movement	**(2,084)**	**(51)**	**(138)**	**(2,273)**
Depreciation charge	**18,255**	**1,276**	**3,597**	**23,128**
Impairment charge (note 5)	**3,572**	**-**	**2,203**	**5,775**
Disposals	**(3,757)**	**(304)**	**(450)**	**(4,511)**
At 31 December 2023	**52,007**	**5,611**	**11,789**	**69,407**
Net book value				
At 01 January 2023	28,007	5,185	11,592	44,784
At 31 December 2023	**35,521**	**6,324**	**8,392**	**50,237**

14 Investments

	2023 €'000	2022 €'000
Investments	**175**	175

From time to time, the Group (via Keywords Ventures Limited) has made modest investments in businesses developing innovative technologies and services that will benefit its clients, while further accelerating the success of investee companies through access to its global platform and relationships.

15 Trade Receivables

	2023 €'000	2022 €'000
Trade receivables	**94,189**	85,012
Provision for bad debts (note 24)	**(4,249)**	(3,449)
Financial asset held at amortised cost	**89,940**	81,563

Trade receivables arise from revenues derived from contracts with customers.

16 Other Receivables

Current	2023 €'000	2022 €'000
Multimedia tax credits / video games tax relief	**37,081**	25,756
Accrued income from contracts with customers	**18,307**	13,220
Prepayments and rent deposits	**14,362**	10,527
Tax and social security	**7,263**	6,538
Other receivables	**6,980**	5,374
	83,993	61,415

Accrued income from contracts with customers represent mainly contract assets in process and related items.

17 Other Payables

	2023 €'000	2022 €'000
Current liabilities		
Accrued expenses*	76,970	61,155
Deferred and contingent consideration (i)	36,550	44,945
Other payables (ii)	30,105	26,099
Deferred and contingent consideration related to continuous employment (i)*	7,273	3,579
Payroll taxes	5,072	3,577
	155,970	139,355
Non-current liabilities		
Deferred and contingent consideration (i)	12,002	18,308
	12,002	18,308

* Please note in 2022 Deferred and contingent consideration related to continuous employment was disclosed within Accrued expenses.

The movement in deferred and contingent consideration during the financial year was as follows:

	2023		2022	
	€'000	**€'000**	€'000	€'000
	Deferred and contingent consideration	**Deferred and contingent consideration related to continuous employment**	Deferred and contingent consideration	Deferred and contingent consideration related to continuous employment
Carrying amount at the beginning of the period	**63,253**	**3,579**	54,142	**-**
Consideration settled by cash	**(30,428)**	**(3,900)**	(25,800)	-
Consideration settled by shares	**(11,716)**	**(1,238)**	(8,040)	-
Unwinding of discount (note 6)	**3,279**	**-**	2,922	-
Additional liabilities from current year acquisitions (note 27)	**25,790**	**315**	37,950	-
Fair value movements in contingent consideration	**300**	**-**	2,282	-
Fair value movements in deferred consideration related to continuous employment	**-**	**8,562**	-	3,579
Exchange rate movement	**(1,926)**	**(45)**	(203)	-
Carrying amount at the end of the period	**48,552**	**7,273**	63,253	3,579

In general, in order for contingent consideration to become payable, pre-defined profit and / or revenue targets must be exceeded. The valuation of contingent consideration is derived using data from sources that are not widely available to the public and involves a degree of judgement (Level 3 input in the fair value hierarchy).

A 10% increase in expected performance would increase the carrying value of Deferred and contingent consideration by €5.8m, while a 10% reduction in expected performance would decrease the carrying value by €7.7m. A 10% increase in expected performance would increase the carrying value of Deferred and contingent consideration related to continuous employment by €0.3m, while a 10% reduction in expected performance would decrease the carrying value by €0.8m.

On an undiscounted basis, the Group may be liable for deferred and contingent consideration ranging from €9.4m to a maximum of €89.3m.

(i) Other payables include deferred income from contracts with customers of €13.1m (2022: €9.1m), which mainly comprise items invoiced prior to services being delivered. Excluding amounts recognised on acquisition of subsidiaries (€5,360k, see note 27), the movement in the year comprises transfers in and out as items are deferred and subsequently recognised as revenue.

18 Loans and Borrowings

Maturity analysis of Loans and borrowings	2023 €'000	2022 €'000
Current		
Expiry within 1 year	-	-
Non-current		
Expiry between 1 and 2 years	-	-
Expiry over 2 years	127,380	51
	127,380	51
	127,380	51
Currency denomination		
US dollar	35,129	-
Sterling	92,251	-
Canadian dollar	-	51
	127,380	51

The carrying amount at the beginning of the period represents loans owed by Keywords Studios QC-Interactive Inc. These balances were repaid in the period.

During July 2023, the Group negotiated a new unsecured multi-currency revolving credit facility agreement ("RCF") of US$400m that matures in July 2027. The new RCF includes an accordion option to increase the facility up to US$500m and an option to extend the expiry date by a further one-year period (both subject to lender consent). The new facility is supported by a group of seven global lenders and replaces the Group's previous €150m unsecured multi-currency revolving credit facility. The RCF's financial covenants remain consistent with the previous facility. The new facility is denominated in US dollars to match the expected predominant currency of future borrowings.

The previous RCF allowed the Group to access financing of up to €150m, which could be drawn down in euro, sterling, US dollars or Canadian dollars, and included an option to increase the facility by up to €50m to a total of €200m (subject to lender consent), at interest rates based on a margin over currency benchmark rates, plus a separate margin charged for the unutilised facility.

Both the new and previous RCFs contain representations, warranties and financial covenants customary for facilities of this type. Non-compliance with RCF terms could result in lenders refusing to advance funds under the facility or, in the worst case, calling in outstanding loans. In connection with the financial covenants, the Group is required to comply with and report interest cover and leverage ratios, each half calendar year, calculated in accordance with the lenders' facility agreement. The covenants provide that Net debt to an adjusted EBITDA metric shall not exceed 3.0x and that EBIT to Net Finance Charges will be a minimum of 4.0x. Throughout the period, the Group operated well within the applicable ratio terms of both the new and previous RCF agreements, with Net Debt to Adjusted EBITDA of 0.1x at the end of H1 and 0.4x at the end of H2, and with EBIT to Net Finance Charges of 18.1x and 16.6x respectively.

Loans and borrowings (classified as financial liabilities under IFRS 9), are held at amortised cost. Interest expenses which are calculated using the effective interest method are disclosed in note 6. While technically any borrowings are repaid and re-borrowed multiple times during the term of the RCF, so long as the Group remains compliant with the financial covenants and certain other terms of the RCF, any debt is rolled from one period to another, with the legal and commercial substance of a multi-year committed facility. Hence the Group presents RCF liabilities as non-current.

The movements in Loans and borrowings are as follows:

	Current €'000	Non-current €'000	Total €'000
At 01 January 2022	81	48	129
Cash flows:			
Repayments	(37)	(42)	(79)
Non-cash flows:			
Exchange rate movement	1	-	1
At 31 December 2022	**45**	**6**	**51**
Cash flows:			
Drawdowns	-	227,322	227,322
Repayments	(45)	(97,334)	(97,379)
Non-cash flows:			
Exchange rate movement	-	(2,614)	(2,614)
At 31 December 2023	**-**	**127,380**	**127,380**

19 Lease Liabilities

The Group has entered into leases, across the business, principally relating to property. These property leases have varying terms and renewal rights. Management applies judgement in determining whether it is reasonably certain that a renewal or termination option will be exercised.

The movement in lease liabilities during the financial year was as follows:

	2023	2022
	€'000	€'000
Carrying amount at the beginning of the year	**42,519**	37,635
Recognition on acquisition of subsidiaries (note 27)	**6,151**	580
Liabilities recognised on new leases in the period	**14,074**	15,244
Unwinding of discounted liabilities - lease liabilities	**1,447**	969
Payment of principal and interest on lease liabilities	**(16,485)**	(12,330)
Exchange rate movement	**(734)**	421
Carrying amount at the end of the year	**46,972**	42,519

The value of leases not yet commenced to which the lessee is committed, which are not included in lease liabilities at 31 December 2023, was €3.6m (2022: €nil).

Maturity analysis of lease liabilities	**2023**	**2023**	**2023**	2022	2022	2022
	€'000	**€'000**	**€'000**	€'000	€'000	€'000
	Lease payments	**Finance charges**	**Lease liabilities**	Lease payments	Finance charges	Lease liabilities
Current						
Not later than one year	**15,164**	**1,299**	**13,865**	12,740	326	12,414
Non-current						
Later than one year and not later than five years	**30,546**	**2,189**	**28,357**	26,491	1,447	25,044
Later than five years	**4,900**	**150**	**4,750**	5,317	256	5,061
	35,446	**2,339**	**33,107**	31,808	1,703	30,105
At 31 December	**50,610**	**3,638**	**46,972**	44,548	2,029	42,519

The Group has elected not to recognise a lease liability for short-term leases (leases with an expected term of twelve months or less) or for leases of low-value assets. Payments made under such leases are expensed on a straight-line basis. The expenses in the period relating to payments not included in the measurement of the lease liability were as follows:

Lease payments not recognised as a liability	**2023** **€'000**	2022 €'000
Short-term leases	**2,550**	2,140
Leases of low value assets	**-**	-
	2,550	2,140
The future minimum lease payments related to these leases		
Not later than one year	**1,081**	1,282
Later than one year and not later than five years	**-**	-
Later than five years	**-**	-
	1,081	1,282

The effect of variable lease payments and reinstatement costs on future cash outflows arising from leases is not material for the Group.

20 Employee Defined Benefit Plans

	2023 €'000	2022 €'000
Liabilities under Employee defined benefit plans	**4,030**	2,861

In line with statutory requirements in France, Italy and India, we are required to maintain employee defined benefit termination payment schemes. The Group commissions an actuarial valuation of the related liabilities in each jurisdiction annually. The liabilities at year end are recorded as long term, while the actuarial gain or loss is recorded separately within Other comprehensive income.

The Group has taken no specific actions to mitigate these factors as due to the long-term nature of the plans it is expected that there will be no sudden financial impact on the Group's results caused by any of these factors. A maturity profile of the obligation and other disclosures required by IAS 19 are not presented as the liability is not significant in the context of the Group, and due to the age profile of employees, a significant outlay is not anticipated for the foreseeable future.

