



# **Catenae Innovation**

14<sup>th</sup> May 2018

Strategic turnaround provides exposure to high value, high growth, blockchain driven products

Catenae Innovation, formerly Milestone Group, is an AIM listed media and technology group which has recently completed a major restructuring under a new senior management team. The refocused strategy concentrates on the areas of media and fintech, delivered via a portfolio of synergous products, via subsidiaries and partnerships which take advantage of blockchain and distributed ledger technology.

## Strategic change focusses on high growth blockchain driven industries

In September last year Catenae commenced a major restructuring under interim CEO Tony Sanders. Along with the cessation of its previous social activities, several contracts in the fintech area deemed unable to deliver satisfactory results were also terminated. The new strategy concentrates on the areas of media and fintech, with the company set to launch a suite of products which use blockchain technology in the coming months.

#### Joint venture with music industry veteran leads new approach

In March 2018, Catenae signed a joint-venture agreement with a company majority owned by music and technology industry specialist Martin Heath. The JV, named Trust in Media, will produce payment processing and intellectual property solutions, initially within the media industry, using a combination of private and public blockchain technologies.

# Fintech division provides further opportunities

Catenae is also launching a range of virtual banking and KYC/AML products. Since the company's review and subsequent cancellation of an agreement with Nasdaq listed Black Cactus Global, Catenae has identified alternative partners to ensure it can provide solutions in this area on a best of breed approach.

# Valuation suggests 107% upside

On a near term EV/EBITDA valuation basis we set an initial target price of 0.28p per share, in excess of X2 the current share price. Recent management stock conversions of accrued fees at a premium to the current stock price underpins further our confidence in prospects for the immediate term. We therefore initiate coverage with a stance of Conviction Buy.

This investment may not be suitable for your personal circumstances. If you are in any doubt as to its suitability you should seek professional advice. This note does not constitute advice and your capital is at risk. This is a marketing communication and cannot be considered independent research.

# CONVICTION BUY – Initial target 0.28p



#### **Key data**

EPIC CTEA
Share price 0.135p
52 week 0.655p/0.095p
high/low
Listing AIM
Shares in issue 1,959,768,320
Market Cap £2.65m
Sector Media

## 12 month share price chart



# Analyst details Richard Gill, CFA

richard.gill@alignresearch.co.uk

IMPORTANT: Catenae Innovation is a research client of Align Research. Align Research & a Director of Align Research own shares in Catenae Innovation. For full disclaimer & risk warning information please refer to the last page of this document.

# **Corporate Background**

**Catenae Innovation** listed on AIM in July 2003 as Milestone Group, originally focused on growing a portfolio of radio, television and publishing assets in the local media sector. This strategy proved to be largely unsuccessful and in March 2008 a new management team began to reposition the company in the digital media and technology sector, with an integrated focus on charitable initiatives and social change. While the company's operations still have a media and technology focus, in September 2017 the charity/social focus was dropped, with all such activities now ceased.

September last year was a pivotal point in Catenae's history, with the previous CEO resigning and a major restructuring commenced (and now completed) under CEO Tony Sanders. Along with the cessation of the social activities, several contracts in the fintech area which were deemed unable to deliver satisfactory results were also terminated.

The refocused strategy concentrates on the areas of media and fintech, with the company having a suite of products which use blockchain technology. Blockchain is perhaps best known for being the technology which underpins cryptocurrencies such as Bitcoin and Ethereum. However, it has much wider applications beyond digital financial transactions, with some commentators suggesting that blockchain could be one of the most disruptive innovations since the advent of the internet due to its core "distributed ledger" approach.

A key joint-venture was signed by the business in March this year with customer engagement analytics business Seed Media Ltd and music and technology industry specialist Martin Heath. The joint-venture, named Trust in Media, will produce payment processing and intellectual property solutions, initially within the media industry, using a combination of private and public blockchain technologies. We expect this to be the first of a number of similar deals, with Catenae looking to work together with industry partners, acting as an incubator, in order to advance commercial opportunities.

