

# Asset & Lifecycle Management Services...

Developed to provide  
true insight into any  
built environment.

# Asset Management & Lifecycle Planning



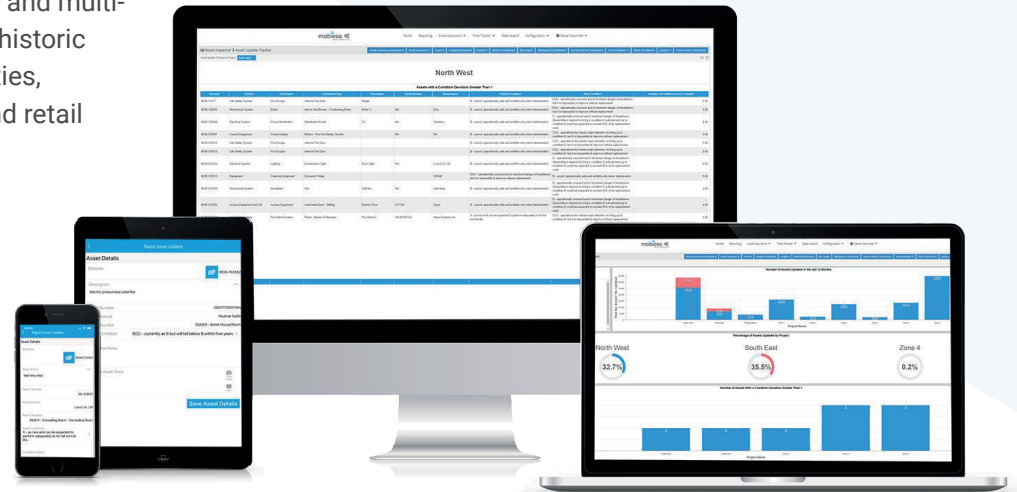
LitmusFM is the UK's leading asset surveying company.

Our asset management and lifecycle team analyse the physical condition of your buildings and facilities, including all building fabric, mechanical and electrical assets.

We lead best practice using a combination of proven survey methods and documentation to tailor our surveys and asset assessments to each organisation's unique requirements.

We provide an end-to-end service, designed to meet an organisation's immediate needs as well as looking to the future. If required, we can recommend the implementation of revised systems and protocols that will protect and preserve an organisation's assets going forward.

Our team has surveyed and reported on behalf of both single and multi-site organisations, including some of the most complex and historic estates in the UK. We have worked with prestigious universities, multi-academy trusts and a wide range of major industrial and retail organisations.



# Trusted Experts

**We are all about maximising the value of any building asset base for performance, risk, sustainability and cost.**

With over 30 years of experience, we have developed and built a team of formally qualified experts in the technical asset management field.

Our collective experience and expertise, together with our investment in the latest technology, has informed the organic development of our Asset Management and Lifecycle services.

We've made mistakes over the years, but we've learned from them.

Today, our clients benefit from rapid data collection and condition assessment programmes, detailed electronic data analytics, resilient compliance reports and advice, and focused life-cycle expenditure and budgeting analysis.

By working with an organisation, the outcomes we expect include our supporting technical mobilisation, mitigating risk, supporting cost reduction, assessing compliance, prolonging asset life and increasing building availability.

We are all about maximising the value of any building asset base for performance, risk, sustainability and cost.

## At a glance:

- ▶ **Completion of Asset Register**
- ▶ **Provision of Lifecycle Modelling And Preventative Maintenance Plan**
- ▶ **Cloud-based Asset Survey & Management Systems**
- ▶ **Costed Remedy Recommendations**
- ▶ **Statutory Compliance Audits & System Deployment**
- ▶ **Design Integrations**

# Asset Management Approach

**Driving cost efficiency and value for money is our priority...**

We usually adopt a 4-stage approach when undertaking Asset, Lifecycle and Forward Maintenance Register projects as follows:

Stage	Title	Activities
1	<b>Assessment of current asset data</b>	Often, not all the information required is available; therefore, we carry out a review of the existing data and prepare a gap analysis based on the information provided.
2	<b>Physical Assessment &amp; Survey</b>	We physically check all the assets and prepare a cleansed asset data output to enable input into a Computer Aided Facilities Management (CAFM) System.
3	<b>Preparation of Whole Life Model</b>	From the information gathered in Stages 2 & 3 and, where required, we are able to prepare a Whole Life Model comprising of a Forward Maintenance Register (FMR) or a full Lifecycle Report.
4	<b>Remedial Works Budgeting, Planning &amp; Execution</b>	Following the completion of the <b>**FMR</b> and <b>**Lifecycle</b> modelling we can shape your capital budget planning for the disposal, removal, and replacement of assets together with the programming and phasing of the works.

