



See everything. Focus on what matters.



Predictive Safety Interventions

FYLD, SGN, National Grid, Cadent Gas and Northern Gas Networks



UK Research and Innovation



Meet FYLD

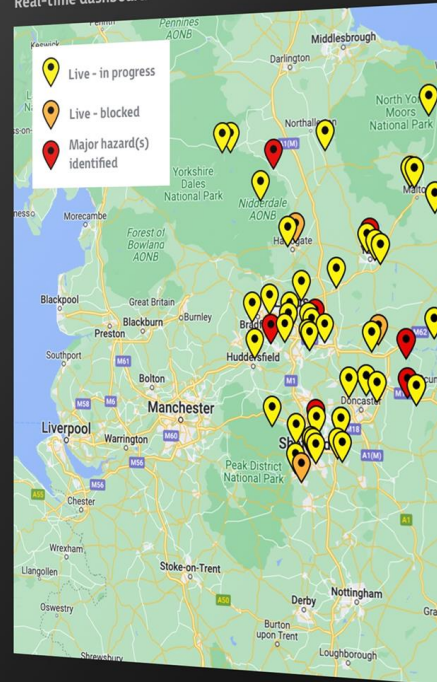
FYLD enables safe, productive and sustainable field operations with dispersed workforces operating in dangerous environments.

- Increasing **availability** through 100% real-time visibility of all fieldwork and AI driven workflows
- Delivering **speed** with **10+% productivity** increases eliminating non-value adding processes
- Improving **quality** enabling jobs to be done **right, first time** – including real time quality assurance led by data

All whilst delivering safety outcomes through an 20% reduction in incidents and injuries

FYLD

Command centre
Real-time dashboard 10:31am



Latest activity



Weekly stats



Project Overview



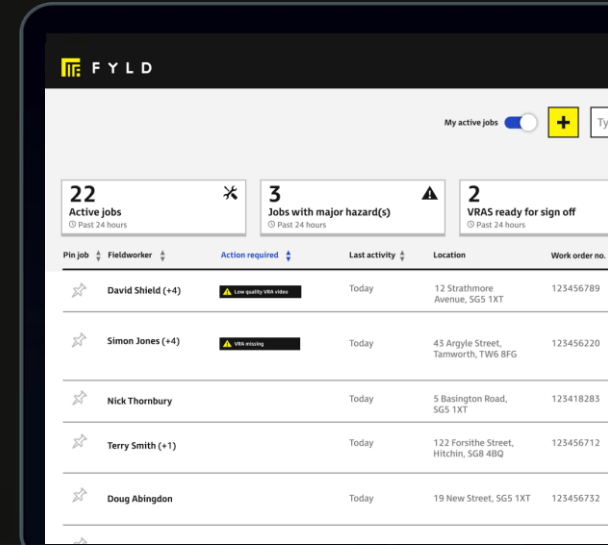
FYLD and SGN are partnering with National Gas, Northern Gas Networks and Cadent Gas to deliver

Funded through OFGEM and UKRI's Strategic Innovation Fund.

- ➔ **Market-leading Artificial Intelligence (AI)** – quantifying live risk on site based on known safety-influencing factors, human factors and historic safety information, imperceptible to humans in real time.
- ➔ **AI-powered intervention in real-time** – delivering tailored intervention in live work activities before a job becomes high risk.
- ➔ **Cost reductions in operating energy networks** - substantially decreasing the number of safety incidents across the sector by predicting specific job risk and employing the use of effective controls at the point of work.



We are revolutionising how safety is managed in high-risk industries, from reactive to predictive



What's the context?

- In 2022, **Ofgem granted £500k funding** for FYLD to explore Predictive Safety Interventions alongside SGN and National Gas.
- The first small-scale trials resulted in a **30% increase in managers interacting** with jobs and nearly **40% increase in managers watching videos** from sites that were perceived to be high-risk
- In October 2023, FYLD alongside SGN, Cadent, Northern Gas and National Gas were selected to continue this work in the first ever **Ofgem SIF Beta Phase**, raising an **additional £1.2m** to do so.

What's the status quo?

