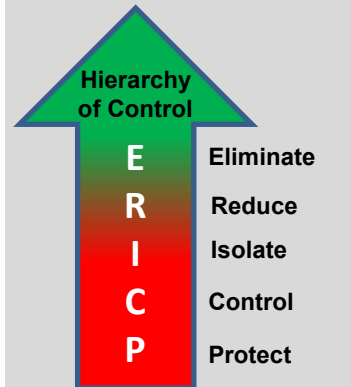


# SAFETY ALERT

## HIGH POTENTIAL CABLE STRIKES



### DETAILS OF THE INCIDENTS

Contractors working for us on construction projects have struck buried HV cables while digging trenches on three separate occasions in the last 6 months. In all three incidents risk assessments and method statements (RAMS), buried services plans and Permits to Work (PtW)) were in place. On the first occasion the scan with a cable avoidance tool (CAT) wasn't sufficient for the ground conditions and didn't identify the presence of the cable, in the other two cases, cables were identified by the CAT scans and were initially located by hand digging with insulated tools; however, in one case the CAT scan had identified an earthing cable, but not the HV cable below, which was struck when the trenching works continued with an excavator. In the second case, the operator decided to expose the cable at a second point using his machine, striking the cable, in contravention of the RAMS and PtW.

### KEY FINDINGS

Safe Systems	The contractors had suitable RAMS and Permits to Work; however, they were not readily available / communicated in one of the incidents, where the operator chose to deviate from safe working practices to save time and effort.
Cable plans	Buried service plans were available but were not suitably updated in all instances.
CAT Scanning	CAT scanning conducted improperly.
Permit to Work	High Risk Permit does not cover breaking ground.
Communication	Lessons learned from the incidents was not fully communicated by the contractors.

### HOW COULD THEY HAVE BEEN AVOIDED

- Correct use of Cable Avoidance Tools, in one case the tool was only used in "Power" mode, restricting its sensitivity.
- Compliance with RAMS, exposing cables at crossing points by hand
- More explicit "Permit to Dig" process with none working supervision in place.
- Additional heavier duty marking of buried services during installation.

### KEY REVIEW POINTS

- Are good practices followed when installing new buried services, with 'Tile Tape' utility marking as standard for all services, accurate (DGPS) survey control, and updated records?
- Are excavations for trenches, etc. controlled under a specific Permit to Work / Permit to Dig?
- Are CAT scans carried out by specifically trained and competent personnel in accordance with good practices?
- Do we ensure close and effective direct supervision of works near buried services and other high-risk tasks?

### HSE Resources

#### Guidance:

Electricity –  
Underground Cables  
<https://www.hse.gov.uk/construction/safetytopics/underground.htm>



#### Video:

Workers engulfed in flames after cable strike  
<https://youtu.be/pLTDVceFFCo>



### Look after yourself and each other

Don't let anyone act unsafely, always stop unsafe practices.

### Tools and Equipment

Use the right, well maintained, tools/ equipment for the job. Never make do.

### Safe Systems

Follow safe systems of work, site rules, signage and traffic signals.



STOP THINK ACT