**\*\*** Both the Forward Maintenance Register and the Lifecycle Model are live documents that are updated in the cloud as works progress to completion.

# Asset Management Approach

## Range of Services

**The complexity of your challenges will determine the extent of our involvement...**

We offer three broad levels of service as set out below:

Title	Core	Enhanced	Premium
QA Asset Checks	●	●	●
Complete Asset Register	●	●	●
Detailed Photographic Report	●	●	●
CAFM Input Template		●	●
Scheduling - Industry Standard for Building Maintenance Services (SFG20)		●	●
Preventative Maintenance Plan		●	●
Royal Institute of Chartered Surveyors NRM Coding		●	●
Chartered Institute of Building Services Engineers Coding		●	●
Preparation of Gap Analysis Report		●	●
FMR/Lifecycle Modelling			●

# Tools - Asset & Lifecycle Management Platform



## The right tools for the job...

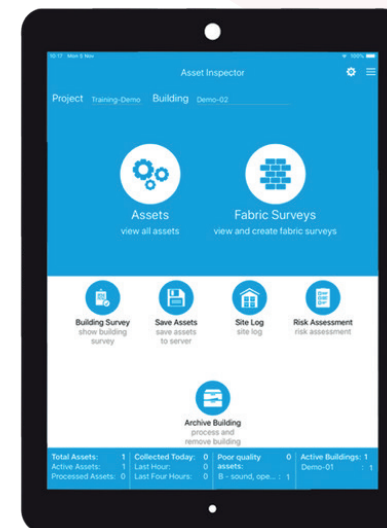
To help organisations gain more detailed control over assets and maximise returns on capital investments, we use our own, mobile enabled, asset capture software for both data collection and as an auditing tool.

It is hosted on a secure, a cloud-based portal which delivers:

- ▶ Full accountability for company assets
- ▶ Real-time asset visibility
- ▶ A structured approach to tagging and coding assets using multi-level hierarchies and data-driven pick lists
- ▶ Improved business intelligence, so enabling informed decision making
- ▶ Complete quality assurance tracking
- ▶ Data export to standard CAFM/IWMS system data formats
- ▶ Multi-project support which allows Engineers and surveyors to work on a mix of projects and buildings concurrently.
- ▶ Project by project pick lists or asset classifications enabling corporate data governance and links to a specific CAFM implementation.
- ▶ Available as a standalone solution or integrated directly into most industry CAFM/IWMS systems
- ▶ Extensive asset collection tagging, broken down to as much detail as a project requires - space locations, room, level, condition, manufacturer, serial number, age, install date etc.

## At a glance:

- ▶ Web-based portal shows each project's assets and location data
- ▶ Branded reports can be reviewed per project,
- ▶ Core assets report with detailed fields
- ▶ Distinct summary of all location data
- ▶ Photography and condition summary – (4 assets per page)
- ▶ Grouped asset summary
- ▶ Export to industry-standard formats: Pdf, Word, Excel, PowerPoint