- **Risk assessments are a snapshot** at a specific point in time on a job site.
In this next phase, FYLD is working to enable a **dynamic view of risk** across the whole job, from start to finish, concentrating on how risks change.
- **Risk assessments are done by one person or one team.** FYLD is bringing insight from thousands of similar jobs and bringing collective intelligence across the workforce.
- **Risk assessments are typically based on what's in front of you.** FYLD is bringing in a range of additional data including weather, traffic, operational and safety data to identify real-time risks on your specific site.



Predictive Safety
For the fieldworker



Pre-job briefing

→ Job site conditions

What do you need to know about where you're going today, including real-time traffic and location insights?

→ Nearby jobs

What else is going on in the area? Expanding the visibility of nearby or relevant jobs in your area

→ Automated delivery

Information pushed to your device, before you set off



Hazards you can't see

→ Real-time hazard detection

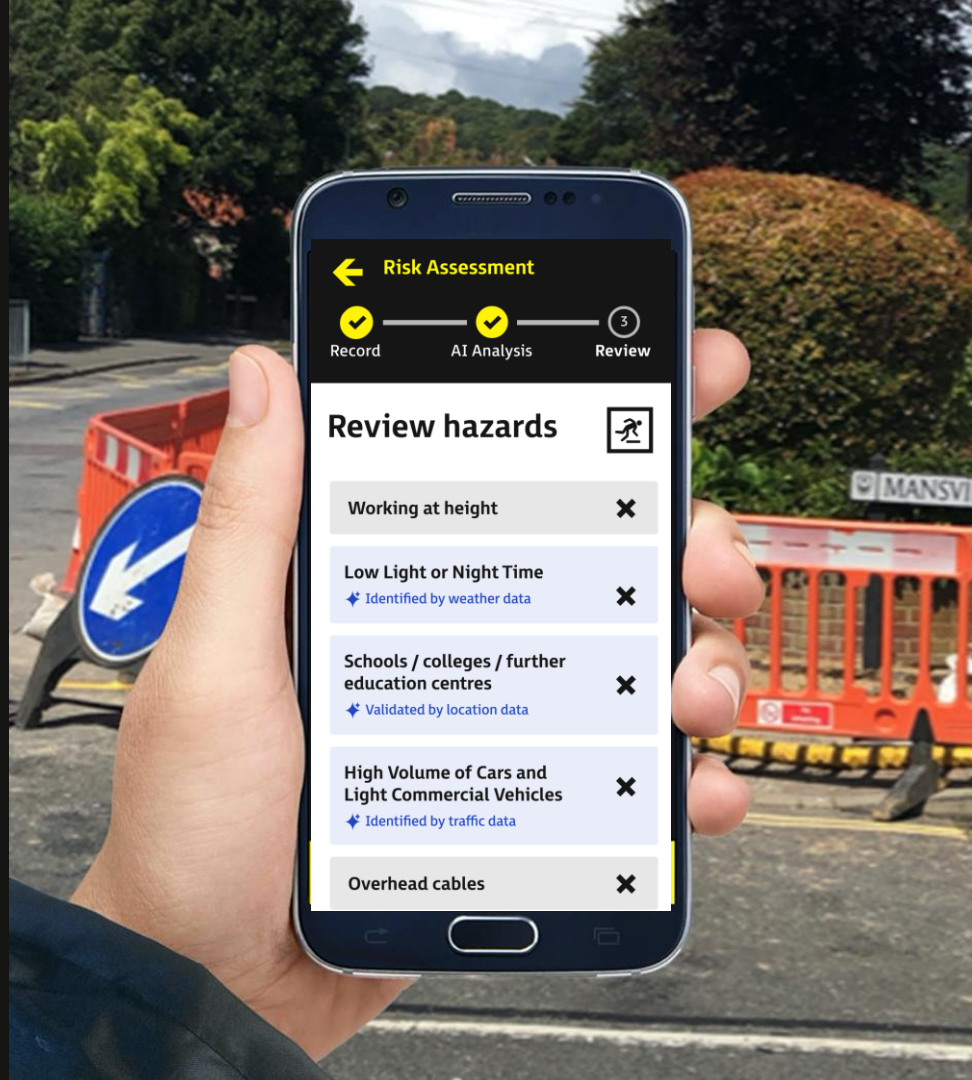
Bringing in 4+ models working in real-time to detect potential hazards, invisible to the naked eye