Substantially all of the pension costs of €8.2m (2022: €7.2m) disclosed in note 10 relate to the Group's defined contribution pension plans.

21 Deferred Tax

Details of the deferred tax assets and liabilities, and amounts recognised in the Consolidated statement of comprehensive income are as follows:

	2023 €'000	**2023 €'000**	**2023 €'000**	2022 €'000	2022 €'000	2022 €'000
	Assets	**Liabilities**	**Net**	Restated Assets	Restated Liabilities	Restated Net
Employee defined benefit plans	**125**	**10**	**115**	308	124	184
Unused tax losses	**13,417**	**-**	**13,417**	10,664	13	10,651
Provisions	**466**	**43**	**423**	258	-	258
Property, plant and equipment	**780**	**1,715**	**(935)**	1,092	1,983	(891)
Multimedia tax credits / video games tax relief	**171**	**6,406**	**(6,235)**	-	3,879	(3,879)
Share-based payments	**15,591**	**-**	**15,591**	8,879	2,091	6,788
Goodwill	**21,159**	**-**	**21,159**	18,176	-	18,176
Customer relationships	**-**	**21,091**	**(21,091)**	-	17,147	(17,147)
Right of use assets and Lease liabilities	**9,867**	**9,867**	**-**	8,400	8,400	-
Offset where legally enforceable right of set off exists	**(28,825)**	**(28,825)**	**-**	(16,620)	(16,620)	-
	32,751	**10,307**	**22,444**	31,157	17,017	14,140

	01 January 2022*	Recognised in the income statement (note 7)*	Recognised in business combinations (note 27)*	**31 December 2022***	**Recognised in the income statement (note 7)**	**Recognised in business combinations (note 11, 27)**	**31 December 2023**
	Restated €'000	Restated €'000	Restated €'000	**Restated €'000**	**€'000**	**€'000**	**€'000**
Employee defined benefit plans	328	(144)	-	**184**	**(69)**	**-**	**115**
Unused tax losses	1,077	1,000	8,574	**10,651**	**(201)**	**2,967**	**13,417**
Provisions	222	36	-	**258**	**165**	**-**	**423**
Property, plant and equipment	116	(1,007)	-	**(891)**	**(44)**	**-**	**(935)**
Multimedia tax credits / video games tax relief	(3,570)	(309)	-	**(3,879)**	**(2,356)**	**-**	**(6,235)**
Share-based payments	3,796	2,992	-	**6,788**	**8,803**	**-**	**15,591**
Goodwill	11,551	(194)	6,819	**18,176**	**(2,030)**	**5,013**	**21,159**
Customer relationships	(5,892)	2,086	(13,341)	**(17,147)**	**7,159**	**(11,103)**	**(21,091)**
	7,628	4,460	2,052	**14,140**	**11,427**	**(3,123)**	**22,444**
Other amounts recognised in the income statement:							
Effect of tax rate change		(13)					
Adjustment in respect of prior years		785					
		5,232					

*The prior year has been restated to the current year presentation as the Directors believe this to be more meaningful.

The deferred tax asset not recognised on available losses at the period end is €3.3m (2022: €3.8m). Deferred tax assets and deferred tax liabilities are offset where a legally enforceable right to offset the recognised amounts exists, the deferred tax assets and deferred tax liabilities relate to taxes levied by the same taxation authority, and the Group anticipates they will be settled either at the same time or, on a net basis.

The Group has adopted Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12) from 01 January 2023. These amendments narrow the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offsetting temporary differences e.g. Right of use assets and Lease liabilities. As a result for leases and decommissioning liabilities, an entity is required to recognise the associated deferred tax assets and liabilities on a gross basis from the beginning of the earliest comparative period presented, with any cumulative effect recognised as an adjustment to retained earnings or other components of equity at that date.

The Group previously accounted for the deferred tax on leases and decommissioning liabilities on a net basis. Following the amendments, the Group has recognised a separate deferred tax asset in relation to its lease liabilities and a deferred tax liability in relation to its right of use assets. There was no impact on the opening retained earnings at 01 January in any period presented as a result of this change. The impact on deferred tax assets and liabilities in each comparative period presented is detailed below.

	Deferred tax assets	**Deferred tax liabilities**	**Retained earnings**
	€'000	**€'000**	**€'000**
At 31 December 2022 - as reported	22,757	8,617	143,627
Adoption of Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12)	8,400	8,400	-
At 31 December 2022 - as restated	31,157	17,017	143,627

22 Shareholders' Equity

Share Capital

	Issue date	Per share €	Number of ordinary £0.01 shares	Number of ordinary £0.01 shares - to be issued	Share capital €'000	Share capital - to be issued €'000	Share premium €'000	Merger reserve €'000
At 01 January 2022			**76,275,775**	**70,144**	**904**	**2,185**	**38,549**	**273,677**
Acquisition-related issuance of shares:								
Waste Creative	24-Jan-22	30.78	20,585	(20,585)	-	(634)	-	633
Heavy Iron	03-Feb-22	31.84	12,914	(12,914)	-	(411)	-	411
Heavy Iron related adjustment	03-Feb-22	31.84	53	-	-	-	-	-
Jinglebell	11-Mar-22	25.94	11,564	(11,564)	-	(300)	-	300
Tantalus Media	04-Jul-22	31.03	28,473	-	-	-	884	-
Forgotten Empires	28-Jul-22	28.41	-	60,857	-	1,729	-	-
Forgotten Empires	28-Jul-22	27.44	-	26,881	-	738	-	-
Mighty Games	03-Aug-22	28.74	-	28,443	-	817	-	-
Climax Studios	08-Aug-22	28.71	135,559	-	2	-	-	3,889
AMC	31-Aug-22	33.49	25,081	(25,081)	-	(840)	-	840
Smoking Gun	05-Oct-22	25.78	-	107,025	-	2,759	-	-
Mighty Games	25-Oct-22	28.74	28,443	(28,443)	-	(817)	817	-
Smoking Gun	25-Oct-22	25.78	107,025	(107,025)	2	(2,759)	-	2,758
G-Net Media	25-Nov-22	33.56	114,038	-	2	-	-	4,147
Acquisition-related issuance of shares			**483,735**	**17,594**	**6**	**282**	**1,701**	**12,978**
Employee Share Purchase Plan			33,372	-	-	-	909	-
Exercise of share options			1,197,175	-	14	-	5,862	-
At 31 December 2022			**77,990,057**	**87,738**	**924**	**2,467**	**47,021**	**286,655**
Acquisition-related issuance of shares:								
Heavy Iron	20-Jan-23	34.67	93,856	-	1	-	-	3,254
Climax Studios	17-Feb-23	27.18	21,428	-	-	-	-	582
Waste Creative	15-Mar-23	31.52	26,600	-	-	-	-	838
Digital Media Management	29-Mar-23	30.92	-	301,170	-	9,311	-	-
Digital Media Management	06-Apr-23	30.92	301,170	(301,170)	3	(9,311)	-	9,308
Hardsuit Labs	10-May-23	28.17	-	53,482	-	1,507	-	-
Hardsuit Labs	30-May-23	28.17	53,482	(53,482)	1	(1,507)	-	1,506
Tantalus Media	15-Jun-23	27.48	191,722	-	2	-	5,986	-
Playboss Interactive	30-Jun-23	24.48	-	13,118	-	321	-	-
Forgotten Empires LLC	03-Aug-23	28.41	60,856	(60,856)	1	(1,729)	-	1,728
Forgotten Empires LLC	03-Aug-23	30.72	59,559	-	1	-	-	1,828
Forgotten Software SL	03-Aug-23	27.45	26,881	(26,881)	-	(738)	-	738
Mighty Games	21-Nov-23	18.58	2,585	-	-	-	49	-
Kantan	12-Dec-23	32.56	12,254	-	1	-	-	400
Acquisition-related issuance of shares			**850,393**	**(74,619)**	**10**	**(2,146)**	**6,035**	**20,182**
Exercise of share options			446,786	-	5	-	1,462	-
At 31 December 2023			**79,287,236**	**13,119**	**939**	**321**	**54,518**	**306,837**

Subject to applicable law, the Company's articles of association and any relevant authority of the Company passed by the shareholders in general meeting, there is no limit to the number of shares which the Company can issue, nor are there are any restrictions on dividends or distributions on such shares. In the context of the Company's general meeting authorities, at the Company's AGM on 26 May 2023 its shareholders gave the Directors the authority to allot the following number of shares (or grant rights to subscribe for, or convert any security into, shares) in the capital of the Company:

a) Up to 3,912,987 shares in respect of the Company's incentive plans in place from time to time (5% of the Company's issued share capital as at 24 March 2023); and

b) Otherwise, up to 26,086,581 shares (33.3% of the Company's issued share capital as at 24 March 2023).

This authority is considered prudent as it gives the Company flexibility to take advantage of possible opportunities which may arise from time to time. The authority granted at the 2023 AGM will expire on the earlier of (i) the close of business on 26 August 2024; and (ii) the conclusion of the 2024 AGM.

Shares to be issued are valued at the share price at the date of acquisition and are recorded in accordance with IAS 32.16.

Shares held in the Employee Benefit Trust ("EBT")

	2023 Shares	2023 €'000	2022 Shares	2022 €'000
Carrying amount at the beginning of the year	**-**	**-**	-	-
Company funded acquisition of shares	**748,655**	**14,846**	-	-
Utilization for the exercise of share-based payment plans	**(340,170)**	**(8,072)**	-	-
Carrying amount at the end of the year	**408,485**	**6,774**	-	-

Reserves

The following describes the nature and purpose of each reserve within owners' equity:

Reserve	Description and purpose
Retained earnings	Cumulative net gains and losses recognised in the Consolidated Statement of Comprehensive Income.
Foreign exchange reserve	Gains or losses arising on retranslation of the net assets of the overseas operations into euro.
Share premium	The share premium account is the amount received for shares issued in excess of their nominal value, net of share issuance costs.
Share-based payments reserve	The Share-based payments reserve is the credit arising on share-based payment charges in relation to the Company's share and share option schemes, net of the cost of EBT shares utilised for employee share schemes less any related cash proceeds.
Shares to be issued	For deferred consideration which is to be provided for by the issue of a fixed number of shares at a future defined date, where there is no obligation on Keywords to offer a variable number of shares, the deferred consideration is classified as an Equity Arrangement and the value of the shares is fixed at the date of the acquisition.
Merger reserve	The merger reserve was initially created following the Group reconstruction, when Keywords Studios plc acquired the Keywords International Limited group of companies. When the Group uses Keywords Studios plc shares as consideration for the acquisition of an entity and has secured at least a 90% equity holding in the acquisition, the value of the shares in excess of the nominal value (net of share issuance costs) is also recorded within this reserve, in line with S612 of the Companies Act 2006. Within Merger reserve are balances related to the share premium on the share placements in 2015 and 2020, of €14.4m and €109.5m respectively, both completed via a cash box structure, with the Company acquiring the net proceeds via a share-for-share exchange. In both cases, the share premium on the issuance of new shares was credited to Merger reserve (in accordance with S610 of the Companies Act 2006). At the time of the placements, the proceeds were not allocated to a specific acquisition or specific purpose, and thus, amounts totalling €123.9m included in the Merger reserve are considered distributable.