At the company's AGM on 23<sup>rd</sup> March 2018 shareholders approved a resolution to change its name from Milestone Group Plc to Catenae Innovation Plc, a move which seeks to reflect the new strategic direction.





# **Operations**

The following divisions will be the core of Catenae's future strategy:

#### **Trust in Media**

In March 2018, Catenae entered into a joint-venture (named Trust In Media Ltd) with customer engagement analytics business Seed Media Ltd and music and technology industry specialist Martin Heath (who also founded and is the majority shareholder in Seed Media). Catenae own 50.5% of the joint-venture, with the remainder owned by Martin Heath, and will earn income in the form of a monthly management fee and 50% of any net revenue generated.

To give a brief biography, in the late 1980s Martin Heath founded dance music record label Rhythm King Records which saw success with artists including Betty Boo, Leftfield and Moby before being sold to BMG in 1996. Subsequently, he also founded Lizard King Records, whose most successful artist was The Killers. Outside of music, Heath was the Founder and Director of Renegade Software, which became the UK's leading 16-bit games company, making award winning games for Sega and Amiga, before being sold to Warner Bros in 1994. He has a particular interest in and knowledge of royalty payments, IP protection and artists' rights, areas which will be core to the new JV.

Trust in Media will produce payment processing and intellectual property solutions, initially within the media industry, using a combination of private and public blockchain technologies.

The backbone of the products will be based upon proven Mutual Distributed Ledger (MDL) technology platforms provided by Z/Yen Group Limited (Z/Yen) and will use the expertise of leading FCA regulated forex company Global Currency Exchange Network Ltd with regards to currency transactions. The joint-venture will also license marketing and analytical technologies from Seed Media Ltd. Both Z/Yen and GCEN have issued signed Letters of Intent with respect to the project. All IP developed by the JV will be solely owned by it.

#### **Products & Market**

Monetisation of musical content is one area where blockchain technology has the potential to revolutionise and fundamentally change how the industry currently works. This mainly concerns the ability of blockchain to remove the middleman from transactions, helping owners of intellectual property to retain the rights to their creative content and earn significantly higher levels of income than under current industry methods. Trust in Media intends to address the structural issues in the market, with there currently being no end-to end music rights licensing and payments service globally. The JV is aiming to be the global music market's leading end-to-end Payment Transaction & Data Rights Infrastructure company, being at the heart of the sector's crypto community.

Once launched in the coming months, Trust in Media's offerings will give independent artists, labels and filmmakers the power to manage their careers from personalised platforms that enable them to publish and sell their content online to their fan base. The company's digital distribution and marketing services will provide an alternative to traditional publishing, whereby artists go through a distribution middleman, with an approach that emphasises creator control. Payment and Data Rights solutions will ensure that artists receive royalties for their work via the use of smart contracts.

Initial revenues will be earned via platform build fees, service fees, transaction fees on purchases and bespoke projects. In our view, Martin Heath's extensive contacts within the music and technology industries should prove invaluable to making this venture a success.

This is a fast growing area for Catenae to be involved in, with global revenues from digital music alone estimated by the International Federation of the Phonographic Industry (IFPI) to have grown by 17.7% to \$7.8 billion in 2016. According to the IFPI statistics, growth was driven by a 60.4% rise in streaming revenue, offsetting a 20.5% decline in digital download revenue. Streaming now makes up the majority (59%) of digital revenues and for the first time in 2016 digital revenues made up 50% of the share of total recorded music industry revenues.

#### **Tribe of Noise**

In May 2018 Catenae announced that it had signed a Memorandum of Understanding to purchase a c.51% interest in Tribe of Noise BV for a consideration of €600,000. The consideration will be paid €341,000 in cash with the balance in new Catenae shares.