→ Site visibility checks

Ensuring that everyone can see and hear what's going on at your job site, for better remote visibility

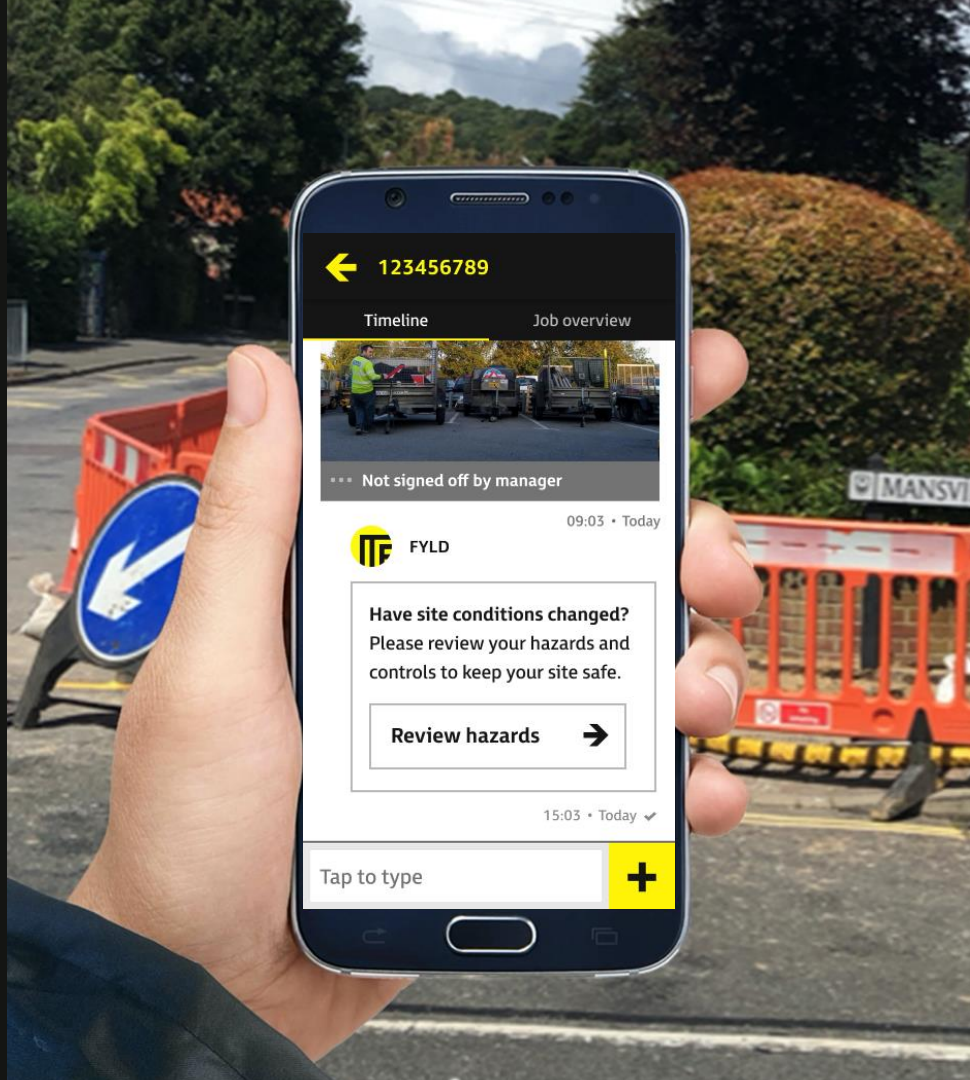
→ Learning from the fieldworker

Verifying hazards that the fieldworker identifies and learning from the hazards and controls applied



Site changes

- ➔ **Changes in site conditions**
Targeted prompts to assess if conditions have changed on site
- ➔ **Hazard & controls review**
Timeline updates to edit hazards and controls on your job, visible to co-workers and your manager
- ➔ **Understand key change factors**
Identify jobs which are more likely to have changes in conditions, for better visibility throughout the course of a job





