

➤ Lightsonic

AffinityWater

openreach.

The UK's First Commercial,
Large-Scale Broadband
Fibre Leak Detection
System

Global Leakage Summit 2026

Lightsonic Introduction



Tommy Langnes
Chief Executive Officer

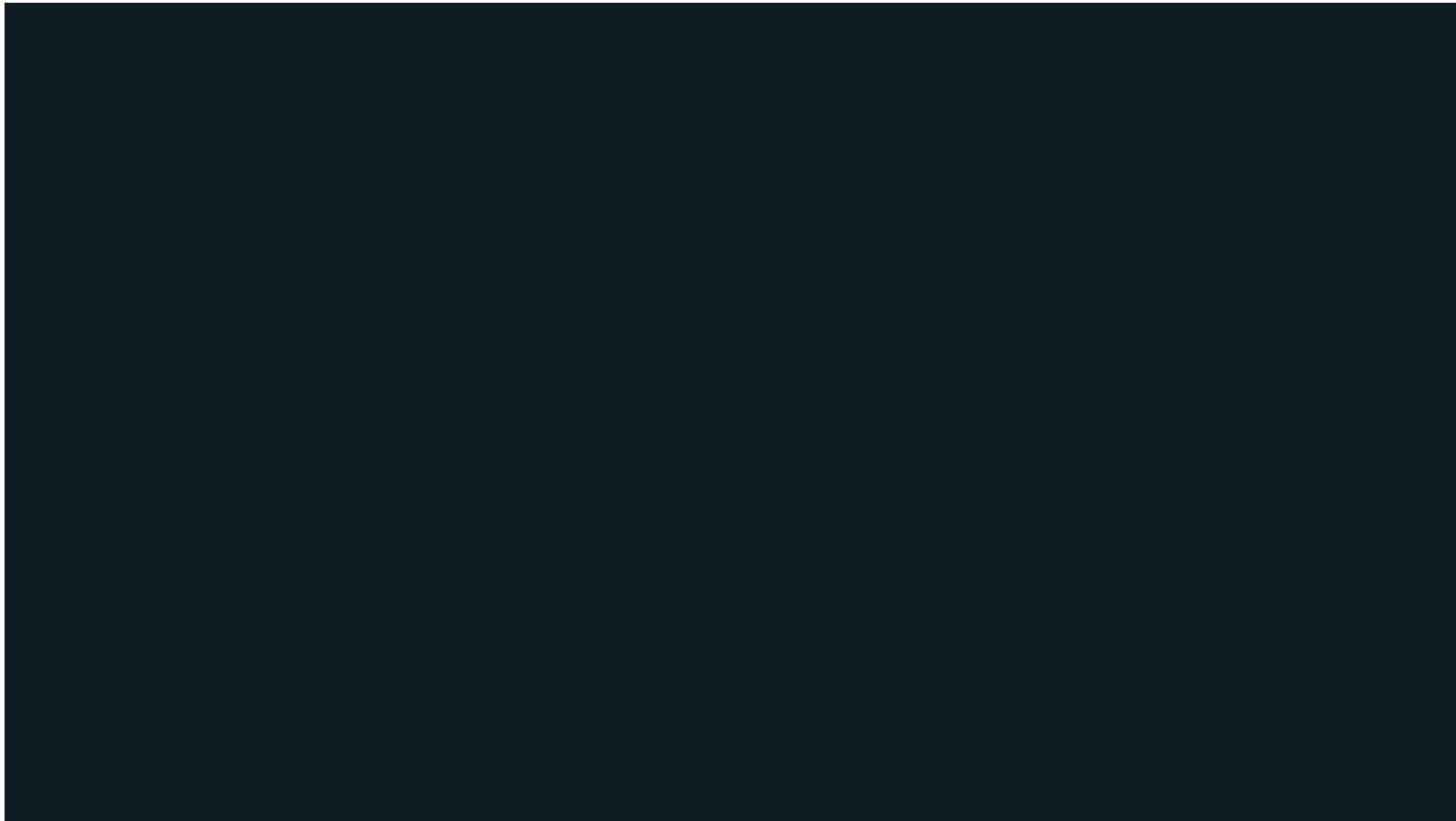


David Weeks
Senior Commercial Manager

What is fibre-optic leak detection?