Tribe of Noise (www.tribeofnoise.com) is a Dutch registered company which provides quality, direct licensed music and fair remuneration models for a growing community of 30,000 musicians globally. Successful revenue models include ToN's streaming music services for businesses in retail, hospitality and leisure, a billion dollar industry often overlooked by many consumer-centric music services. Tribe of Noise's product offering is complimentary to those offered by Trust in Media and provides a ready built audience and cross-selling opportunities for both entities.

## **Catenae Commerce**

The **Catenae Commerce** subsidiary leads Catenae's fintech offerings. Its commercial solutions, due to be launched in the coming months, include a number of card payment programmes and KYC platforms. Using distributed ledger and blockchain technology, Catenae's fintech offerings help clients streamline and secure their payment processes, cut costs and empower business on a global scale.

## **Virtual Banking**

Catenae provides a number of technology driven finance related services including a Money Over IP platform that supports virtual bank accounts, payroll, loyalty and reward cards, pre-paid debit cards (using MasterCard products) and a cryptocurrency exchange. The pre-paid card offering in particular provides significant opportunities, with research firm Companies & Markets estimating the market will grow to a value of \$2.1 trillion by 2018, driven by rising demand for the card's flexibility and from consumers who have no bank account.

## **KYC/AML** platform

Catenae's KYC (Know Your Customer) and AML (Anti Money Laundering) platform is designed to be used by banking, gaming and insurance industry clients, amongst others, to meet their legal and regulatory requirements. The platform ties into a number of major global databases to carry out background checks on both individuals and corporates. It has been developed to significantly reduce the processing time for each full background check application from weeks to days, making it more business responsive. Catenae charges clients a fee per case processed and an ongoing monthly fee, which will be determined separately for each client. The product is expected to have synergies with Trust in Media's offerings, especially in the case of proving artists' identities.



## Mobile Solutions - OnSide/OnGuard

Catenae provides two mobile resource management and reporting platforms, which have been designed to help companies mainly operating in the areas of sports coaching, security and transport logistics, to simplify resource allocation and maximise productivity. They have been developed with a modular approach, meaning they can be tailored to service a number of different needs.

**OnGuard** is a logistics and reporting tool developed for organisations with a remote workforce, such as security and man-guarding. OnGuard helps clients to increase visibility, allowing for real-time alerts and geo-tracking, as well as acting as a hub for administrative data. Clients come from the security, transport and commercial cleaning sectors, with there currently being over 750 contracted users across more than 5,500 locations.

**OnSide** is a monitoring tool developed for the sports coaching industry. The product provides a central management system for the coaching process, digitising the reporting processes and safeguarding sporting environments by facilitating risk assessments and allowing for the exchange of information in real time. OnSide is currently used by over 600 operatives and coaches for the secure monitoring of over 200,000 young people. A premium "Pro" version adds functionality such as Finance, Payroll and Human Resources.

Perhaps the company's flagship client for OnSide is Charlton Athletic Community Trust. In April 2016 Catenae signed a three-year agreement with the trust to provide OnSide Pro valued at £120,000, part paid in marketing and promotional services by the trust. The platform is to be used to monitor and manage all elements of training and educational sessions with services ranging from monitoring the time-keeping of coaching staff through to attendance and demographical information for those taking part in individual programmes.

During the 2017 financial year and into 2018, all existing clients renewed or expanded their agreements for both products. It is planned that this area of the business will receive increased marketing exposure in the coming months to take advantage of forthcoming General Data Protection Regulation (GDPR) legislation given the products' ability to validate individuals and access to data. There will also be a tie in with the KYC products, with clients in the security and sports coaching industries being able to complete the required background checks on employees.



#### **Non-core Products**

#### Disorder

DISORDER is an independent youth magazine featuring the best in new music, fashion, culture and lifestyle. Acquired as a strategic content / distribution partner in April 2014, Disorder Magazine is a free quarterly publication, made available online and via a mobile app that is focused on creative youth culture. A supporting website at <a href="http://www.disordermagazine.com/">http://www.disordermagazine.com/</a> provides additional content, including exclusive video & music content from featured artists. Currently making token revenues, Catenae is expected to close the magazine shortly.