23 Share Incentive Schemes

In July 2013, at the time of the IPO, a Share Option Scheme and a Long-Term Incentive Plan ("LTIP") was put in place, while in 2021, the Group introduced an Employee Share Purchase Plan. The charge in relation to these arrangements is as follows:

	2023	2022
	€'000	€'000
Share option scheme expense	**1,354**	2,689
LTIP option scheme expense	**20,485**	15,888
Employee Share Purchase Plan	**125**	101
Share-based payments expense	**21,964**	18,678

Of the total Share-based payments expense, €2,025k relates to Directors of the Company (2022: €1,142k).

Share Option Scheme
Share options are granted to Executive Directors and to permanent employees. The exercise price of the granted options is equal to the market price of the shares at the time of the award of the options. The Company has no legal or constructive obligation to repurchase or settle the options in cash.

Movements in the number of share options outstanding and their related weighted average exercise prices are as follows:

	2023		2022	
	Average exercise price in £ per share	**Number of options**	Average exercise price in £ per share	Number of options
Outstanding at the beginning of the period	**18.78**	**1,585,819**	15.65	2,423,568
Granted	**-**	**-**	-	-
Lapsed	**19.79**	**(125,282)**	19.17	(133,323)
Exercised	**14.71**	**(102,197)**	7.88	(704,426)
Outstanding at the end of the period	**18.99**	**1,358,340**	18.78	1,585,819
Exercisable at the end of the period	**17.45**	**873,025**	15.19	481,319
Weighted average share price at date of exercise	**25.87**		23.57	

Summary by year

Year of Option	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
Exercise price	£2.54	£7.76	£17.10	£15.88	£15.93	£25.48	-	-	
Outstanding at the beginning of the period	14,339	41,550	151,519	320,650	546,350	511,411	-	-	1,585,819
Granted	-	-	-	-	-	-	-	-	-
Lapsed	(6,938)	-	-	(9,500)	(48,427)	(60,417)	-	-	(125,282)
Exercised	(7,401)	(6,800)	(22,845)	(36,428)	(28,723)	-	-	-	(102,197)
Outstanding at the end of the period	-	34,750	128,674	274,722	469,200	450,994	-	-	1,358,340
Exercisable at 31 December 2023	-	34,750	128,674	274,722	280,700	154,179	-	-	873,025
Exercisable 2024	-	-	-	-	188,500	148,408	-	-	336,908
Exercisable 2025	-	-	-	-	-	148,407	-	-	148,407
Exercisable 2026	-	-	-	-	-	-	-	-	-
Exercisable 2027	-	-	-	-	-	-	-	-	-

The inputs into the Black-Scholes model, used to value the options, are as follows:

Year of Option	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Weighted average**
Weighted average share price (£)	£2.54	£7.75	£17.22	£16.09	£16.00	£26.42	-	-	
Weighted average exercise price (£)	£2.54	£7.76	£17.10	£15.88	£15.93	£25.48	-	-	
Fair value at measurement date (€)	€0.40	€1.13	€3.79	€5.72	€6.06	€9.32	-	-	
Average expected life	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	-	-	
Expected volatility	27.17%	24.79%	35.87%	45.23%	50.15%	47.70%	-	-	
Risk-free rates	0.58%	0.16%	0.89%	0.81%	0.07%	0.15%	-	-	
Average expected dividend yield	0.55%	0.21%	0.10%	0.10%	0.10%	0.10%	-	-	
Weighted average remaining life of options in months	-	-	-	-	4	16	-	-	7

Expected volatility was determined by reference to KWS volatility. The expected life used in the model has been adjusted based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations.

Long-term Incentive Plan Scheme
LTIP share awards are subject to KWS performance versus the designated share index over a three-year period.

Movements in the number of share options outstanding and their related weighted average exercise prices are as follows:

	2023		2022	
	Average exercise price in £ per share	**Number of options**	Average exercise price in £ per share	Number of options
Outstanding at the beginning of the period	**0.01**	**3,648,173**	0.01	3,704,898
Granted	**0.01**	**720,680**	0.01	901,690
Lapsed	**0.01**	**(124,047)**	0.01	(130,241)
Exercised	**0.01**	**(615,373)**	0.01	(828,174)
Outstanding at the end of the period	**0.01**	**3,629,433**	0.01	3,648,173
Exercisable at the end of the period	**0.01**	**1,276,229**	0.01	741,212
Weighted average share price at date of exercise	**21.96**		24.73	

Summary by year

Year of Option	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
Exercise price	£0.01	£0.01	£0.01	£0.01	£0.01	£0.01	£0.01	£0.01	
Outstanding at the beginning of the period	21,688	44,743	186,000	488,781	1,170,790	845,307	890,864	-	3,648,173
Granted	-	-	-	-	-	-	-	720,680	720,680
Lapsed	-	-	-	-	(25,400)	(49,500)	(41,750)	(7,397)	(124,047)
Exercised	(21,688)	(14,000)	(51,572)	(169,738)	(353,375)	(2,500)	(2,500)	-	(615,373)
Outstanding at the end of the period	-	30,743	134,428	319,043	792,015	793,307	846,614	713,283	3,629,433
Exercisable at 31 December 2023	-	30,743	134,428	319,043	792,015	-	-	-	1,276,229
Exercisable 2024	-	-	-	-	-	793,307	-	-	793,307
Exercisable 2025	-	-	-	-	-	-	846,614	-	846,614
Exercisable 2026	-	-	-	-	-	-	-	713,283	713,283

The inputs into the Monte Carlo binomial model, used to value the options, are as follows:

Year of Option	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Weighted average**
Weighted average share price (£)	£2.56	£7.75	£17.24	£16.05	£16.00	£26.42	£22.31	£22.46	
Weighted average exercise price (£)	£0.01	£0.01	£0.01	£0.01	£0.01	£0.01	£0.01	£0.01	
Fair value at measurement date (€)	€1.74	€4.96	€11.83	€13.98	€13.28	€16.73	€15.70	€21.02	
Average expected life	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years	
Expected volatility	27.11%	24.79%	35.87%	45.26%	50.15%	47.70%	41.22%	38.05%	
Risk-free rates	0.54%	0.16%	0.89%	0.81%	0.07%	0.13%	1.59%	3.58%	
Weighted average remaining life of options in months	-	-	-	-	-	4	17	29	11

Expected volatility was determined by reference to KWS share price volatility. The expected life used in the model has been adjusted based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations. As any dividends earned are to be reinvested into the business, the impact of dividends has been ignored in the calculation of the LTIP share option charge.

LTIPs vest on the third anniversary of the grant, if the market performance criteria are met. LTIPs must be exercised before the seventh anniversary of the grant.

Salary Shares
Conditional awards under the rules of the LTIP Plan ("Salary Shares"), are issued to certain employees and Directors, where the only vesting condition is continuous service.

Movements in the number of share options outstanding and their related weighted average exercise prices are as follows:

	2023		2022	
	Average exercise price in £ per share	**Number of options**	Average exercise price in £ per share	Number of options
Outstanding at the beginning of the period	**0.01**	**259,623**	0.01	26,738
Granted	**0.01**	**622,627**	0.01	237,676
Lapsed	**0.01**	**(31,509)**	0.01	(953)
Vested	**0.01**	**(8,150)**	0.01	(3,838)
Outstanding at the end of the period	**0.01**	**842,591**	0.01	259,623

Summary by year

Year of Option	**2021**	**2022**	**2023**	**Total**
Exercise price	£0.01	£0.01	£0.01	
Outstanding at the beginning of the period	24,147	235,476	-	259,623
Granted	-	-	622,627	622,627
Lapsed	-	(22,105)	(9,404)	(31,509)
Vested	(953)	(7,197)	-	(8,150)
Outstanding at the end of the period	23,194	206,174	613,223	842,591
Vesting 2024	23,194	203,635	-	226,829
Vesting 2025	-	2,539	573,342	575,881
Vesting 2026	-	-	39,881	39,881

Details of the awards by year are as follows:

Year of Option	**2021**	**2022**	**2023**	**Weighted average**
Weighted average share price (£)	£27.40	£22.41	£22.08	
Weighted average exercise price (£)	£0.01	£0.01	£0.01	
Fair value at measurement date (€)	€32.08	€26.47	€25.41	
Average expected life	3 Years	2 Years	3 Years	
Weighted average remaining life of options in months	8	5	23	18

24 Financial Instruments and Risk Management

Interest Rate Risk
Interest rate risk is the risk that the value of financial instruments will fluctuate due to changes in market interest rates. The Group's income and operating cash flows are substantially independent of changes in market interest rates. The management monitors interest rate fluctuations on a continuous basis and acts accordingly.

Where the Group has a significant amount of surplus cash, it invests in higher earning interest deposit accounts. Due to interest rate conditions, the interest rates for short-term deposits are at similar levels to those achieved for longer terms.

The effect of a strengthening or a weakening of 1% in interest rates charged during the reporting period on the interest expense would have resulted in the following pre-tax profit / (loss) impact for the year:

	1% Strengthening 2023 €'000	**1% Weakening 2023 €'000**	1% Strengthening 2022 €'000	1% Weakening 2022 €'000
Interest expense	**1,274**	**(1,274)**	-	-

In 2022, there were no drawdowns on the RCF, therefore any strengthening or weakening of interest rates would have had no impact.

Credit Risk
The Group's main financial assets are cash and cash equivalents, as well as trade and other receivables which represent the Group's maximum exposure to credit risk in connection with its financial assets.

