



FREE GUIDE

Support for fibre networks.

Dark fibre carries huge capacity. So when it breaks, it matters — and you want it **found and fixed fast**. Here's how SICOM keeps a network running.

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Innovation in connectivity infrastructure

Fibre-optic cables, WiFi and private 5G now carry all of our communications — voice, data and video, the cloud apps and storage we rely on, the CCTV and access controls that secure a building, and the systems that make a building smarter and cheaper to run. SICOM works across all of it.



Consultancy

Helping you create customer-friendly developments and identify connectivity issues early.



Design

Designing the infrastructure and complete communications solutions to fit the site.



Construction

Ducts, chambers and aerials — including wayleaves, civils, permits and planning.



Installation

Cables, termination, testing and commissioning of the network.



Solutions

Integrated dark fibre, high-bandwidth networks and data-centre infrastructure.



Support

Long-term support for networks: maintenance, emergency repair, asset recording, utilisation and mapping.



Recording & mapping

A live record of where every fibre runs and how it's used — so a fault has a location, not a guess.



Sensing & security

The same monitoring that finds faults can detect tapping, moisture and tampering.

When fibre breaks, **finding it is half the job**

Dark fibre networks have huge capacity and flexibility, so when they break it's important they're fixed quickly.

Problems range from a **trapped or bent patch lead**, through inadvertent damage like bending a cable, to **serious fibre cuts** caused by a third party somewhere along the route — a digger that didn't know the cable was there.

The hard part is rarely the repair. It's working out **where** the fault is, on a route that might run for miles through chambers, joints and underground.

SICOM'S SUPPORT SERVICE INCLUDES

- **Detailed mapping and recording** of fibre routes and locations.
- **On-call engineers** to find the location of the fault.
- **Civils teams** for external investigation and repair.
- **Reinstatement** of the service.

The mapping isn't an extra. It's the thing that turns “the line's down somewhere” into “the fault is in chamber 14” — and sends the right team to the right place first time.

RADAR™ Real-time Automatic Detection and Reporting

RADAR™ is SICOM's out-of-band monitoring device. It sits in your comms room or data centre and checks the condition of every fibre in your network **every few seconds**.

It compares the losses along each fibre against a fingerprint taken at installation. The moment something changes, it tells us — an **attenuation event** (probably a fibre bend, trapped lead or poorly seated optic) or a full **fibre break**.

It links to a mapping system installed when we take over support of the network, so the alert doesn't just say **something** is wrong — it tells us **where**.

Because it's out-of-band, it watches the fibre itself rather than the traffic on it. It sees the problem coming before it takes the service down.

24/7 automatic monitoring

Isolate root cause – fibre or equipment

Protect against tapping & intrusion

Reduce time-to-repair

Secure enclosures

Faster to find. **Faster to fix.**

- 1** We can work with your IT team to **confirm whether a fault is in the fibre or not** — before anyone starts pulling things apart.
- 2** We identify the **location of the issue in seconds**. Often on-site staff can rectify it in minutes.
- 3** If the fault is between buildings, we can see whether it's in a **chamber, joint or underground** and dispatch the appropriate repair team.
- 4** The result is **faster identification of faults and faster repairs** — less downtime, less guesswork, fewer wasted call-outs.

Total Support is provided **free of charge on larger networks** with long-term support agreements. If you're running fibre at that scale, it's worth a conversation.

The same fibre can **stand guard**

RADAR™ doesn't only watch for faults. The same Real-time Automatic Detection and Reporting can drive sensors on the fibre itself — and feed straight into your NOC for alarms and reporting.



Fibre tapping

A clip-on coupler shows up as an attenuation event. The alarm is raised automatically — with the location — so an attempt to tap the line gives itself away.



Moisture detection

Multiple detectors on a single fibre — in basements, under raised floors, in lofts. Completely passive: no power required at the sensor.



Door & lid opening

Cabinet door or chamber lid opening detection. Immune to jamming and EMI, multiple sensors on one fibre — each with its location.

All of it can be integrated into NOC systems for alarms and reporting — one fibre, doing the monitoring and the sensing at the same time.

— TALK TO SICOM

Already running fibre? Let's keep it running.

Whether you're building a new network or you've inherited one with no records, we can map it, monitor it and stand behind it.

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