Predictive Safety
For the manager



Remote Site Visibility

→ Know where the blind spots are

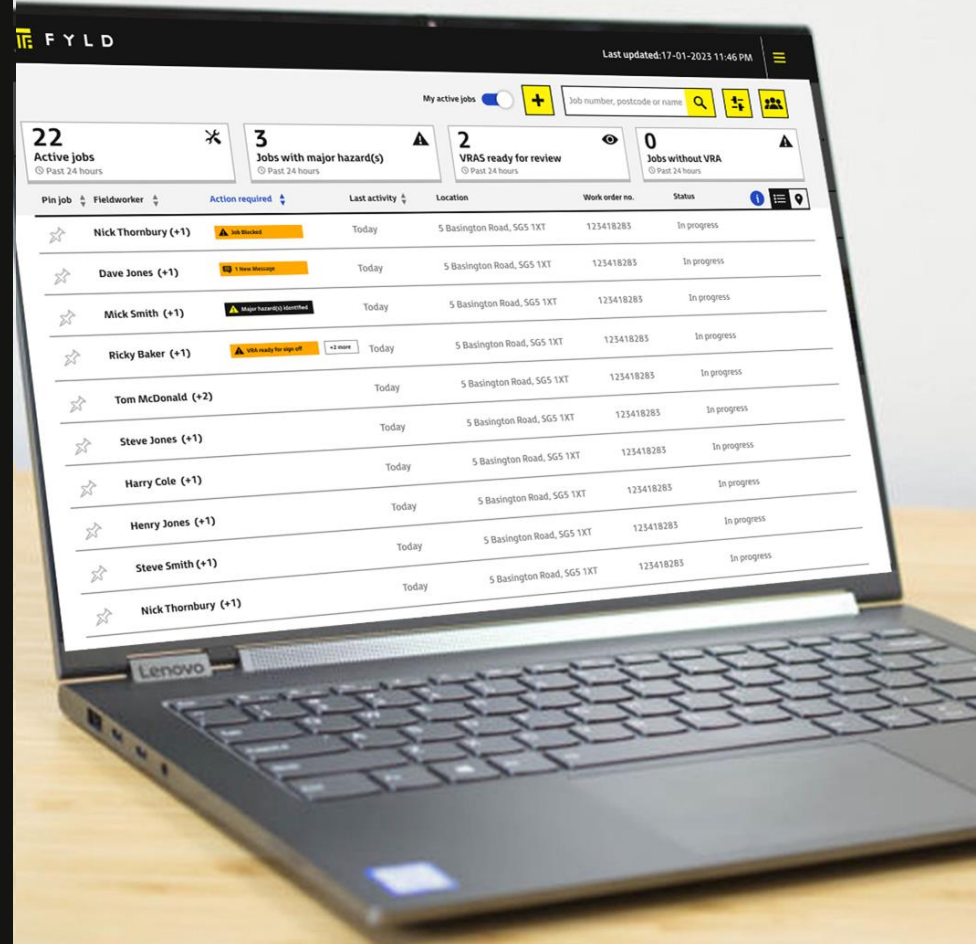
Understand which jobs don't have good visibility on site so you can focus in on what you need to see.

→ Missing Information

Is your team out of signal or is there a critical risk assessment missing? Find out quickly.

→ Focus your attention

See all your jobs in one place with key statuses to ensure jobs that need your attention are prioritised.