Credit risk arises when a failure by counterparties to discharge their obligations could reduce the amount of future cash inflows from financial assets on hand at the reporting date. Customer credit risk is managed at appropriate Group locations according to established policies, procedures and controls. Customer credit quality is assessed and credit limits are established where appropriate. Outstanding customer balances are regularly monitored and a review for indicators of impairment (evidence of financial difficulty of the customer, payment default, breach of contract, etc.) is carried out at each reporting date. Significant balances are reviewed individually while smaller balances are grouped and assessed collectively. Receivables balances are unsecured and non-interest-bearing.

Credit risk arises on trade receivables and accrued income from contracts with customers (reported within other receivables). Trade and other receivables are carried on the Consolidated statement of financial position net of provisions.

Trade Receivables
The trade receivables balances disclosed comprise a large number of customers spread across the Group's activities and geographies with balances classified as "Not past due" representing 78.9% of the total trade receivables balance at the balance sheet date (2022: 73.0%).

The ageing of trade receivables can be analysed as follows:

	Total €'000	**Not past due €'000**	**1-2 months past due €'000**	**More than 2 months past due €'000**
At 31 December 2023	**89,940**	**70,995**	**18,945**	**-**
At 31 December 2022	81,563	59,532	16,803	5,228

A provision for doubtful debtors is included within trade receivables and can be reconciled as follows:

	2023 €'000	2022 €'000
Provision at the beginning of the year	**3,449**	1,768
Impairment of financial assets (trade receivables) charged to administration expenses	**531**	1,733
Foreign exchange movement in the year	**275**	79
Recognition on acquisition of subsidiaries	**331**	-
Utilised	**(337)**	(131)
Provision at the end of the year	**4,249**	3,449

Trade receivables loss allowance is estimated using a practical expedient to arrive at lifetime expected credit losses. Overdue receivables are evaluated to calculate an expected credit loss using a historical credit loss experience of 1.0% (2022: 1.0%). Taking into account internal and external information, the historical credit loss experience may be adjusted where it is determined that there has been a significant increase in credit risk. Where a receivable is credit impaired, the impairment is recognised immediately.

	Total €'000	Not past due €'000	1-2 months past due €'000	More than 2 months past due €'000
Trade receivables gross	**94,189**	**71,712**	**19,680**	**2,797**
Credit impaired	**(3,307)**	**-**	**(538)**	**(2,769)**
Expected credit losses	**(942)**	**(717)**	**(197)**	**(28)**
At 31 December 2023	**89,940**	**70,995**	**18,945**	**-**

	Total €'000	Not past due €'000	1-2 months past due €'000	More than 2 months past due €'000
Trade receivables gross	85,012	60,134	17,175	7,703
Credit impaired	(2,598)	-	(200)	(2,398)
Expected credit losses	(851)	(602)	(172)	(77)
At 31 December 2022	81,563	59,532	16,803	5,228

Accrued income from contracts with customers

Accrued income from contracts with customers comprise a large number of projects in process spread across the Group's activities and geographies, with balances classified as aged "0-30 days" representing 67.4% of the balance at the balance sheet date (2022: 76.6%).

The ageing of accrued income from contracts with customers can be analysed as follows:

	Total €'000	0-30 days €'000	31-60 days €'000	60+ days €'000
At 31 December 2023	**18,307**	**12,340**	**4,134**	**1,833**
At 31 December 2022	13,220	10,124	3,096	-

Accrued income from contracts with customers loss allowance is estimated using a practical expedient to arrive at lifetime expected credit losses using a historical credit loss experience of 1.0% (2022: 1.0%). Taking into account internal and external information, the historical credit loss experience may be adjusted where it is determined that there has been a significant increase in credit risk. Where a receivable is credit impaired, the impairment is recognised immediately.

	Total €'000	0-30 days €'000	31-60 days €'000	60+ days €'000
Accrued income from contracts with customers gross	**19,651**	**12,465**	**4,176**	**3,010**
Credit impaired	**(1,147)**	**-**	**-**	**(1,147)**
Expected credit losses	**(197)**	**(125)**	**(42)**	**(30)**
At 31 December 2023	**18,307**	**12,340**	**4,134**	**1,833**

	Total €'000	0-30 days €'000	31-60 days €'000	60+ days €'000
Accrued income from contracts with customers gross	16,652	10,227	3,897	2,528
Credit impaired	(3,265)	-	(762)	(2,503)
Expected credit losses	(167)	(103)	(39)	(25)
At 31 December 2022	13,220	10,124	3,096	-

Accrued income from contracts with customers represent mainly contract assets in process and related items. Excluding movements in the provision, the movement in the year comprises transfers in and out as items are accrued and subsequently invoiced to customers, with no significant amounts recognised on the acquisition of subsidiaries.

Related Party Receivables

There were no related party receivables at the end of either period presented.

Currency Risk

Currency risk is the risk that the value of financial instruments will fluctuate due to changes in foreign exchange rates. The foreign exchange risk arises for the Group where assets and liabilities arise in a currency other than the functional currency of the entity.

The Group's policy, where possible, is for Group entities to manage foreign exchange risk at a local level by matching the currency in which revenue is generated with the expenses incurred and by settling liabilities denominated in their functional currency with cash generated from their own operations in that currency. Where Group entities have liabilities denominated in a currency other than their functional currency (and have insufficient reserves of that currency to settle them), cash already denominated in that currency will, where possible, be transferred from elsewhere within the Group.

The Group is predominantly exposed to currency risk on the balances held within working capital across the Group and the exposure is concentrated in the movement of the US dollar, sterling and Canadian dollar against the euro. The effect of a strengthening or weakening of 10% in those currencies against the euro at the reporting date on the working capital balances would, all other variables held constant, have resulted in the following pre-tax profit / (loss) impact for the year:

	2023 €'000	**2023 €'000**	2022 €'000	2022 €'000
	10% Strengthening	**10% Weakening**	10% Strengthening	10% Weakening
US dollar to euro	**4,182**	**(4,617)**	5,981	(4,894)
Sterling to euro	**174**	**(254)**	365	(299)
Canadian dollar to euro	**301**	**(261)**	591	(483)

Total Financial Assets and Liabilities

The carrying amount of the financial assets and liabilities shown in the Consolidated and Company Statements of financial position are stated at amortised costs, with the exception of contingent consideration held at fair value.

Liquidity Risk

Liquidity risk arises from the Group's management of working capital and the financial charges on its debt instruments.

The Group's policy is to ensure that it will have sufficient cash to allow it to meet its liabilities when they become due. The Directors consider liquidity risk is mitigated by the strong working capital position, with €239.8m of current assets, including cash of €59.9m available to settle liabilities as they fall due.

The following are the contractual maturities (representing undiscounted contractual cash flows) of the Group's financial liabilities:

	Carrying value	**Contractual cash flows**				
	Total	**Total**	**Within 1 year**	**1-2 years**	**2-5 years**	**Over 5 years**
At 31 December 2023	**€'000**	**€'000**	**€'000**	**€'000**	**€'000**	**€'000**
Trade payables	**14,294**	**14,294**	**14,294**	**-**	**-**	**-**
Deferred and contingent consideration (i)	**55,825**	**89,347**	**53,653**	**33,764**	**1,930**	**-**
Other payables	**112,147**	**112,147**	**112,147**	**-**	**-**	**-**
Loans and borrowings	**127,380**	**127,380**	**-**	**-**	**127,380**	**-**
Loan interest	**-**	**26,418**	**8,806**	**8,806**	**8,806**	**-**
Lease liabilities	**46,972**	**50,609**	**15,164**	**11,117**	**19,428**	**4,900**
Total	**356,618**	**420,195**	**204,064**	**53,687**	**157,544**	**4,900**

	Carrying value	Contractual cash flows				
	Total	Total	Within 1 year	1-2 years	2-5 years	Over 5 years
At 31 December 2022	€'000	€'000	€'000	€'000	€'000	€'000
Trade payables	15,878	15,878	15,878	-	-	-
Deferred and contingent consideration (i)	63,253	66,598	45,115	20,031	1,452	-
Other payables	94,410	106,410	94,410	7,000	5,000	-
Loans and borrowings	51	51	45	6	-	-
Loan interest	-	2	2	-	-	-
Lease liabilities	42,519	44,548	12,740	9,267	17,224	5,317
Total	216,111	233,487	168,190	36,304	23,676	5,317

(i) Deferred and contingent consideration at 31 December 2023 has arisen on business combinations, and is based on contracted amounts to be paid in the future to sellers under share purchase agreements. In general, in order for contingent consideration to become payable, pre-defined profit and / or revenue targets must be exceeded. On an undiscounted basis, the Group may be liable for deferred and contingent consideration up to a maximum of €89.3m. For further details see note 17.

25 Capital Management

Group	2023 €'000	2022 €'000
Loans and borrowings (note 18)	**127,380**	51
Less: cash and cash equivalents	**(59,862)**	(81,886)
Net debt / (net cash) position	**67,518**	(81,835)
Total equity	**599,039**	557,091
Net debt / (net cash) to capital ratio	**11.3%**	(14.7)%

The Group manages capital by monitoring debt to capital and net debt ratios. This debt to capital ratio is calculated as net debt to total equity. Net debt is calculated as loans and borrowings (as shown in the Consolidated statement of financial position) less cash and cash equivalents. The liquidity risk and cash management for the Group is managed centrally by the Group Treasury function. Group Treasury manage bank balances centrally, and monitors the credit rating and stability of the institutions the Group banks with. The Board receives projections on a monthly basis as well as information regarding cash balances. The Group's strategy is to preserve a strong cash base and secure access to finance at reasonable cost by maintaining a good credit rating.

26 Related Parties and Shareholders

The details of key management compensation (being the remuneration of the Directors) are set out in note 10.

