



COMMUNITY INFORMATION SHEET • CONNECTIVITY

How connectivity shapes digital infrastructure

Why data centres follow fibre — and what that means for regions that want them

The key idea: data centres follow fibre like farms follow water

Ask why data centres cluster where they do and the answer is networks as much as power: a serious facility needs **multiple, physically separate fibre routes** to the outside world. Power can be built; water can be piped; but a region with only one fibre path, one backhoe strike from silence, cannot host serious digital infrastructure. Connectivity isn't an accessory to the data-centre story. It's a precondition.

Latency decides what goes where

Different computing tolerates different delay. Interactive work (payments, gaming, video calls) wants to be near users, anchoring big facilities to cities. But **AI training and batch processing barely notice distance**: they can run wherever power is clean and cheap, so long as fat fibre pipes connect them. That is the opening for regions like Tasmania. The workload mix arriving with the AI boom is exactly the kind that can live at the end of a good cable.

The design consequences

Network thinking shapes the facility itself: route diversity (two entry points on opposite sides of the site, fed from different streets), on-site meet-me rooms where carriers interconnect and increasingly **edge sites**, small facilities near towns that keep local traffic local. It also shapes the map: interconnectors and subsea cables that bundle fibre (sheet 03) create new places where digital infrastructure becomes possible.

What this means for communities

When a data centre is proposed, its network story tells you how serious it is: real projects secure diverse fibre before they announce. And when a fibre or cable project is proposed, it may be the quiet first chapter of a bigger digital-infrastructure story for your region. That's worth asking about openly, so the whole picture is planned (and its benefits shared) rather than arriving one surprise at a time.

What good practice looks like

- Proponents show their connectivity plan: routes, diversity and who else can use them.
- Regional fibre built for one project engineered with capacity for the community and others.
- Councils ask for the full picture: is this cable/DC/substation part of a larger program?
- Latency and workload claims explained in plain English, not used to dazzle.

Questions to ask

How many physically separate fibre routes serve this site and where do they run? Can local businesses and networks connect to infrastructure built for the project? What further development does this project make possible and is that being planned with us?

Want to know more? DII's data-centre series explains siting and planning; sheets 02–06 of this series cover the cables and networks themselves. This sheet is general information, not legal or planning advice; a specific proposal is confirmed by qualified assessment.