Site Radio Selection Worksheet

A two-page guide for choosing radios for a construction project. Fill it in for one site to work out which radio type fits, where coverage needs checking, which channels you need and what to ask suppliers for.

How to use it. Complete section 1 in the office, then work through the flow in section 2. Do the coverage walk in section 3 on site with test handsets before you commit to anything, and repeat it as the build goes up.

Project _____ Site address _____

Start and finish dates _____ Completed by and date _____

1 Your site

Tick one box on each row.

Sites, yards or offices that need to talk to each other	☐ Just this site	☐ Two or three	☐ Four or more
Size of this site	☐ Small and compact	☐ Large single site	☐ Spread over a wide area
Basements, cores, plant rooms or other enclosed areas	☐ None	☐ Some	☐ Many
Tower or mobile cranes on site	☐ None	☐ One	☐ Two or more
People working alone or out of hours	☐ No	☐ Sometimes	☐ Regularly
Project length	☐ Under 3 months	☐ 3 to 12 months	☐ Over 12 months
Peak number of people needing a radio	☐ Under 10	☐ 10 to 50	☐ Over 50

2 Which radio fits

Follow the questions in order. Your answers from section 1 and the coverage walk in section 3 give you the answer.

QUESTION A

Do two or more sites, or the office, need to talk to each other by radio?

- ☐ **Yes**, go to question C
- ☐ **No**, go to question B

QUESTION B

Is the site small, with a short and simple job?

- ☐ **Yes**, PMR446 is likely to be enough
- ☐ **No**, look at licensed DMR, or PoC if you want GPS and central oversight

QUESTION C

Did the coverage walk find areas with weak or no mobile signal?

- ☐ **No**, Push to Talk over Cellular (PoC)
- ☐ **Yes**, go to question D

QUESTION D

Can WiFi or a router with cable repeaters cover those areas?

- ☐ **Yes**, PoC with WiFi in the dead spots
- ☐ **No**, multi-mode radios running DMR and PoC

PMR446

Licence-free and low cost. Short range, shared channels and no central management.

No licence needed

Licensed DMR

Tougher, louder, more range. Repeaters may be needed for tall or large sites.

Ofcom licence, from £75 for 5 years

PoC

Works anywhere with mobile signal or WiFi. Live GPS and a dispatcher view.

No spectrum licence, monthly subscription

Multi-mode

DMR and PoC on one handset. PoC for reach, DMR where signal drops.

Ofcom licence for the DMR side

Crane lifts are separate. Whichever radios you choose, each crane needs its own dedicated channel for the operator and slinger or signaller, set out in the lift plan by the appointed person. Don't use general site talkgroups for lifts. See CPA TIN 017 and BS 7121.

Licence fees from Ofcom business radio guidance, checked November 2026

3 Coverage walk

Test handsets in each area, on each network or radio you're considering. National coverage figures describe outdoor landmass, not the inside of a basement or a concrete core, so the only reliable answer comes from testing on your own site. Recheck after major stages, for example once the cladding goes on.

Location	Network or radio tested	Signal	Recheck date	Fallback needed
Compound and cabins		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Gate and unloading area		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Basement levels		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Lift and stair cores		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Plant rooms and risers		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Top working floor		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Far boundary of the site		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No
Other		☐ Good ☐ Weak ☐ None		☐ Yes ☐ No

Where you've ticked "Fallback needed", the usual options are WiFi from a router, cable repeaters, or DMR on a multi-mode radio.

4 Channels you'll need

Keep talkgroups few and simple. Managers can join several groups so they hear what's going on without anyone ringing them.

Talkgroup or channel	Who's in it	Who else listens
General site		
Logistics and gate		
Safety and emergencies		
Crane 1 (dedicated)	Operator and slinger or signaller only	Appointed person
Crane 2 (dedicated)	Operator and slinger or signaller only	Appointed person
Other		

5 Features and buying route

- ☐ Man down alarm
- ☐ Lone worker check-in
- ☐ Emergency button
- ☐ Live GPS location
- ☐ Dispatcher or site office view
- ☐ Control over apps and numbers on each handset
- ☐ Call recording
- ☐ Earpieces that work with ear defenders and hard hats
- ☐ IP rating for dust, rain and drops
- ☐ Battery that lasts a full shift

Your decision	
Radio type from section 2	
Number of handsets	
Ofcom licence needed	☐ Yes ☐ No ☐ Not sure
Buy or hire	☐ Buy ☐ Hire ☐ Not sure
Hire period, if hiring	
Budget	

Questions to ask any supplier

- Can we trial handsets on our own site before buying or hiring?
- What happens in the areas where we found no signal?
- What's included in the price, and is there a licence or subscription on top?
- How quickly can handsets be added or removed as the workforce changes?
- Who sets up the talkgroups and crane channels?