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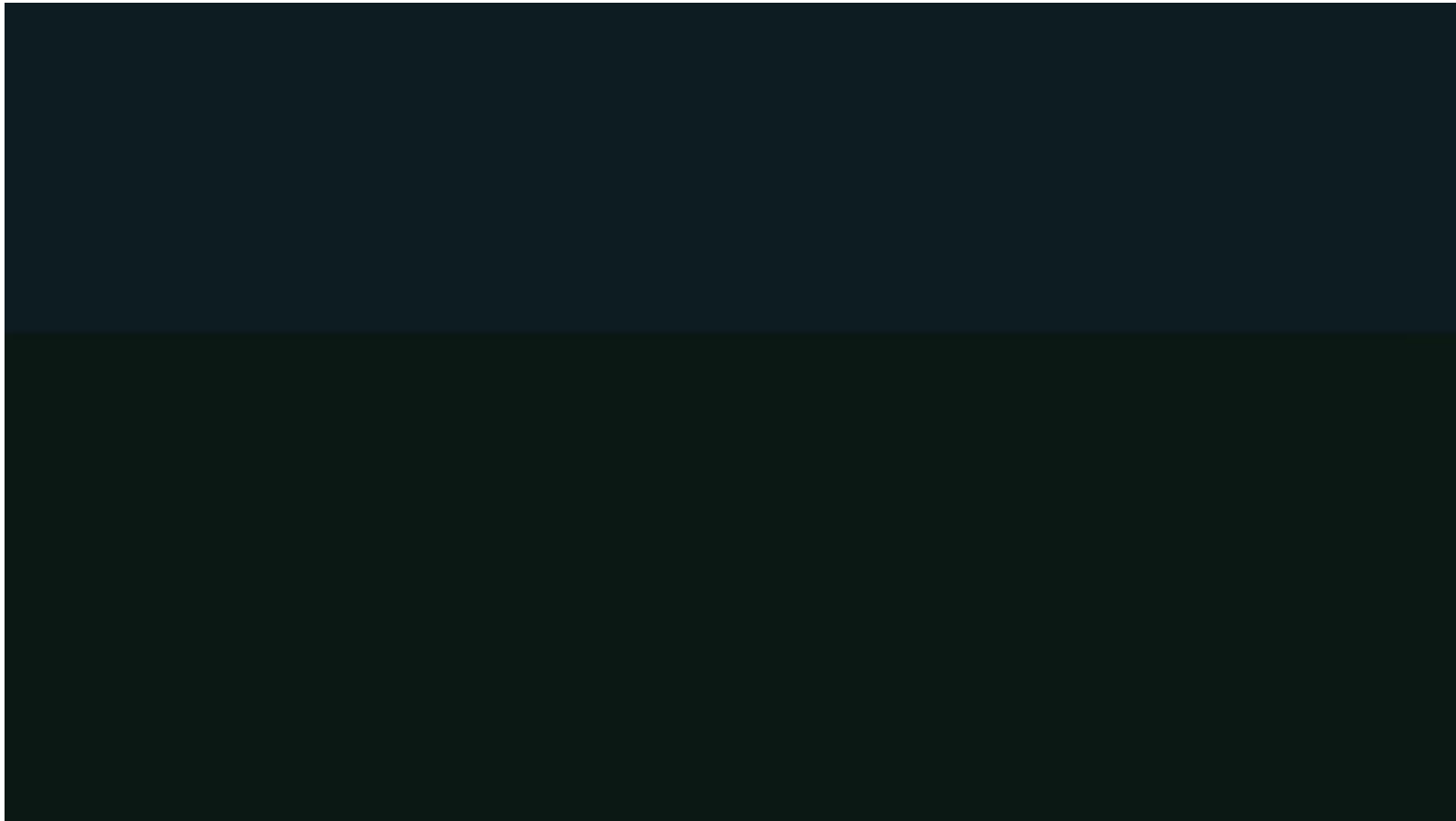
1. Distributed Acoustic Sensing (“DAS”)