# Tools - Asset Management Progress Reporting

## Accurate reporting throughout the journey...

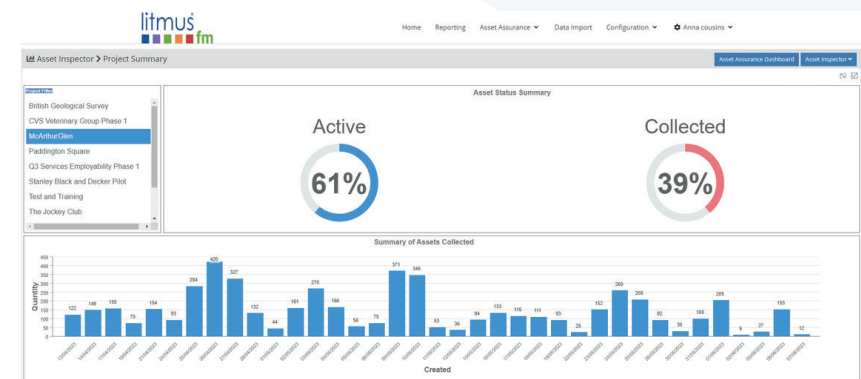
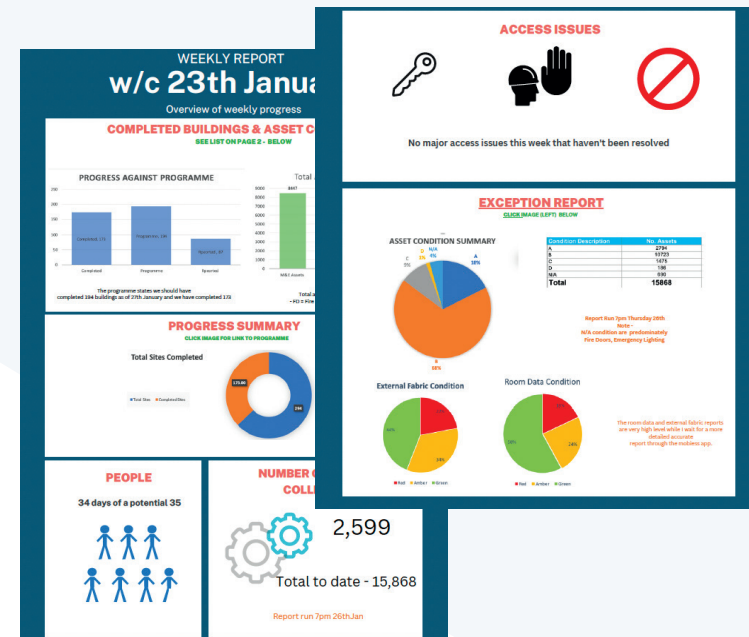
Keeping track of a project's progress is important.

There could be tens of thousands of assets that need to be recorded and it's crucial that the workstreams are monitored.

Along the way issues will arise – they always do – and so total visibility of activity will help prevent delays and will ensure any barriers to progress are addressed at the earliest opportunity.

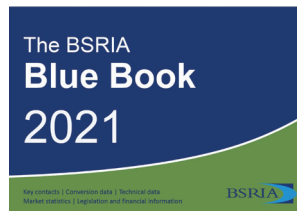
Project Progress Reporting will include:

- ▶ Provide a real-time dashboard identifying assets captured against original asset data
- ▶ Ongoing reporting of assets captured by each surveyor in real time
- ▶ Breakdown of assets by discipline
- ▶ Record of areas and locations of the assets registered
- ▶ Update on asset condition and any Health & Safety issues
- ▶ Progress reporting on access issues
- ▶ Data separation by Project and Building Clusters



## Our Technical Standards

At LitmusFM we utilise several important industry standards within our operational standards and approach:





# Asset Management & Lifecycle Planning

## Project Report

### The University of Glasgow



University  
of Glasgow

The University of Glasgow is the fourth oldest university in the English-speaking world, founded in 1451. Based in Scotland's largest city, the University of Glasgow is one of the world's top 100 universities and currently has 26,000 students from over 120 different countries enrolled. Glasgow is also a member of the prestigious Russell Group of UK research universities.

### Background

The University had just recently tendered its hard services contract. As part of this new regime, there is a strategic aim to collate and survey all of the M & E assets and the internal Building Fabric condition across the University portfolio of 279 facilities, both Residential and Non-Residential settings, recording details of their location, condition and description, to enable the data to be transferred to the new supplier's operational CAFM (Computer Aided Facility Management) system.

The transfer of the new asset register will enable the supplier to plan the labour loading and planned preventative maintenance (PPM) regime for each of the facilities.

There is also a requirement to provide a life-cycle plan and a forward maintenance register from the new asset register to enable capital and project planning.