# **Financials & Recent Trading**

Results for the year to September 2017 reflected trading under the company's previous strategy. Revenues from continuing operations for the period were £24,640 with a net loss of £2.26 million. On the balance sheet, at the period end net liabilities stood at £645,884, down from £1.02 million 12 months previously. The movement reflects the net loss for the year, added to a £1.25 million negative entry in the share reserve relating to a failed placing (discussed in detail below), offset by an increase in share capital and the share premium account following fundraisings completed during the year.

Notable balance sheet items included cash of £749,972 at the period end with loans of £293.027. Of these, £275,027 is unsecured, attracts no interest and has no fixed repayment schedule. The remaining £18,000 is unsecured, attracts 10% per annum interest and has no fixed repayment schedule. Trade and other payable were £1.18 million at the year end, with £0.33 million relating to trade payables, £0.29 million to tax and social security, with £0.58 million of accruals and deferred income. Of the latter, £98,842 related to unpaid contingent remuneration to Directors in office at the year-end, an amount which could feasibly be settled in new equity.

During the year Catenae issued 994,770,335 new ordinary shares for a total consideration of £3,862,421, of which £2,516,220 was received in cash during the year. The remaining £1.25 million relates to a failed placing with City of London Markets (discussed in further detail below).

#### **Recent fundraisings**

Since the period end, in December, a further £150,000 was raised via the exercise of warrants at 0.5p per share.

Then in March, the company raised £145,000 through the issue of 96,666,669 subscription shares at a price of 0.15p per share, with a creditor balance of £30,000 settled via the issue of 20,000,000 shares at the same price. Additionally, £105,000 was raised via a convertible loan at a conversion price of 0.15 pence per share. The loan note is unsecured, interest-free and can be repaid at any time prior to 31<sup>st</sup> March 2019. Catenae has agreed to issue warrants to the holders of the subscription shares and the loan conversion shares over 166,666,670 new ordinary shares, exercisable at a price of 0.25 pence at any time up until 19<sup>th</sup> March 2019.

On 19<sup>th</sup> April Catenae further strengthened the balance sheet by issuing a total of 34,333,334 new ordinary shares at a price of 0.15p. Within this issue, £11,500 was raised via the issue of 7,666,667 new shares, with Business Development Director Guy Meyer subscribing for 6,666,667 of these. Additionally, CEO Tony Sanders converted £40,000 of a creditor balance owed to him into 26,666,667 new shares. At the same time Catenae raised £15,000 via an interest free, unsecured convertible loan note. This is convertible into 10,000,000 new shares at a price of 0.15p and can be repaid at any time prior to 31<sup>st</sup> March 2019. Finally, the company has issued warrants to the holders of the



Subscription Shares and the Loan Conversion Shares over 17,666,667 new ordinary shares, exercisable at a price of 0.25p at any time up until 31st March 2019.

## **Going concern**

As a result of the financial position at the financial year end, the independent auditor's report for the year contained a material uncertainty paragraph in respect of the company's ability to continue as a going concern. Catenae is dependent upon future funding and revenues to meet its obligations. After making enquiries and considering this material uncertainty and the measures that can be taken to mitigate the uncertainty, the Directors have a reasonable expectation that the company will have adequate resources to continue in existence for the foreseeable future.

## Failed October 2016 placing

In October 2016, Catenae announced that it had received had received irrevocable undertakings to raise £1.325 million in an equity placing at a price of 1.5p per share. However, £1.25 million of the funds were not received from broker counterparty City of London Markets (CoLM), with the £135,000 balance (which was initially received) being returned. The company commenced a legal recovery process against the amount due from CoLM shortly after the placing failed.

In January 2018, Catenae announced that it had entered into a compromise agreement whereby CoLM agreed to pay the company a settlement payment of £125,000 and to waive all rights to the issued shares - Catenae intends to dispose of the shares in due course.