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2. DAS for leak detection

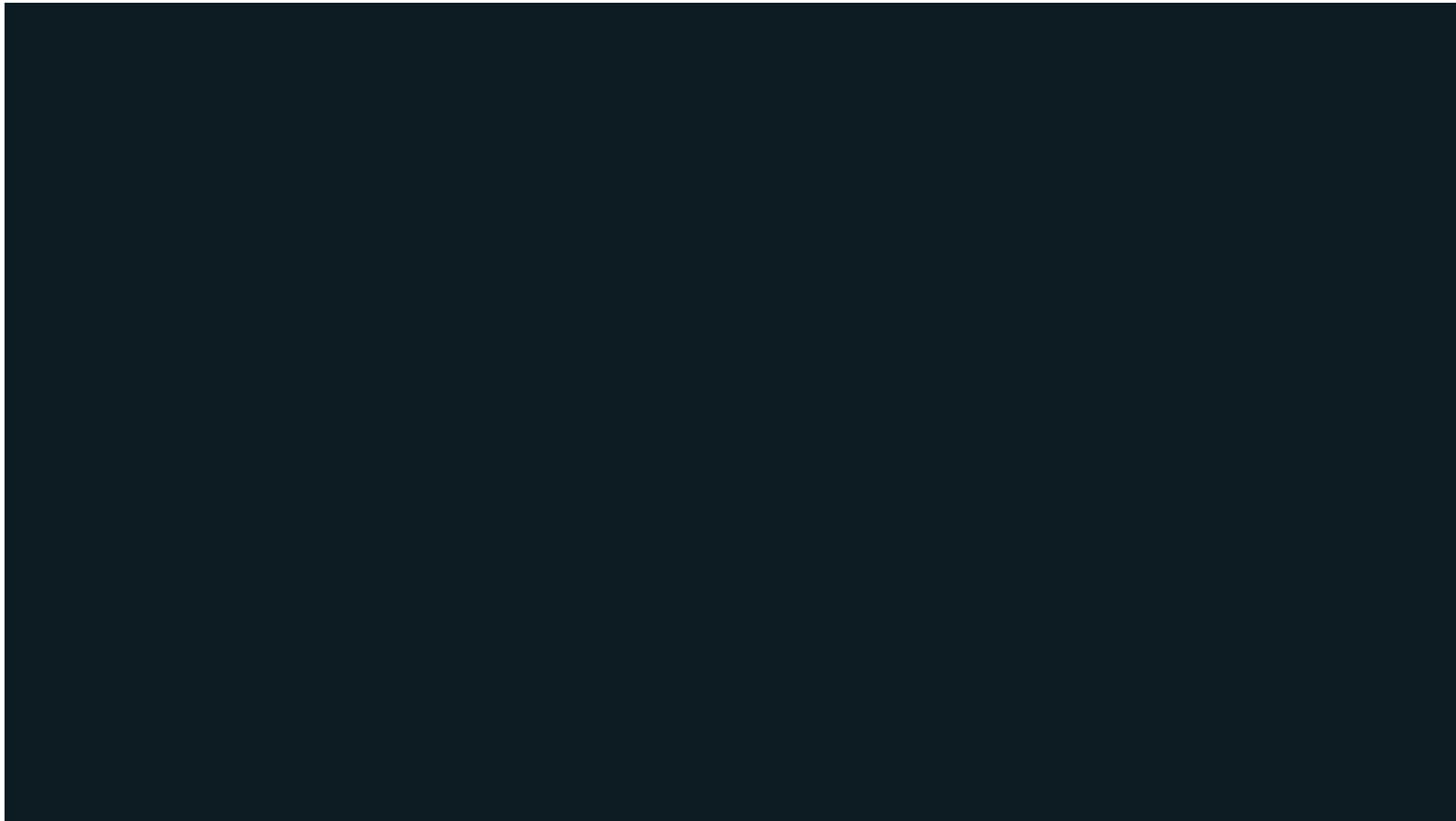


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2. DAS for leak detection

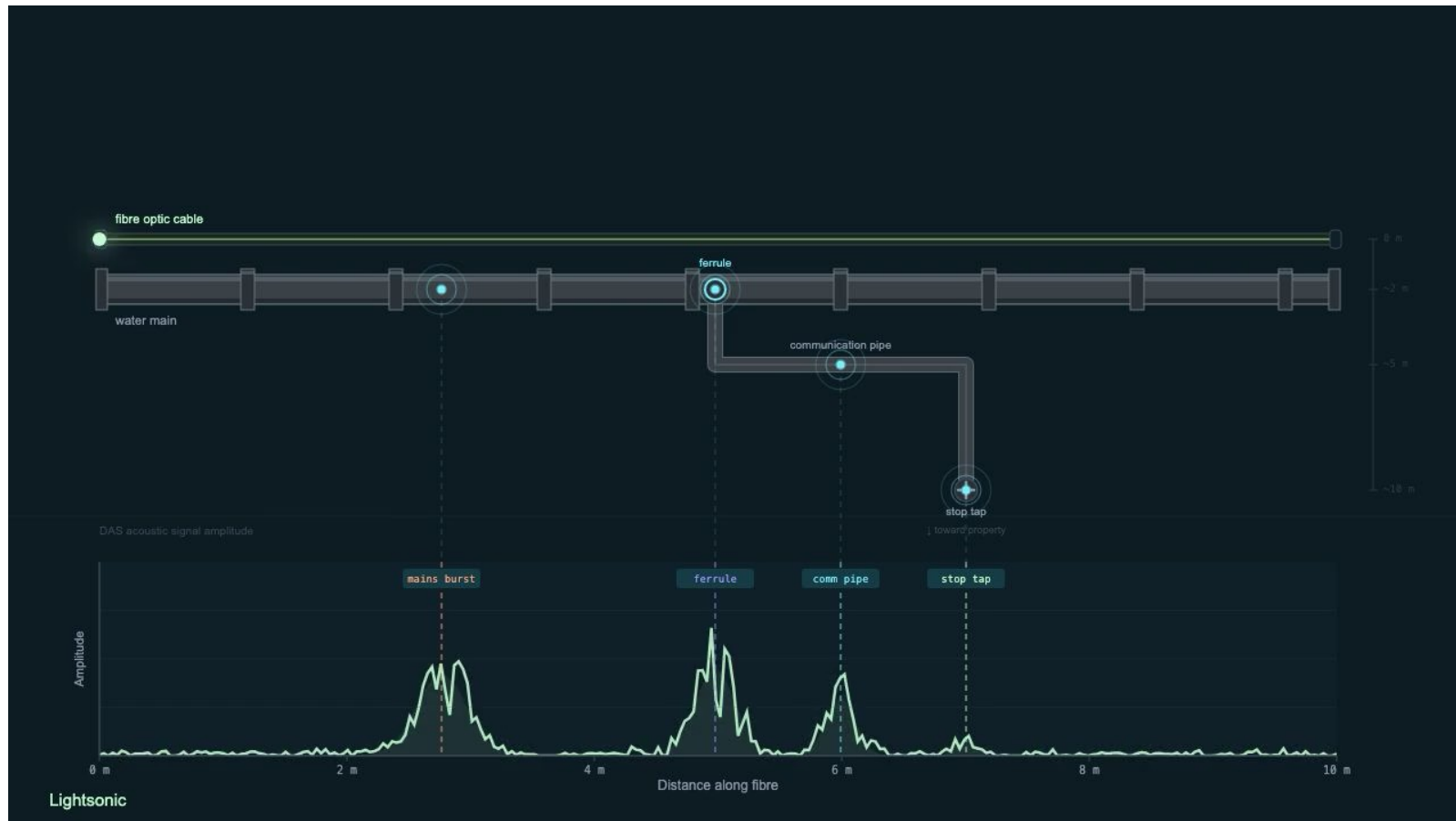


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3. Leak detection at scale

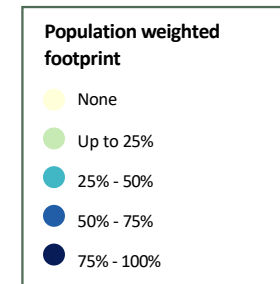


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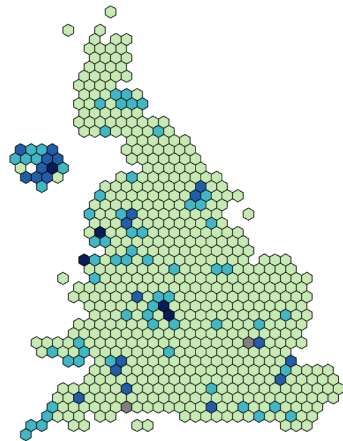
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Leak Detection at Scale – Openreach’s Full Fibre network