27 Business Combinations

	Digital Media Management €'000	The Multiplayer Group €'000	Other acquisitions €'000	2023 €'000	2022 €'000
Details of goodwill and the fair value of net assets acquired					
Book value:					
Property, plant and equipment	**608**	**2,492**	**362**	**3,462**	422
Right of use assets	**5,714**	**54**	**383**	**6,151**	580
Trade and other receivables - gross	**3,321**	**6,800**	**2,702**	**12,823**	6,145
Bad debt provision	**(23)**	**(308)**	**-**	**(331)**	-
Cash and cash equivalents	**14,296**	**9,025**	**3,628**	**26,949**	5,401
Trade and other payables	**(1,340)**	**(2,928)**	**(787)**	**(5,055)**	(4,762)
Deferred income	**(1,120)**	**(4,240)**	**-**	**(5,360)**	(3,461)
Lease liabilities	**(5,714)**	**(54)**	**(383)**	**(6,151)**	(580)
Book value of identifiable assets and liabilities acquired	**15,742**	**10,841**	**5,905**	**32,488**	3,745
Fair value adjustments:					
Identifiable intangible assets - Customer relationships	**22,148**	**21,200**	**2,511**	**45,859**	34,695
Identifiable intangible assets - Intellectual property	**-**	**-**	**-**	**-**	25,914
Deferred tax assets	**-**	**-**	**5,013**	**5,013**	15,393
Deferred tax liabilities	**(4,994)**	**(4,982)**	**(1,127)**	**(11,103)**	(13,341)
Total fair value adjustments	**17,154**	**16,218**	**6,397**	**39,769**	62,661
Net assets acquired	**32,896**	**27,059**	**12,302**	**72,257**	66,406
Goodwill from current year acquisitions	**55,229**	**68,677**	**28,095**	**152,001**	70,482
Total purchase consideration	**88,125**	**95,736**	**40,397**	**224,258**	136,888
% Share capital acquired	**100%**	**100%**	**100%**		

	Digital Media Management €'000	The Multiplayer Group €'000	Other acquisitions €'000	2023 €'000	2022 €'000
Details of purchase consideration and outflows from current acquisitions					
Cash	**65,677**	**93,729**	**27,923**	**187,329**	92,895
Equity instruments	**9,311**	**-**	**1,507**	**10,818**	-
Deferred cash	**-**	**2,007**	**914**	**2,921**	8,993
Deferred consideration contingent on performance	**13,137**	**-**	**9,732**	**22,869**	28,957
Shares to be issued	**-**	**-**	**321**	**321**	6,043
Total purchase consideration	**88,125**	**95,736**	**40,397**	**224,258**	136,888
Related acquisition costs charged to the Consolidated statement of comprehensive income:	**560**	**1,470**	**315**	**2,345**	1,177
Number of shares:					
Shares issued on acquisition	**301,170**	**-**	**53,482**	**354,652**	135,468
Fixed number of shares to be issued	**-**	**-**	**13,118**	**13,118**	87,738
Net cash outflow arising on acquisition:					
Cash paid in the period	**65,677**	**93,729**	**27,923**	**187,329**	92,895
Less: cash and cash equivalent balances transferred	**(14,296)**	**(9,025)**	**(3,628)**	**(26,949)**	(5,401)
Net cash outflow arising on acquisition	**51,381**	**84,704**	**24,295**	**160,380**	87,494

	Digital Media Management €'000	The Multiplayer Group €'000	Other acquisitions €'000	2023 €'000	2022 €'000
Details of pro forma revenues and profitability of current acquisitions					
Pre-acquisition revenue in H1	**6,413**	**19,648**	**5,644**	**31,705**	19,329
Pre-acquisition revenue in H2	**-**	**19,453**	**-**	**19,453**	12,070
Pre-acquisition revenue	**6,413**	**39,101**	**5,644**	**51,158**	31,399
Post-acquisition revenue	**19,165**	**1,165**	**18,894**	**39,224**	9,106
Pro forma revenue	**25,578**	**40,266**	**24,538**	**90,382**	40,505
Pre-acquisition profit / (loss) before tax	**1,650**	**7,869**	**136**	**9,655**	1,601
Post-acquisition profit / (loss) before tax	**2,154**	**290**	**5,144**	**7,588**	3,440
Pro forma profit / (loss) before tax	**3,804**	**8,159**	**5,280**	**17,243**	5,041

Disclosures required by IFRS 3 Business Combinations are provided separately for those individual acquisitions that are considered to be material, and in aggregate for individually immaterial acquisitions. Acquisitions are considered individually material if the impact on the Group's Revenue and Adjusted Profit Before Tax measures (on an annualised basis) is greater than 5%*, or the impact on goodwill is greater than 10% of the closing balance for the period. Two of the business combinations completed during the prior period were considered individually material and therefore warrant separate disclosure.

During the period, the Group completed five acquisitions, 47 Communications, Digital Media Management, Hardsuit Labs, Playboss and The Multiplayer Group purchasing 100% of these businesses. The aggregate amounts recognised in respect of the identifiable assets acquired and liabilities assumed on acquisitions completed in the period are set out in the table above. Details of the purchase consideration and other information relevant to the evaluation of the financial effect of the acquisitions are also presented.

Total purchase consideration of €224.3m includes amounts attributable to Digital Media Management €88.1m, Hardsuit Labs €15.7m, The Multiplayer Group €95.7m and other acquisitions €24.8m, while Goodwill from current year acquisitions of €152.0m includes amounts related to Digital Media Management €55.2m, Hardsuit Labs €12.8m, The Multiplayer Group €68.7m and other acquisitions of €15.3m. Identifiable intangible assets - Customer relationships of €45.9m includes amounts attributable to Digital Media Management €22.2m and The Multiplayer Group €21.2m. The consideration and goodwill for Playboss is deemed immaterial to the accounts.

Please note that Total purchase consideration excludes €22.9m of Deferred and contingent consideration related to continuous employment, where the purchase agreement includes deferred consideration contingent on both pre-defined profit and / or revenue targets being exceeded and which is also tied to the retention of key staff, that are considered post-acquisition expenses under IFRS 3 (note 17).

The main factors leading to the recognition of goodwill on the acquisitions are the presence of certain intangible assets in the acquired entities, which are not valued for separate recognition. These include expertise in the acquired entities, enhancing and growing our service capabilities, broadening our service offering, and extending our geographical footprint, further building out our global platform.

The goodwill that arose from business combinations completed in the period that is expected to be deductible for tax purposes was €22.2m (for which a deferred tax asset has been recognised of €5.0m).

*The Group reports a number of alternative performance measures ("APMs"), including Pro forma revenue and Adjusted Profit Before Tax, to present the financial performance of the business, that are not GAAP measures as defined under IFRS. A reconciliation of these measures to the relevant GAAP measure is presented in the APM's section.

28 Subsidiaries

The results and financial position of all the subsidiaries are included in the consolidated financial statements. Details of the Company's direct and indirect subsidiaries as at 31 December 2023 are set out below:

Name	Country of incorporation	Date of incorporation / acquisition	Ownership ^	Registered office
3455 Productions, LLC	USA	24-Nov-20	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
47 Communications LLC	USA	31-Jan-23	100%	5455 Wilshire Blvd, 22nd Fl, Los Angeles, CA 90036, USA
9409-2954 Québec Inc.	Canada	04-Dec-19	100%	1751 Richardson, Suite 8400, Montreal, QC H3K 1G6, Canada
Alset LTD	UK	17-Aug-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
AMC RO Studios S.R.L	Romania	11-Aug-21	100%	Stirbei Voda 36, etaj 1, sector 1, Bucharest, Romania
Babel Media Limited *	UK	17-Feb-14	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Babel Media USA, Inc.	USA	17-Feb-14	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
Bitsy SG Limited	UK	17-Aug-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Blindlight, LLC	USA	08-Jun-18	100%	1111 South Flower Street, Suite 101, Burbank, CA 91502, USA
Climax Development Limited	UK	22-Apr-21	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Climax Studios Limited	UK	22-Apr-21	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Coconut Lizard LTD	UK	25-Jun-20	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Cord Worldwide LTD	UK	07-Apr-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
d3t Development Limited	UK	30-Aug-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
d3t LTD	UK	19-Oct-17	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Descriptive Video Works Inc.	Canada	11-Jun-19	100%	400-725 Granville Street, PO Box 10325, Vancouver BC V7Y 1G5, Canada
Digital Media Management Inc	USA	29-Mar-23	100%	6555 Barton Ave., Suite 190 Los Angeles, CA 90038, USA
Eastern New Media Limited	Hong Kong	19-May-17	100%	4404, 44/F Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong
Edugame Solutions Private Limited	India	09-Oct-14	100%	3rd floor, Vardhman Orchard Plaza, Plot No 4, LSC, West Enclave, Pitampura, New Delhi, 110034, India
Electric Square Limited	UK	17-Aug-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Fire Without Smoke Inc	USA	29-May-18	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
Fire Without Smoke LTD	UK	29-May-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Forgotten Empires LLC	USA	28-Jul-22	100%	8730 Cincinnati Dayton Rd. #1072, West Chester, OH 45071, USA
Forgotten Software S.L.U	Spain	28-Jul-22	100%	nº 1 - La Cala Del Moral Rincon De La Victoria calle Murillo
GameSim Inc.	USA	16-May-17	100%	13501 Ingenuity Drive, Suite 310, Orlando, FL 32826, USA
g-Net Media, Inc.	USA	24-Nov-20	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
Hardsuit Labs, Inc	USA	10-May-23	100%	4025 Delridge Way SW, #210, Seattle 98106, United States
Heavy Iron Studios, Inc	USA	12-Jan-21	100%	1600 Rosecrans Ave., Bldg 7 Ste 300, MBS Media Campus, Manhattan Beach CA, 90266, USA
Helpshift Inc	USA	15-Dec-22	100%	343 Sansome Street, Suite 500, San Francisco, California, 94104, USA
Helpshift Information Technology (Shanghai) Co. Ltd	China	15-Dec-22	100%	Southwest Area, 3rd Floor, No. 2123 Pudong Avenue, Shanghai, China
Helpshift Technologies Private Limited	India	15-Dec-22	100%	3rd floor, Vardhman Orchard Plaza, Plot No 4, LSC, West Enclave, Pitampura, New Delhi, 110034, India
Keywords UK Limited (formerly Helpshift UK Ltd)	UK	15-Dec-22	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
High Voltage Software, Inc.	USA	14-Dec-20	100%	2345 Pembroke Ave., Hoffman Estates, IL 60169, USA
HVS Nola LLC	USA	14-Dec-20	100%	201 St. Charles Ave., Suite 2220, New Orleans, LA 70170, USA
Ichi LTD	UK	26-Nov-19	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Indigo Pearl Limited	UK	15-Dec-20	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Itsy SGD Limited	UK	17-Aug-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Jinglebell S.r.l.	Italy	10-Dec-20	100%	Via Marco d'Oggiono 12, 20123, Milan, Italy
Jurango Pty Limited ~~	Australia	20-Dec-21	85%	29 Thornton Crescent, Mitcham, VIC 3132, Australia
Keywords (Shanghai) Information Technology Limited	China	02-Apr-15	100%	Room 701, Building 5, No.860 Dong Ti Yu Hui Road, Hongkou District, Shanghai, China
Keywords Asia Private Limited	Singapore	15-Mar-16	100%	20 Kallang Avenue, #06-6A, Lobby B, Pico Creative Centre, 339411, Singapore
Keywords Australia Holdings Limited	UK	17-Mar-21	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Keywords Australia Pty Limited ~	Australia	18-Mar-21	85%	12 Spring Street, Fitzroy, Victoria, 3065, Australia
Keywords Canada Holdings Inc.	Canada	27-Oct-17	100%	1751 Richardson, Suite 8400, Montreal, QC H3K 1G6, Canada
Keywords do Brasil Localização e Tradução Ltda	Brazil	18-Jan-15	100%	Rua Professor Aprígio Gonzaga, 35 – 7º andar - São Judas - São Paulo - SP CEP: 04303-000, Brazil
Keywords Germany Holdings GmbH	Germany	06-Sep-19	100%	Moriz-Seeler-Strasse 5-7, Franz Ehrlich Haus, 12489, Berlin, Germany
Keywords International Co., Limited.	Japan	30-Nov-10	100%	1-22-19 Izumi, Suginami-ku, Tokyo, 168-0063 Japan
Keywords International Limited *	Ireland	13-May-98	100%	Whelan House, South County Business Park, Leopardstown, Dublin 18, D18 T9P8, Ireland
Keywords International Pte. Limited	Singapore	24-Apr-14	100%	20 Kallang Avenue, #06-6A, Lobby B, Pico Creative Centre, 339411, Singapore
Keywords International, Inc.	USA	26-Sep-12	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
Keywords Sperasoft LLC	Armenia	07-Apr-22	100%	18/1 Vardanants str., 3rd floor, Yerevan 0010, Armenia
Keywords Studios B.C., Inc.	Canada	27-Oct-17	100%	2700 Commerce Place 10155 - 102 Street, Edmonton, AB, T5J 4G8
Keywords Studios d.o.o. Beograd	Serbia	18-May-22	100%	Belgrade, BULEVAR MIHAJLA PUPINA 10L, floor 9, Belgrade-New Belgrade, NEW BELGRADE, 11070, Serbia
Keywords Studios France SAS	France	08-Jun-16	100%	59 Boulevard Exelmans, 75016 Paris, France
Keywords Studios India Private Limited	India	17-Feb-14	100%	3rd floor, Vardhman Orchard Plaza, Plot No 4, LSC, West Enclave, Pitampura, New Delhi, 110034, India
Keywords Studios Italy S.R.L.	Italy	08-May-14	100%	Via Egadi 2, Milano, MI, 20144, Italy
Keywords Studios Korea Corporation	South Korea	11-Jan-21	100%	16th Floor, Gangnam Building, 1321-1, Seocho-dong, Seocho-gu, Seoul 137-070, South Korea
Keywords Studios Los Angeles, Inc.	USA	08-May-14	100%	1115 Flower Street, Burbank, CA 91502, USA
Keywords Studios Malta Limited	Malta	04-May-22	100%	Level 3, Valletta Buildings, South Street, Valletta VLT 1103, Malta
Keywords Studios México, S. de R.L. de C.V.	Mexico	16-Jul-15	100%	Torrente #75, Colonia Ampliación Alpes, Del. Álvaro Obregón, CP. 01710, Ciudad de México, México
Keywords Studios Netherlands B.V.	Netherlands	05-Feb-19	100%	Van Limburg Stirumstraat 19, Hilversum 1215HP, The Netherlands
Keywords Studios Poland Spolka z.o.o.	Poland	04-Feb-21	100%	11 Ul. Na Zjezdzie, Krakow 30-527, Poland
Keywords Studios QC-Games Inc.	Canada	17-Feb-14	100%	1751 Richardson, Suite 8400, Montreal, QC H3K 1G6, Canada
Keywords Studios QC-Interactive Inc.	Canada	16-Nov-16	100%	1751 Richardson, Suite 8400, Montreal, QC H3K 1G6, Canada
Keywords Studios QC-Tech Inc.	Canada	06-Jan-15	100%	1751 Richardson, Suite 8400, Montreal, QC H3K 1G6, Canada
Keywords Studios Romania S.R.L.	Romania	15-Jun-21	100%	6-8 Corneliu Coposu Bvd., Unirii View Building, office 103, 1st floor, 3rd district, Bucharest, Romania
Keywords Studios Spain SLU	Spain	16-Jul-15	100%	Julián Camarillo 6A, 3B, 28037 Madrid, Spain
Keywords Studios Texas, LLC	USA	22-Jan-20	100%	7800 Shoal Creek Blvd. Suite 240S, Austin, Texas 78757, USA
Keywords Studios Unlimited Company *	Ireland	27-Mar-18	100%	Whelan House, South County Business Park, Leopardstown, Dublin 18, D18 T9P8, Ireland
Keywords Studios US Inc	USA	24-Oct-17	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
Keywords Treasury Holdings Limited	Ireland	30-Nov-22	100%	Whelan House, South County Business Park, Leopardstown, Dublin 18, D18 T9P8, Ireland
Keywords UK Holdings Limited	UK	28-Mar-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Keywords US Holdings Inc.	USA	23-Oct-17	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA

Keywords Ventures Limited	UK	06-Apr-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Laboratorio Comunicazione S.r.l.	Italy	04-Nov-22	100%	Via Egadi 2, Milano, MI, 20144, Italy
Laced Music LTD	UK	07-Apr-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Laced Publishing Limited	UK	07-Apr-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Lakshya Digital Private Limited *	India	09-Oct-14	100%	3rd floor, Vardhman Orchard Plaza, Plot No 4, LSC, West Enclave, Pitampura, New Delhi, 110034, India
Lakshya Digital Singapore Pte. Limited	Singapore	09-Oct-14	100%	20 Kallang Avenue, #06-6A, Lobby B, Pico Creative Centre, 339411, Singapore
Liquid Development, LLC	USA	19-Aug-15	100%	411 SW 2nd Ave Ste 300, Portland, OR 97204, USA
Liquid Violet LTD *	UK	15-Jan-14	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Lonsdale Miller Limited	UK	15-Dec-20	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Maverick Media Limited	UK	27-Aug-20	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Mighty Developments Pty Limited ~~	Australia	03-Aug-22	85%	422 Brunswick Street, Fitzroy, VIC 3065, Australia
Mighty Games Group Pty Limited ~~	Australia	03-Aug-22	85%	422 Brunswick Street, Fitzroy, VIC 3065, Australia
Mighty Games Productions Pty Limited ~~	Australia	03-Aug-22	85%	422 Brunswick Street, Fitzroy, VIC 3065, Australia
Player Research LTD	UK	26-Oct-16	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Smoking Gun Interactive Inc	Canada	05-Oct-22	100%	1100-333 Seymour St, Vancouver, BC V6B 5A6, Canada
Snowed In Studios, Inc	Canada	19-Jul-18	100%	400-981 Wellington Street West, Ottawa, Ontario, K1Y 2Y1, Canada
Sperasoft Poland Spólka z.o.o.	Poland	13-Dec-17	100%	Kraj Polska, woj. Małopolskie, powiat Kraków, miejsc. Kraków, ul. Na Kozłóce 27 30-664 Kraków, Poland
Sperasoft Studios LLC	Russia	13-Dec-17	100%	196084, Russia, Saint-Petersburg, Kievskaya street, 5 - building
Sperasoft, Inc.	USA	13-Dec-17	100%	251 Little Falls Drive, Wilmington, New Castle, DE 19808, USA
SperaSystems LLC	USA	13-Dec-17	100%	2033 Gateway Pl Ste 500 San Jose, CA 95110-3712, USA
SPOV Limited	UK	16-Feb-17	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Strongbox Limited	Seychelles	19-May-17	100%	306 Victoria House, Victoria, Mahe, Seychelles
Studio Gobo Limited	UK	17-Aug-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Sunny Side Up Creative Inc.	Canada	03-Jan-19	100%	1751 Richardson, Suite 8400, Montreal, QC H3K 1G6, Canada
Synthesis Deutschland GmbH *	Germany	12-Apr-16	100%	Holstenkamp 46 A, Bahrenfeld, 22525 Hamburg, Germany
Synthesis Global Solutions SA *	Switzerland	12-Apr-16	100%	Corso Elvezia 16, 6900 Lugano, Ticino, Switzerland
Tantalus Media Pty Limited ~	Australia	18-Mar-21	85%	12 Spring Street, Fitzroy, Victoria, 3065, Australia
The Multiplayer Games Group (Spain) S.R.L	Spain	16-Dec-23	100%	Calle Ferraz 11, 2nd Floor, left, Madrid, 28008
The Multiplayer Group (Canada) Inc.	Canada	16-Dec-23	100%	2700-10155, 102 Street NW, Edmonton, Alberta, T5J 4G8.
The Multiplayer Group Ltd	UK	16-Dec-23	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
The Sound Lab LLC	USA	29-Sep-22	100%	3830 Monte Villa Parkway, Suite 200, Bothell, WA 98021
The Trailerfarm Limited	UK	13-Sep-18	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
TV+SYNCHRON Berlin GmbH	Germany	01-Oct-19	100%	Moriz-Seeler-Strasse 5-7, Franz Ehrlich Haus, 12489, Berlin, Germany
Waste Creative Limited	UK	16-Dec-21	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Waste Holdings Limited	UK	16-Dec-21	100%	4th Floor, 110 High Holborn, London, WC1V 6JS, UK
Wicked Witch Software Pty Limited ~~	Australia	20-Dec-21	85%	Level 5, 990 Whitehorse Road, Box Hill, Melbourne, VIC 3128, Australia
Wizcorp Inc.	Japan	18-Apr-19	100%	1-22-19 Izumi, Suginami-ku, Tokyo, 168-0063 Japan
Xcelerator Machine Translations Limited	Ireland	12-Dec-19	100%	DCU Alpha Innovation Campus, Old Finglas Road, Glasnevin, Dublin 11, D11 KXN4, Ireland
Xloc, Inc.	USA	08-May-17	100%	8801 Fast Park Drive, Suite 301, Raleigh, NC 27617, USA

* Indicates a direct subsidiary (all other holdings are indirect, being subsidiaries of various intermediate group holding companies)
^ Proportion of voting rights and ordinary share capital ultimately held by Keywords Group
~ A combination of put and call options are in place requiring the sellers to sell, or the Group to buy the remaining 15% shareholding three years from acquisition. The Group has accounted for the acquisition as if a 100% interest was acquired on acquisition (see note 3).
~~ Wholly owned subsidiary of Keywords Australia Pty Limited. The Group has accounted for the company as if a 100% interest was held (see note 3).