However, in February 2018 it was announced that CoLM had failed to make a payment as per the compromise agreement on the agreed basis. To close the matter, and eliminate management time spent on it, Catenae has now entered into revised payment terms whereby CoLM will pay £76,000 on an agreed payment schedule by 27<sup>th</sup> April 2018, with the balance of £49,000 to be paid in quarterly instalments by 30<sup>th</sup> April 2019.

#### **Additional Warrants/Options**

In addition to the recently issued warrants discussed above, at the end of the 2017 financial year Catenae had a total of 248,431,460 warrants in issue (as per the schedule below), exercisable at various prices, with each warrant giving the right to one ordinary share. The 137.5 million 0.5p warrants (30 million of which were exercised following the period end) have no performance conditions, are exercisable immediately and will lapse on the second anniversary of the date of issue (28<sup>th</sup> April 2017). The performance conditions of all the other warrants are that the mid-market share price of the company must be 2.5p for 5 consecutive days.

Holder	Warrants	Price (p)	Value (£)
Kevin Everett	1,944,445	1.25	24,306
<b>Kevin Everett</b>	1,944,445	1.75	34,028
Guy Mayer	2,500,000	0.5	12,500
Misc	26,707,500	1.25	333,844
Misc	26,707,500	1.75	467,381
Misc	26,813,785	1.25	335,172
Misc	26,813,785	1.75	469,241
Misc	135,000,000	0.5	675,000
TOTAL	248,431,460		2,351,472

Catenae outstanding warrants as at 30th Sept 2017. Source: Annual report

Additionally, there were 163,213,116 share options outstanding at the period end, vesting at prices between 1.25p and 3p per share and having exercise prices ranging from 0.1p to 1.75p per share. As at 30th September 2017, 78,260,782 options were exercisable, with the remainder not exercisable due to the mid-market share price being lower than their vesting price.

Holder	Options	Option price (p)	Value (£)
Tony Sanders	15,352,000	1	153,520
<b>Tony Sanders</b>	6,666,668	0.1	6,667
<b>Tony Sanders</b>	1,666,667	1.25	20,833
<b>Tony Sanders</b>	1,666,667	1.75	29,167
<b>Kevin Everett</b>	3,582,000	1	35,820
<b>Kevin Everett</b>	7,777,778	0.1	7,778
Others	60,685,000	1	606,850
Others	2,000,000	1.5	30,000
Others	63,816,336	0.1	63,816
TOTAL	163,213,116	_	954,451

Catenae outstanding options as at 30<sup>th</sup> Sept 2017. Source: Catenae annual report

Accounting for the recently issued/exercised instruments the company currently has 179,368,783 options and 386,098,130 warrants in issue.



# **Key Risks**

## Going concern and funding requirements

As discussed above, the independent auditor's report for the 2017 financial year noted a material uncertainty in respect of the company's ability to continue as a going concern. Given that current liabilities of £1,472,994 as at 30<sup>th</sup> September 2017 were higher than current assets of £749,972, Catenae is dependent upon future funding and revenues to meet its obligations. Mitigating this risk, £400,000 in cash (gross) has been raised since the period end and after making enquiries, and considering the material uncertainty and the measures that can be taken to mitigate the uncertainty, the Directors have a reasonable expectation that the company will have adequate resources to continue in existence for the foreseeable future.

## Products at a pre or early revenue stage

Catenae has a range of commercial products currently available to the market, with more significant potential revenue earners set to be launched in the coming months. Until these products begin to become cash flow positive the company faces the same funding concerns as described above.

#### **Competition risk**

The markets in which Catenae operates and intends to operate are competitive, with many suppliers in the areas of fintech and media offering customers many competing products. The current financial position puts the company in a weaker competitive position compared to many of its peers, many of which have access to significant funds. To establish a competitive advantage and to attract and retain customers Catenae must ensure that its offerings are of sufficient quality.