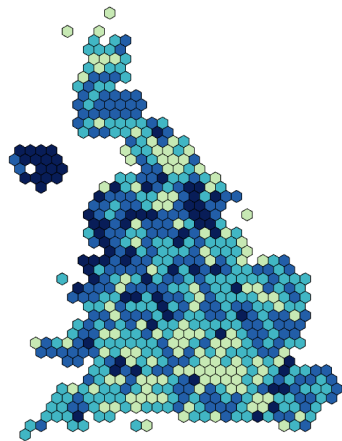


January 2021



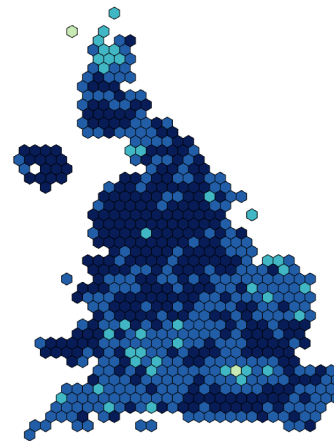
0.8m FTTp premises passed

March 2025



18.1m FTTp premises passed

March 2026



>22m FTTp premises passed

25m

by end of this year

30m

target



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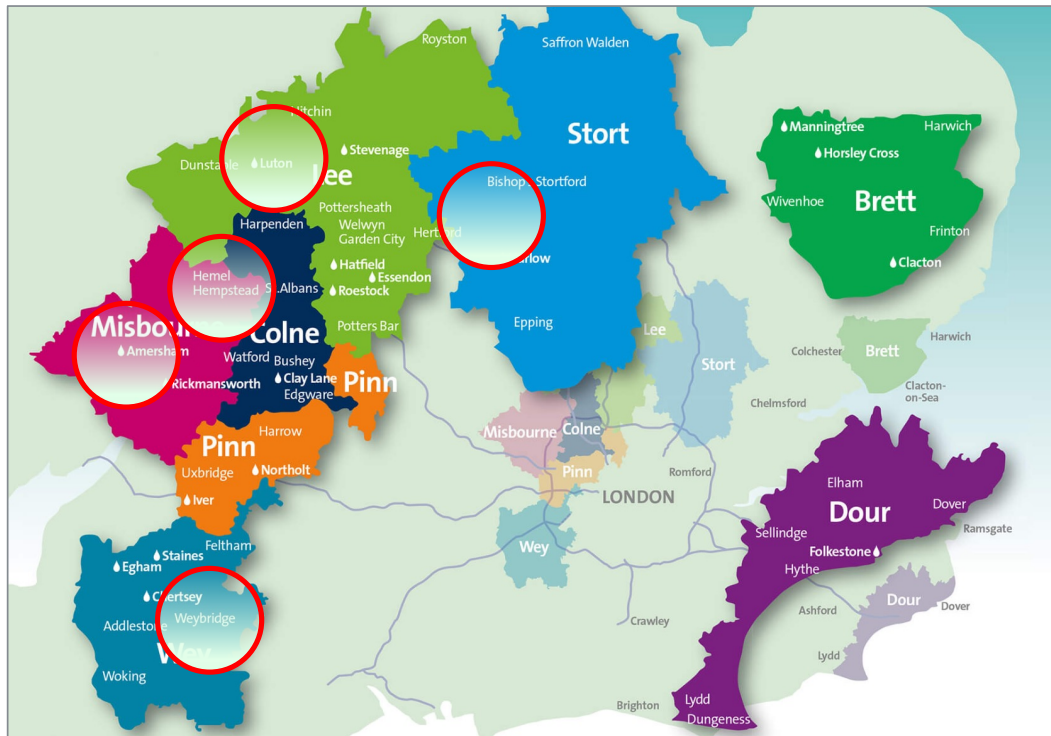
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The Affinity Deployment