Post-acquisition, the Group reviews entities to streamline activities and close any dormant entities acquired or re-structured entities. Restructuring details are set out below:

Name	Country of incorporation	Date of incorporation / acquisition	Ownership	Date of re-structuring	Re-structuring details
PT Limitless Indonesia	Indonesia	19-May-17	100%	23-Aug-23	Dissolved

29 Significant Events and Events after the Reporting Date

Crisis in Ukraine
Since the crisis in Ukraine began in 2022, our priority has been to support our personnel and freelance suppliers located in the affected area, while also contributing to broader humanitarian efforts in the region. As our Group had no business operations in Ukraine, the crisis primarily impacted our Game Development teams in Russia, as well as our collaboration with several freelance suppliers based in Ukraine.

Through this period, we have continued to work with our customers, supporting their preferences for where their work should be performed, while also remaining focused on mitigating any potential business interruption or other risks associated with our activities in Russia. As a result, the volume of work produced in Russia has continued to reduce over time and we have been scaling down our operations accordingly.

In the period, the Group produced €4.9m of Revenue in Russia, which represents approximately 0.6% of Group revenue, down from 3.8% in 2022. During the year, we continued to transfer projects supported in Russia to other parts of the Group, as we further ramped up production capacity in these locations with a combination of employees relocating from Russia and local hires. All production studios located in Russia have now been closed. Costs of acquisition and integration includes severance and rationalisation costs of €3.9m associated with ceasing operations in Russia.

The Group has never had significant receivables exposure in Russia, as work produced in Russia was contracted and collected in other territories. The Group does not have significant amounts of working capital or non-current assets located in Russia. Thus, any exposure to impairment of assets located in Russia is not considered material.

Events after the Reporting Date
There have been no significant events since the reporting date.

Alternative performance measures

The Group reports a number of alternative performance measures ("APMs") to present the financial performance of the business, that are not GAAP measures as defined under IFRS. The Directors believe that these measures, in conjunction with the IFRS financial information, provide the users of the financial statements with additional information to provide a more meaningful understanding of the underlying financial and operating performance of the Group. The measures are also used in the Group's internal strategic planning and budgeting processes and for setting internal management targets.

These measures can have limitations as analytical tools and therefore should not be considered in isolation, or as a substitute for IFRS measures. APM's may not be calculated uniformly by all companies and therefore may not be directly comparable with similarly titled measures and disclosures of other companies. As these measures frequently exclude significant recurring transactions that impact financial performance (e.g. share-based payments expense), the adjusted measures will typically be higher than the corresponding IFRS measures and should not be regarded as a complete picture of the Group's financial performance, which is presented in the Total comprehensive income / (expense) of the Group.

The principal measures used by the Group are set out below:

Organic revenue growth – Acquisitions are a core part of the Group's growth strategy. Organic revenue growth measures are used to help understand the underlying trading performance of the Group excluding the impact of acquisitions. Organic revenue growth is calculated by adjusting the prior year revenues, adding pre-acquisition revenues for the corresponding period of ownership to provide a like-for-like comparison with the current year, and applying the prior year's foreign exchange rates to both years, when translating studio results into the euro reporting currency.

Constant exchange rates ("CER") – Given the international nature of the Group's operations, foreign exchange movements can have an impact on the reported results of the Group when they are translated into the Group's reporting currency, the euro. In order to understand the underlying trading performance of the business, revenue is also presented using rates consistent with the prior year in order to provide year-over-year comparability.

Adjusted profit and earnings per share measures – Adjusted profit and earnings per share measures are used to provide management and other users of the financial statements with a clear understanding of the underlying profitability of the business over time. Adjusted profit measures are calculated by adding the following items back to the equivalent GAAP profit measures:

- **Amortisation of intangible assets** – Customer relationships and music licence amortisation commences on acquisition, whereas intellectual property / development costs amortisation commences when the product is launched. These costs, by their nature, can vary by size and amount each year. As a result, amortisation of intangibles is added back to assist with the understanding of the underlying trading performance of the business and to allow comparability across regions and categories.
- **Costs of acquisition and integration** – The level of acquisition activity can vary each year and therefore the costs associated with acquiring and integrating businesses are added back to assist with the understanding of the underlying trading performance of the Group.
- **Share-based payments** – The Group uses share-based payments as part of remuneration to align the interests of senior management and employees with shareholders. These are non-cash charges, and the charge is based on the Group's share price which can change. The costs are therefore added back to assist with the understanding of the underlying trading performance.
- **Foreign exchange gains and losses** – The Group does not hedge foreign currency translation exposures. The effect on the Group's results of movements in exchange rates can vary each year and are therefore added back to assist with understanding the underlying trading performance of the business.
- **Other income** – Other income comprises gains on investments or other non-trading income. As the gains have arisen outside the normal trading activities of the Group, the income has been added back to assist with the understanding of the underlying trading performance.

Free cash flow measures – The Group aims to generate sustainable cash flow (free cash flow) in order to support its acquisition programme and to fund dividend payments to shareholders. Free cash flow is measured as net cash generated by / (used in) operating activities after capital expenditure, payments of principal on lease liabilities, interest and tax payments, settlement of deferred consideration related to continuous employment but before acquisition and integration cash outlay, other income and dividend payments. Adjusted free cash flow is a measure of cash flow adjusting for capital expenditure that is supporting growth in future periods (represented by capital expenditure in excess of depreciation).

Net debt – The Group manages capital by monitoring debt to capital and net debt ratios. Net debt is calculated as loans and borrowings less cash and cash equivalents, and excludes lease liabilities. The debt to capital ratio is calculated as net debt as a percentage of total equity.

The remainder of this section provides a reconciliation of the APMs with the relevant IFRS GAAP equivalent.

Divisional analysis

The following table presents revenue growth by division at both actual exchange rates ("AER") and constant exchange rates ("CER"). Constant exchange rates are calculated by retranslating current year reported numbers at the corresponding 2022 foreign exchange rates, in order to give management and other users of the financial statements better visibility of underlying trading performance against the prior year.

	2023 Revenue AER €m	**2023 Revenue CER €m**	2022 Revenue AER €m	**2023 Growth AER %**	**2023 Growth CER %**
Create	**336.1**	**350.5**	275.5	**22.0%**	**27.2%**
Globalize	**279.5**	**287.9**	300.9	**(7.1)%**	**(4.3)%**
Engage	**164.8**	**171.1**	114.3	**44.2%**	**49.7%**
	780.4	**809.5**	690.7	**13.0%**	**17.2%**

Pro forma revenue

Pro forma revenue is calculated by adding pre-acquisition revenues of current year acquisitions to the current year revenue numbers, to illustrate the size of the Group had the acquisitions been included from the start of the financial year.

	2023 Revenue AER €m	**2023 Pre-acquisition revenue AER €m**	**2023 Pro forma revenue AER €m**
Create	**336.1**	**43.8**	**379.9**
Globalize	**279.5**	**1.0**	**280.5**
Engage	**164.8**	**6.4**	**171.2**
	780.4	**51.2**	**831.6**

Organic revenue at constant exchange rates

Organic revenue at constant exchange rates is calculated by adjusting the prior year revenues, adding pre-acquisition revenues for the corresponding period of ownership, and applying the 2022 foreign exchange rates to both years, when translating studio results into the euro reporting currency.

	2022 Revenue AER €m	2022 Pre-acquisition revenue AER €m	2022 Like for like revenue AER €m	**2023 Revenue growth CER €m**	**2023 Revenue CER €m**	**2023 Organic revenue growth CER %**
Create	275.5	23.2	298.7	**51.8**	**350.5**	**17.3%**
Globalize	300.9	-	300.9	**(13.0)**	**287.9**	**(4.3)%**
Engage	114.3	52.9	167.2	**3.9**	**171.1**	**2.3%**
	690.7	76.1	766.8	**42.7**	**809.5**	**5.6%**

Adjusted operating costs

This comprises Administrative expenses as reported in the Consolidated statement of comprehensive income, adding back share-based payments expense, costs of acquisition and integration, amortisation of intangible assets, depreciation and impairment, and deducting bank charges.

Calculation		**2023 €'000**	2022 €'000
Administrative expenses	Consolidated statement of comprehensive income	**(252,275)**	(196,554)
Share-based payments expense	Consolidated statement of comprehensive income	**21,964**	18,678
Costs of acquisition and integration	Consolidated statement of comprehensive income	**27,140**	8,413
Amortisation of intangible assets	Consolidated statement of comprehensive income	**26,060**	16,810
Depreciation - property, plant and equipment	Note 13	**23,128**	18,365
Depreciation - right of use assets	Note 12	**13,907**	14,585
Bank charges	Note 6	**(724)**	(662)
Adjusted operating costs		**(140,800)**	(120,365)
Adjusted operating costs as a % of revenue		**18.0%**	17.4%

Adjusted operating profit

The Adjusted operating profit consists of the Operating profit as reported in the Consolidated statement of comprehensive income, adjusted for share-based payments expense, costs of acquisition and integration, and amortisation of intangible assets. In order to present the measure consistently year-on-year, the impact of other income is also excluded.

Calculation		**2023 €'000**	2022 €'000
Operating profit	Consolidated statement of comprehensive income	**46,830**	71,810
Share-based payments expense	Consolidated statement of comprehensive income	**21,964**	18,678
Costs of acquisition and integration	Consolidated statement of comprehensive income	**27,140**	8,413
Amortisation of intangible assets	Consolidated statement of comprehensive income	**26,060**	16,810
Other income	Consolidated statement of comprehensive income	**-**	(1,098)
Adjusted operating profit		**121,994**	114,613
Adjusted operating profit as a % of revenue		**15.6%**	16.6%

EBITDA

EBITDA comprises Operating profit as reported in the Consolidated statement of comprehensive income, adjusted for amortisation of intangible assets, depreciation and impairment, and deducting bank charges.