### Brief

Our brief was to provide the University with:

- ▶ A comprehensive asset register for each of the University facilities, to cover all Mechanical & Electrical assets, across each of the facilities;
- ▶ A comprehensive asset register for each facility covering fire safety, safe systems and building attributes;
- ▶ A collection of key attribute information such as location, asset type, year of installation, capacity, rating, residual life and position in the lifecycle;
- ▶ A dynamic photographic report linked to individual M&E assets that support the condition and criticality reporting assumptions by identifying any assets in a poor, unsafe or obviously non-compliant condition, or where there is a need for a further, detailed inspection;
- ▶ Condition and criticality coding allocation against assets using a recognised and agreed format including, incorporation of industry-standard data classification structures – BCIS (Building Cost Information Service) and SFG20 - the leading maintenance manager software platform;
- ▶ Application of a barcode and QR code label/tag to allow the deployment of dynamic asset tracking, fault history tracking and other technologies;
- ▶ A detailed output report in an agreed format that will allow for the bulk data upload into the supplier's CAFM System; and
- ▶ Report any compliance needs assessment for each location with RAG status reporting, based on need versus seen, highlighting any gaps.

*Continued...*

# Asset Management & Lifecycle Planning

## Project Report

### Approach

Our initial approach was to carry out a desktop evaluation of the current available data, including drawings and any operation and maintenance records, to assess at a high level the locations of the key plant and assets.

As a part of our survey, we examined and recorded all M & E assets, verified the Operations & Maintenance data, and recorded any additional or missing assets across the premises.

All asset data was recorded on a comprehensive template, enabling it to be transferred into a CAFM system when required. The template recorded the relevant floor, area, room number and location, followed by the classification of the asset against SFG20 – the leading maintenance manager software platform, the Royal Institution of Chartered Surveyors (RICS) and BCIS categories, as well as the type of asset and any additional remarks.

Regular progress reports were issued, detailing the progress against the overall agreed timelines, and noting any access issues or areas of concern identified whilst conducting the survey. Our approach ensured that we provided a multi-disciplinary team that fully supported the asset collation/survey project and we undertook the following activities:

- ▶ Asset data capture for all mechanical and electrical assets ;
- ▶ Recording the location and position of each asset, noting any differences in a final report; and
- ▶ Asset data collated on a template in hard and soft copy format, through agreement on a new classification of assets (Event critical/ Life safety-critical/ Noncritical etc.)

▶▶ *“We feel the huge success of this project is due to working as one team. Every stakeholder group has come together to make this happen and without the support from our colleagues, our amazing surveyors and a fabulous team within the University of Glasgow this wouldn't have been possible.”* ◀◀

**Terry Wyldes,**  
Head of Asset  
Management at  
LitmusFM

### Outcomes

Our surveying team used their essential technical and asset knowledge to provide the University of Glasgow with critical asset data to develop a robust PPM schedule to ensure that important environments operate to an optimum level and that teaching can be delivered in safe and well-maintained environments. We have used the information and data gathered to support the University in developing a capital plan for future years.

Using experienced surveyors, we captured all external and internal fabric conditions as well as all mechanical and electrical asset data. This was recorded on a comprehensive template, capturing all the relevant data and detail and enabling it to be transferred into a CAFM system. We recorded detailed location information such as the floor, area, and room number along with detailed asset information including the age and condition of each asset, followed by the classification of the assets against SFG20 Maintenance codings.

Regular progress reports and meetings with all stakeholders detailing the progress against the overall agreed timelines, noting any access issues or areas of concern during the survey process enabled us to achieve incredible results in four months - with 35k assets collected across 250 buildings.

Once all data had been collected and checked we were able to support The University of Glasgow with a gap analysis report to understand the variation in asset detail by building and to identify any assets that were identified as in poor condition and in need of remedial action.

# Asset Management & Lifecycle Planning

## Project Report



### Cummins Engines UK

Cummins UK is a diesel engine manufacturer and the Cummins US distributor for the UK and Ireland. Cummins Inc. is a corporation of complementary business units that design, manufacture, distribute and service engines and related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Cummins serves customers in approximately 190 countries and territories through a network of more than 500 company-owned and independent distributor locations and approximately 5,200 dealer locations.

**Cummins UK had a planned budget of over £12.5m for capital repair over the next 15 year period. Litmus re-valued the need for capital funding for the period to be nearer to £9.8m; nearly £3m less than originally budgeted.**

### Background

In response to the needs of the UK business, Cummins UK had developed an Asset Management System Framework that demonstrated the linkages between the key elements and outputs of an asset management system.