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Affinity Water's deployment



Fibre routes
>100 ~600km

Scaled Implementation
Jan 2026

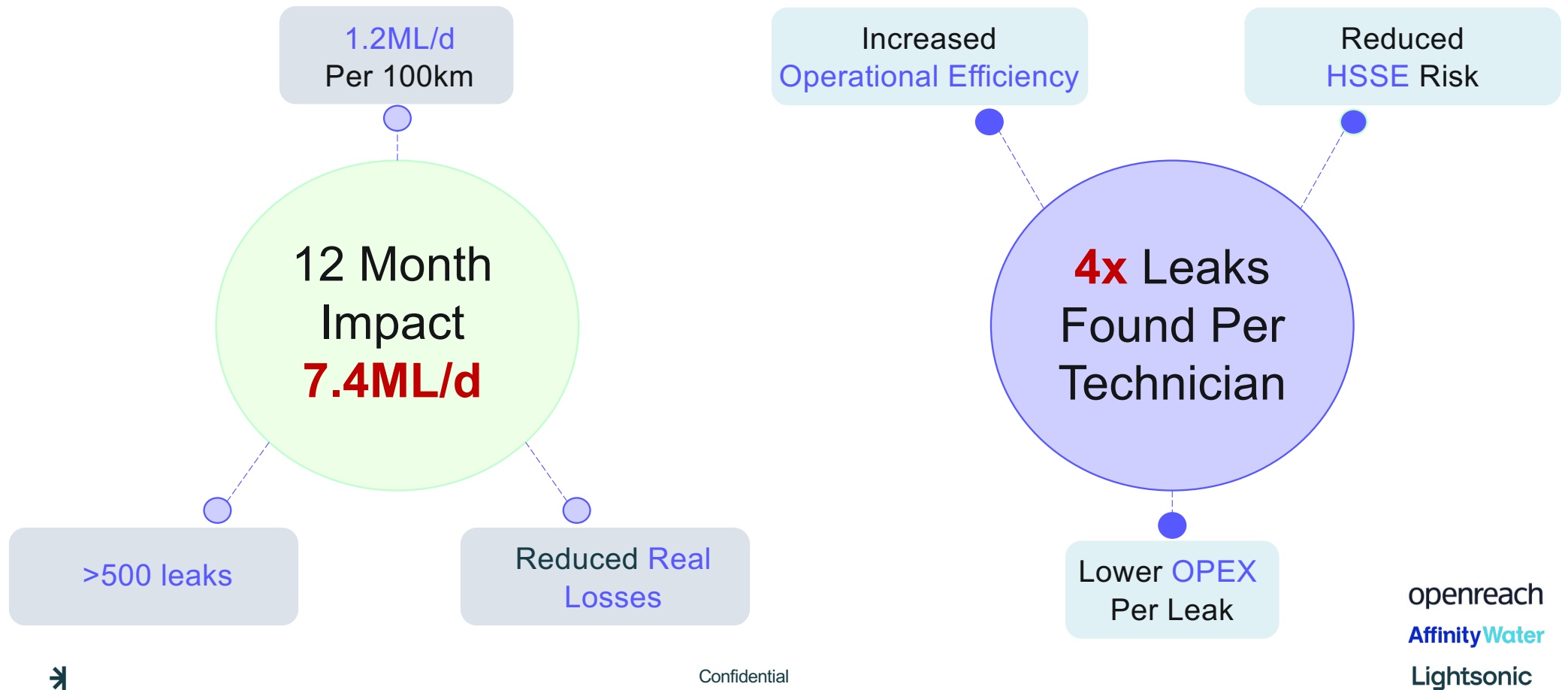
- 5x Locations:
1. Walton on Thames
 2. Hemel Hempstead
 3. Ware
 4. Chesham
 5. Luton

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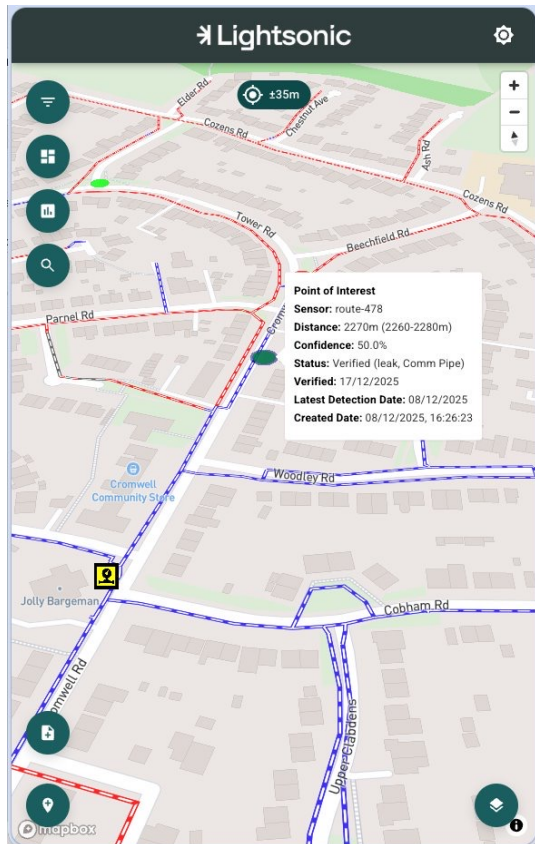


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Impact of intelligent sensing at scale