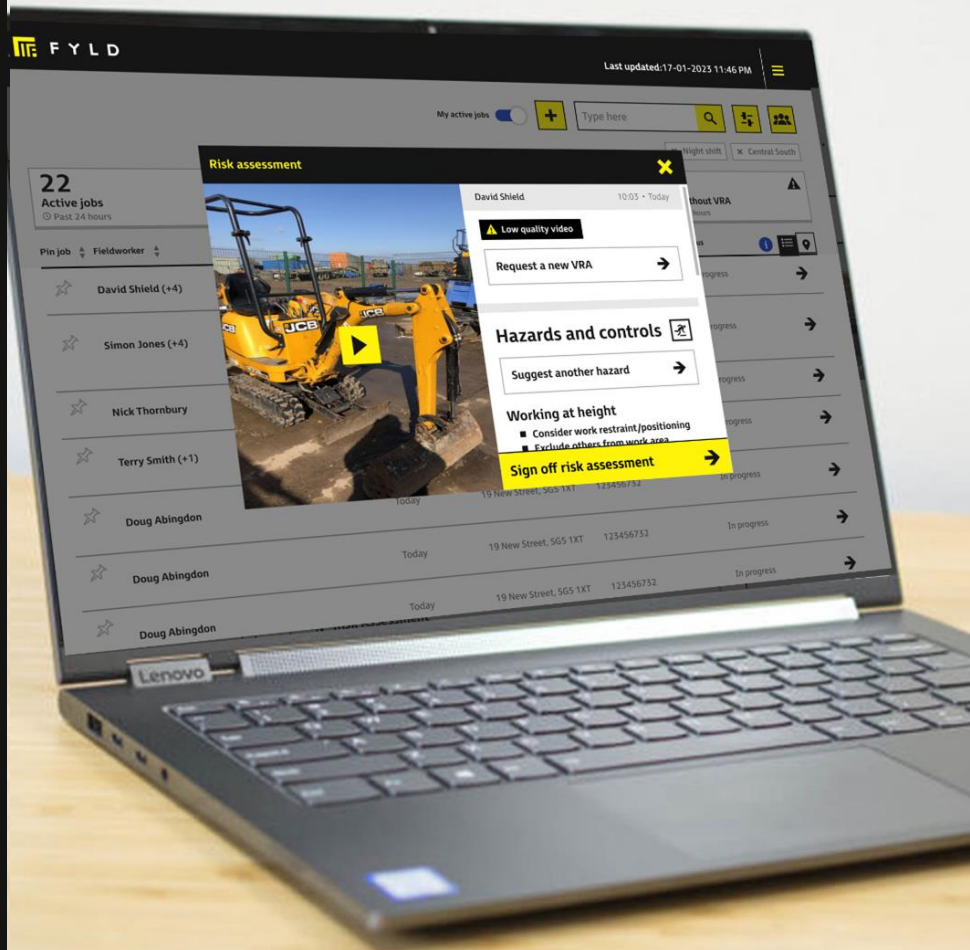
Quick interventions

→ Unblock your team

Which of your teams are waiting on authorisations or sign-off to proceed? Get to them first.

→ Request a new risk assessment

Are you concerned about a low quality risk assessment? Request one directly and get better remote visibility for you and your team.





Predictive Safety What's next?



What's happened during Beta phase?

- The new technology has been trialled by **SGN from May 2024 onwards** and has rolled out across 3 regions, for repair teams to use.
- An internal SGN review in July approved the capability for a **wider rollout**, aiming to be in use across **100% of SGN repair teams** by end of 2024.
- Most of the functionality developed during Beta phase so far is transferable to other customers and applicability has been **tested in control environments** with other FYLD customers.

Key Feedback

*"(The PSI updates) make the job easier and safer. It's useful to know jobs with higher footfall via the site briefing. Adjust how you set up a site with ramps for wheelchairs and buggy. **The new VRA spots hazards that you may have missed, which makes you really stop, think and re-assess.** Weather indicators are very helpful. Heavy rain can really impact excavations filling with water so we can plan to mitigate against it. "*

Fieldworker, Scotland East



*"Have used the site briefing a lot. **Helps you think about the job and hazards that we will be up against at a location.** Helps me decide beforehand if I can use a mole which saves time and makes the job much more efficient.*

Fieldworker, South Region

*"**Suggesting local area hazards like schools being flagged are great.** Often working in built up housing estates and can't see what's behind site or round the corner, so it's useful to know. **Makes me aware that we could be busy at certain times of day so I can plan the site and work accordingly** such as not using the hose at certain times to avoid having a trip hazard."*

Fieldworker, South Region

*"**It's [helping] you anticipate things.** Like being able to see what's been done before and point you in the right direction with relevant information. It's a great training tool for younger engineers coming in"*

Fieldworker, North Region

<https://bit.ly/3Ufm8ID>



Thank you

Want to continue the conversation?
Let's connect.