The Framework needed to incorporate the key features of the ISO 55000 management system, however the current Asset Management Register and Lifecycle Plan was not sufficiently developed to meet the requirements of the new Framework; therefore, Litmus was approached to see how they could assist.

### Brief

Litmus was briefed to carry out a comprehensive asset data collection and collation exercise for the Cummins manufacturing facility in Darlington, which consisted of 600,000 sq. ft of floor space.

Litmus reviewed the buildings and facilities, as well as all of the fabric, mechanical and electrical assets; approximately 6,000 assets in total.

This included:

- ▶ Capturing asset data for all building fabric, mechanical and electrical elements;
- ▶ Assessing the condition age for each asset;
- ▶ Assessing the cost of replacing each asset;
- ▶ Collating asset data on template in hard and soft copy format;
- ▶ Developing a 15 year lifecycle model of asset replacement and renewal; and
- ▶ Inputting asset data into the Maximo system.

*Continued...*

# Asset Management & Lifecycle Planning

## Project Report

### Approach

**John Brownless, the Litmus Partnership, said:** "Following our formal appointment, we arranged to meet with Cummins Engines UK Facilities Team on-site in Darlington, as well as all the key stakeholders involved in the project.

"Our team of three qualified consultants commenced the asset data collection on-site and carried out inspections of all of the mechanical, electrical and building fabric assets and their components. The condition of each asset was recorded on a data template, which noted the building location, the room or area description and the asset type.

"Priority works were then recorded with a timescale for completion. This was particularly relevant where we identified Health and Safety works required to an asset.

"Each asset and sub element was categorised against the BCIS recognised construction categories – which enabled Cummins UK to download the data onto their CAFM system, which in this case was Global Maximo.

"From the completed template and cost data we were then able to profile the replacement of assets for each year over a 15 year period, with associated costs, giving Cummins more detail with regards improvement and replacement costs over this period."

### Outcomes

Prior to the exercise Cummins UK had a planned budget of over £12.5m for capital repair over the next 15 year period. The project re-valued the need for capital funding for the period to be nearer to £9.8m; nearly £3m less than originally budgeted. Following further scrutiny by the Cummins UK Finance Team this value was agreed.

▶▶ *Following the valuation being agreed, the Cummins UK Management Team decided to release funds from the capital budget to immediately commence the refurbishment of the offices at the site.* ◀◀

*Karl Cundill, the Litmus Partnership*

# Asset Management & Lifecycle Planning

## Project Report



Public Health  
England

### Public Health England

Public Health England is an executive agency of the Department of Health and Social Care, and a distinct organisation with operational autonomy. They provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific expertise and support.

**“It was clear that a successful conference and events business would be beneficial to the university, both financially and reputationally.”**

The agency employs 5,500 staff (full-time equivalent), mostly scientists, researchers and public health professionals.

They have eight local centres, plus an integrated region and centre for London, and four regions (north of England, south of England, Midlands and east of England, and London).

Public Health England was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service.

### Background

Public Health England needed to know their Planned Preventative Maintenance Plan was robust to ensure their facilities worked at an optimum level to enable them to protect and improve the nation's health, especially during the COVID pandemic. The only way to achieve this was to have a quality up-to-date asset register.

### Brief

LitmusFM was appointed in 2021 with the key objectives of providing up-to-date asset registers for their major sites in Leeds, Glasgow, Chilton and Colindale. This covered over 723,000 square feet, with over 8,500 assets.

### Approach

**John Brownless, LitmusFM, said:** “This was a complex project in a critical environment that was carried out during a lockdown period in the COVID pandemic. We had to ensure the sites could operate as usual without disruption from our surveyors in the interest of public health. Our initial approach was to carry out a desktop evaluation of all of the current available data to assess, at a high level, the locations of the key plant and assets.

“As part of our survey, we inspected and recorded all assets, verifying any O&M BIM data, and recorded any additional or missing assets across the premises.”