## **Reliance on third-parties**

Mainly via its joint-ventures, Catenae works with and will rely upon a number of third-party providers including those in the areas of blockchain technology, payment processing and other services. Any interruption to the supply of the products or services provided by third-parties may have an adverse effect on the business and its financial performance. Although the MOU for the acquisition of Tribe of Noise demonstrates the company is looking to mitigate potential risk by owning its own technology.

# Management

#### **Tony Sanders – Interim CEO and Chairman**

Tony initially joined Catenae in 2011 as Technical & Development Director and became interim CEO in September 2017 following the departure of Deborah White. Before joining Catenae he was Technical and Operations Director at ICM Group PLC (Latterly, Phoenix IT Group) for nine years.

During his time at ICM he was key to implementing a growth strategy for new products resulting in a three-fold increase in revenue to £18.8m over a 4-year period, and placing ICM in the top 3 of UK Business Continuity providers. He was instrumental in ICM winning the CIR Industry Awards Most Innovative Solution for Emergency Office v1.0, and again the following year for v2.0, and oversaw a business unit turnaround and transformation achieving a 60% margin against a previous 30% forecast and enlarging revenue on a legacy service turning it into the fastest growing business unit in the group.

Tony has also previously held Senior and Director roles at British Telecom, CSF Assurity Ltd, Hill Samuel Merchant Bank, Profile Computers PLC, Thorn EMI Computeraid.

#### **Guy Meyer - Business Development Director**

Guy Mayer was appointed as Business Development Director on 20th September 2017. He ran his own cross-platform marketing agency, Firebelly, for nearly 20 years as CEO. Firebelly provided award-winning marketing strategies, content creation and execution services mainly in the entertainment and publishing sectors.

Operating across traditional and digital media, he is experienced in business strategy formulation, sales & marketing. His clients included The Walt Disney Company, Harper Collins, Lionsgate, Paramount Pictures and Universal Pictures International. He sold Firebelly in 2013 to concentrate on business consulting where he worked globally mainly with sales teams, helping them expand and accelerate their sales pipelines in verticals that included Financial Services, Government and Telecoms.

#### **Kevin Everett - Non-Executive Director**

Kevin Everett has been a Non-Executive of Catenae since May 2013. He has extensive strategic, operational and financial experience, balancing professional and charitable careers, with a focus on business and education. He has vast experience in connecting foundations with the corporate sector.

Kevin is currently Treasurer and Chairman of the Board of the Sir John Cass Foundation. During 23 years on the Board, he has led the restructuring of the Foundation, increasing their assets from £16 million to £120 million. His early support for specialist schools, linked with his belief in the model of putting education and employers together, has helped increase the Sir John Cass Foundation's grant capacity and benefit from £300,000 to over £5 million. He has served as a director on a number of Boards, both commercial and not-for-profit, and is a Chairman of the Valuation Tribunal for England.



#### **Forecasts**

Catenae is now a refocused and re-energised business, with the new management team having a clear strategy for growth in a burgeoning industry, with the recent fundraisings and creditor conversions strengthening the balance sheet. We expect to see a significant ramp up in revenues over the coming months and, following discussions with management, provide an indication of profits which could be achieved over the next two financial years.

#### **Key assumptions**

- Transaction fees from Trust in Media are the main driver of revenue growth across the business. Broadly, we expect the business to sign up one new artist every month, with revenues earned as a percentage of transaction fees processed through each artist site. While an average artist is expected to earn c.£100,000 a month in generated revenues (of which the joint-venture earns 20%), the signing of a major artist with a large fan base could provide significant upside to our forecasts. Build and service fees are also expected to rise over the forecast period as a function of new artist signups.
- Trust in Media is consolidated into the accounts but on a cash basis Catenae is paid a 50% dividend.
- Modest revenues begin to be earned from Catenae Commerce from June 2018, with steady growth in OnSide/OnGuard over the forecast period.
- No costs or revenues for Disorder magazine from July this year as the business is closed.
- A further £1.3 million is raised in the 2018 financial year at an anticipated price of 0.2p per share, with the €259,000 equity consideration for Tribe of Noise issued at the same price, to give a total of 2,722,980,320 shares in issue at the end of FY 2019.
- No tax as Catenae has unutilised tax losses of approximately £12.5 million that would be available to carry forward against future profits subject to agreement by HM Revenue & Customs.