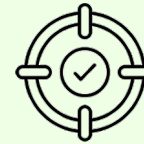


The Lightsonic Solution



Continuous Monitoring

POIs continuously reported



Highly Accurate

Leaks geo-located to $\pm 10\text{m}$



Highly Sensitive

Proactively find background leaks $>0.1 \text{ m}^3/\text{hr}$

Reactively manage large breakouts



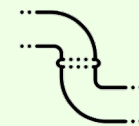
Maintenance Free

No upkeep



Leak Categorisation

Prioritise most severe leaks by confidence level

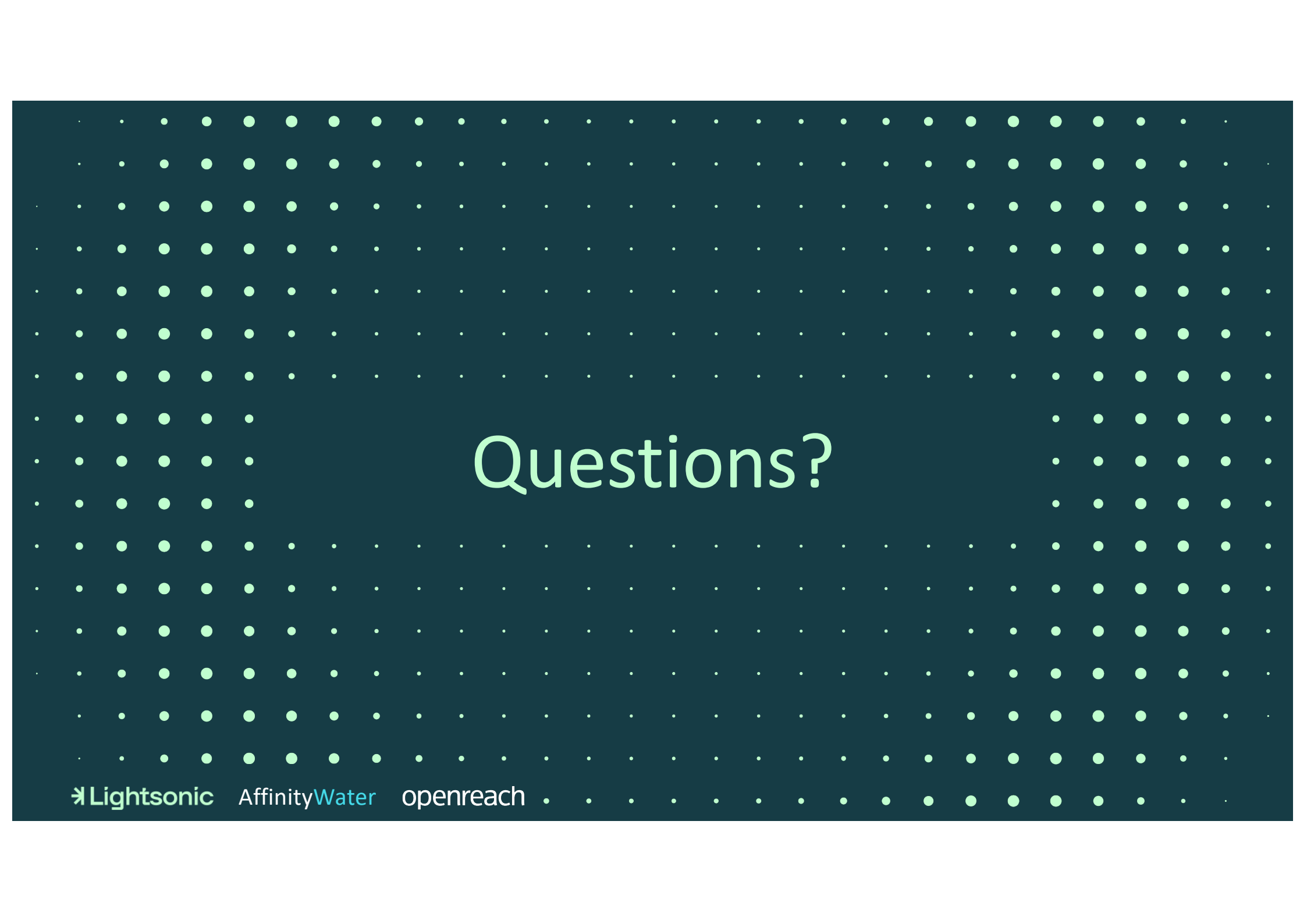


Any Pipe Material



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Questions?

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