*Continued...*

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# Asset Management & Lifecycle Planning

## Project Report



### Outcomes

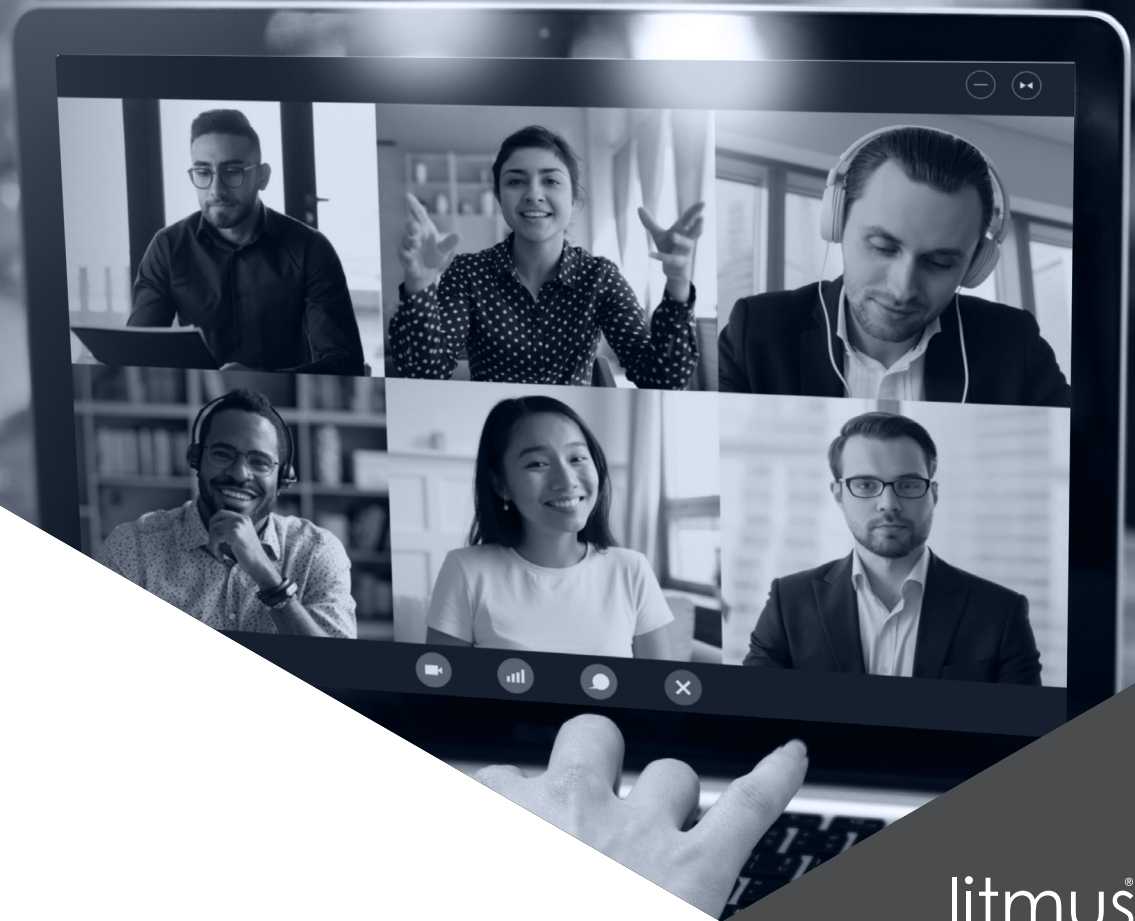
Public Health England were provided with all the asset data on a comprehensive template to ensure capture of all the relevant data and the detailed fields then transferred into the CAFM system on completion.

The template recorded the relevant building, block, floor, room description and room number, followed by the classification of the asset (against the RICS: BCIS Categories – Royal Institution of Chartered Surveyors – Building Cost Information Service), type of asset and an additional description.

▶▶ *Our experienced surveying team used their essential technical and asset knowledge to provide Public Health England with critical asset data. This enabled the engineering teams to produce a robust PPM schedule, which has ensured these important environments operate to an optimum level. It also provides Public Health England with a capital plan for future years.* ◀◀

*Karl Cundill, LitmusFM, Project Lead*

**We're here to help**



## How to get in touch

There are several ways you can get in touch.

- ▶ Call us on **01276 673 880**
- ▶ Email us at **[mailbox@litmuspartnership.co.uk](mailto:mailbox@litmuspartnership.co.uk)**
- ▶ Complete the online contact form **here**.

If you would like to invite colleagues to a group discussion, we are able to arrange online meetings through Microsoft Teams.

### **The Litmus Partnership Limited**

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