Calculation		**2023 €'000**	2022 €'000
Operating profit	Consolidated statement of comprehensive income	**46,830**	71,810
Amortisation of intangible assets	Consolidated statement of comprehensive income	**26,060**	16,810
Depreciation - property plant and equipment	Note 13	**23,128**	18,365
Depreciation - right of use assets	Note 12	**13,907**	14,585
Bank charges	Note 6	**(724)**	(662)
EBITDA		**109,201**	120,908

Adjusted EBITDA

Adjusted EBITDA comprises EBITDA, adjusted for share-based payments expense, and costs of acquisition and integration. In order to present the measure consistently year-on-year, the impact of other income is also excluded.

Calculation		2023 €'000	2022 €'000
EBITDA	As above	**109,201**	120,908
Share-based payments expense	Consolidated statement of comprehensive income	**21,964**	18,678
Costs of acquisition and integration	Consolidated statement of comprehensive income	**27,140**	8,413
Other income	Consolidated statement of comprehensive income	**-**	(1,098)
Adjusted EBITDA		**158,305**	146,901
Adjusted EBITDA as a % of revenue		**20.3%**	21.3%

Adjusted profit before tax

Adjusted profit before tax comprises Profit before taxation as reported in the Consolidated statement of comprehensive income, adjusted for share-based payments expense, costs of acquisition and integration, amortisation of intangible assets, non-controlling interest, foreign exchange gains and losses, and unwinding of discounted liabilities. In order to present the measure consistently year-on-year, the impact of other income is also excluded.

Calculation		2023 €'000	2022 €'000
Profit before taxation	Consolidated statement of comprehensive income	**34,994**	67,982
Share-based payments expense	Consolidated statement of comprehensive income	**21,964**	18,678
Costs of acquisition and integration	Consolidated statement of comprehensive income	**27,140**	8,413
Amortisation of intangible assets	Consolidated statement of comprehensive income	**26,060**	16,810
Foreign exchange (gain) / loss	Note 6	**1,232**	(1,677)
Unwinding of discounted liabilities - deferred consideration	Note 6	**3,279**	2,922
Other income	Consolidated statement of comprehensive income	**-**	(1,098)
Adjusted profit before tax		**114,669**	112,030
Adjusted profit before tax as a % of revenue		**14.7%**	16.2%

Adjusted effective tax rate

The Adjusted effective tax rate is the Taxation expense as reported in the Consolidated statement of comprehensive income, adjusted for the tax impact of the adjusting items in arriving at Adjusted profit before tax, as a percentage of the Adjusted profit before tax.

Calculation		2023 €'000	2022 €'000
Adjusted profit before tax	As above	**114,669**	112,030
Taxation	Consolidated statement of comprehensive income	**15,042**	20,612
Effective tax rate before tax on adjusting items	Taxation / Adjusted profit before tax	**13.1%**	18.4%
Tax arising on bridging items to Adjusted profit before tax^		**10,539**	4,043
Adjusted taxation		**25,581**	24,655
Adjusted effective tax rate	Adjusted taxation / Adjusted profit before tax	**22.3%**	22.0%

^Being mainly the tax impact of share-based payments expense €4.2m, amortisation of intangible assets €4.4m and acquisition related costs €1.5m, with the prior period being mainly the tax impact of share-based payments expense €0.4m and amortisation of intangible assets €4.0m less foreign exchange €0.4m.

Adjusted earnings per share

The Adjusted profit after tax comprises the Adjusted profit before tax, less the Taxation expense as reported in the Consolidated statement of comprehensive income, adjusted for the tax impact of the adjusting items in arriving at Adjusted profit before tax.

The Adjusted earnings per share comprises the Adjusted profit after tax divided by the either the basic or diluted weighted average number of equity shares, as reported in note 8.

Calculation		**2023 €'000**	2022 €'000
Adjusted profit before tax	As above	**114,669**	112,030
Taxation	Consolidated statement of comprehensive income	**(15,042)**	(20,612)
Tax arising on bridging items to Adjusted profit before tax^		**(10,539)**	(4,043)
Adjusted profit after tax		**89,088**	87,375
Weighted average number of equity shares		**Number**	**Number**
Basic	Note 8	**78,910,471**	76,979,596
Diluted	Note 8	**79,995,267**	80,481,897
Adjusted earnings per share		**€ c**	€ c
Basic		**112.90**	113.50
% growth		**(0.5%)**	27.2%
Diluted		**111.37**	108.56
% growth		**2.6%**	27.8%

^Being mainly the tax impact of share-based payments expense €4.2m, amortisation of intangible assets €4.4m and acquisition related costs €1.5m, with the prior period being mainly the tax impact of share-based payments expense €0.4m and amortisation of intangible assets €4.0m less foreign exchange €0.4m.

Return on capital employed (ROCE)

ROCE represents the Adjusted profit before tax (excluding net interest costs, unwinding of discounted lease liabilities and bank charges, and also adjusted to include pre-acquisition profits of current-year acquisitions), expressed as a percentage of the capital employed. As the Group continues to make multiple acquisitions each year, the calculation further adjusts the Adjusted profit before tax and the capital employed as if all the acquisitions made during each year were made at the start of that year.

Capital employed represents Total equity as reported on the Consolidated statement of financial position, adding back employee defined benefit plan liabilities, cumulative amortisation of intangible assets (customer relationships), acquisition-related liabilities (deferred and contingent consideration), together with loans and borrowings, while deducting cash and cash equivalents.

Calculation		**2023 €'000**	2022 €'000
Adjusted profit before tax	As above	**114,669**	112,030
Interest received	Note 6	**(614)**	(309)
Bank charges	Note 6	**724**	662
Interest expense	Note 6	**5,768**	1,261
Unwinding of discounted liabilities - lease liabilities	Note 6	**1,447**	969
Pre-acquisition profits of current year acquisitions	Note 27	**9,655**	1,601
Adjusted profit before tax including pre-acquisition profit and excluding net interest		**131,649**	116,214
Total equity	Consolidated statement of financial position	**599,039**	557,091
Employee defined benefit plans	Consolidated statement of financial position	**4,030**	2,861
Cumulative amortisation of intangibles assets (customer relationships)	Note 11	**76,617**	58,301
Deferred and contingent consideration	Note 17	**55,825**	63,253
Loans and borrowings	Note 18	**127,380**	51
Cash and cash equivalents	Consolidated statement of financial position	**(59,862)**	(81,886)
Capital employed		**803,029**	599,671
Return on capital employed	Adjusted profit before tax including pre-acquisition profit and excluding net interest expense / capital employed	**16.4%**	19.4%

Free cash flow

Free cash flow represents Net cash generated by / (used in) operating activities as reported in the Consolidated statement of cash flows, adjusted for acquisition and integration cash outlay, capital expenditure, settlement of deferred consideration related to continuous employment, net interest paid, payments of principal on lease liabilities and is presented both before and after taxation paid. In order to present the measure consistently year-on-year, the impact of other income is also excluded.

Calculation		**2023 €'000**	2022 €'000
Net cash generated by / (used in) operating activities	Consolidated statement of cash flows	**110,457**	124,286
Acquisition and integration cash outlay:			
Costs of acquisition and integration	Consolidated statement of comprehensive income	**27,140**	8,413
Fair value adjustments to contingent consideration	Consolidated statement of cash flows	**(300)**	(2,282)
Non-cash movements in Deferred and contingent consideration related to continuous employment	Consolidated statement of cash flows	**(8,877)**	(3,000)
Fair value adjustments to property, plant and equipment	Note 5	**(5,755)**	-
Fair value adjustments to right of use assets	Note 5	**(2,041)**	-
Other fair value movements within Cost of acquisition and integration	Note 5	**(2,677)**	-
Acquisition of property, plant and equipment	Consolidated statement of cash flows	**(30,689)**	(27,007)
Investment in intangible assets	Consolidated statement of cash flows	**(3,052)**	(501)
Other income	Consolidated statement of comprehensive income	**-**	(1,098)
Settlement of deferred and contingent consideration related to continuous employment	Consolidated statement of cash flows	**3,900**	-
Interest received	Consolidated statement of cash flows	**614**	309
Interest paid	Consolidated statement of cash flows	**(7,729)**	(1,797)
Payments of principal on lease liabilities	Consolidated statement of cash flows	**(15,038)**	(11,361)
Free cash flow after tax		**65,953**	85,962
Taxation paid	Consolidated statement of cash flows	**20,853**	17,505
Free cash flow before tax		**86,806**	103,467

Adjusted free cash flow

Adjusted free cash flow is a measure of cash flow adjusting for capital expenditure that is supporting growth in future periods (as measured by capital expenditure in excess of maintenance capital expenditure).

Calculation		**2023 €'000**	2022 €'000
Free cash flow before tax	As above	**86,806**	103,467
Capital expenditure in excess of depreciation:			
Acquisition of property, plant and equipment	Consolidated statement of cash flows	**30,689**	27,007
Depreciation - property, plant and equipment	Note 5	**(23,128)**	(18,365)
Capital expenditure in excess of depreciation		**7,561**	8,642
Adjusted free cash flow		**94,367**	112,109

Adjusted cash conversion rate

The Adjusted cash conversion rate is the Adjusted free cash flow as a percentage of the Adjusted profit before tax:

Calculation		**2023 €'000**	2022 €'000
Adjusted free cash flow	As above	**94,367**	112,109
Adjusted profit before tax	As above	**114,669**	112,030
Adjusted cash conversion ratio	Free cash flow before tax and capital expenditure in excess of depreciation, as a % of Adjusted profit before tax	**82.3%**	100.1%

Net debt

The Group manages capital by monitoring debt to capital and net debt ratios. Net debt is calculated as Loans and borrowings (as shown in the Consolidated statement of financial position) less Cash and cash equivalents, and excludes Lease liabilities.

Calculation		**2023 €'000**	2022 €'000
Loans and borrowings	Consolidated statement of financial position	**127,380**	51
Cash and cash equivalents	Consolidated statement of financial position	**(59,862)**	(81,886)
Net debt / (net cash) position		**67,518**	(81,835)