#### **Valuation**

The key forecast period is FY2019 when Catenae will have seen a full financial year of contributions from Trust in Media and from Tribe of Noise. While subject to due diligence, we expect the Tribe of Noise deal to complete in the near future. For the year we forecast an indicative EBITDA of £0.7 million and cash of circa £0.6 million at the period end. Accounting for the assumed new shares in issue and applying a conservative multiple of 10 times EV/EBITDA equates to a price of 0.28p per share for end Sept 2019, and which we set as our initial target price.

#### **DCF** valuation

To highlight the longer term upside potential we carry out a 5 year DCF analysis (2019 to 2023) plus terminal value using EBITDA as a proxy for free cash flow — we believe this is reasonable given the historic tax losses and negligible expected interest, depreciation and amortisation costs. Using forecast 2019 EBITDA as a base we assume 30% growth out to 2023 and use a discount rate of 12%. For the terminal value we use a multiple of 8 times 2023 EBITDA and again discount back at 12%. Added to forecast cash of circa £0.2 million as at end FY2018 and divided by the assumed number of shares in issue (post the expected capital raise at 0.2p per share) we derive a value per share of 0.5p.

With Catenae shares currently at 0.135p we therefore initiate coverage with a Conviction Buy stance.

#### **DISCLAIMER & RISK WARNING**

It is the policy of ALIGN Research to only cover companies in which we have conviction in the investment case. Our "Conviction Buy" recommendation is derived from our conviction in either taking equity as payment for our research services, or applying our fee to the purchase of equity in a covered company whilst absorbing the cash cost of our freelance analyst payments.

Catenae Innovation is a research client of Align Research. Align Research & a Director of Align Research own shares in Catenae Innovation. Full details of our Company & Personal Account Dealing Policy can be found on our website <a href="http://www.alignresearch.co.uk/legal/">http://www.alignresearch.co.uk/legal/</a>

ALIGN Research has made every reasonable effort to ensure the accuracy of the information in our research reports and on our website, although this can not be guaranteed. Our research reflects the objective views of our team of analysts. As we actively seek to take the majority of our fees by the way of equity payment in the companies we cover, we believe that we are aligned with both investors and the subject company. Additionally, we only write about those companies that we have conviction in. However, as a consequence of this alignment, our vested interest is in an increase in value of the subject company's equity. As such, we can not be seen to be impartial in relation to the outcome of our reports.

ALIGN Research has both a personal & company dealing policy (covering staff & consultants) in relation to the dealing in the shares, bonds or other related instruments of companies that we follow & which adhere to industry standard personal account dealing (PAD) rules. ALIGN Research may publish follow up notes on these securities/companies but has no scheduled commitment and may cease to follow these securities/companies without notice.

Your capital is at risk by investing in securities and the income from them may fluctuate. Past performance is not necessarily a guide to future performance and forecasts are not a reliable indicator of future results. Nothing in this report should be construed as an offer, or the solicitation of an offer, to buy or sell securities by us. As we have no knowledge of your individual situation and circumstances the investment(s) covered may not be suitable for you. You should not make any investment decision without consulting a fully qualified financial advisor. The marketability of some of the companies we cover is limited and you may have difficulty buying or selling in volume. Additionally, given the smaller capitalisation bias of our coverage, the companies we cover should be considered as high risk.

ALIGN reports may not be reproduced in whole or in part without prior permission from ALIGN Research. This financial promotion has been approved by Align Research Limited, which is authorised & regulated by the Financial Conduct Authority. FRN No. 768993. © 2018 Align Research Limited.

