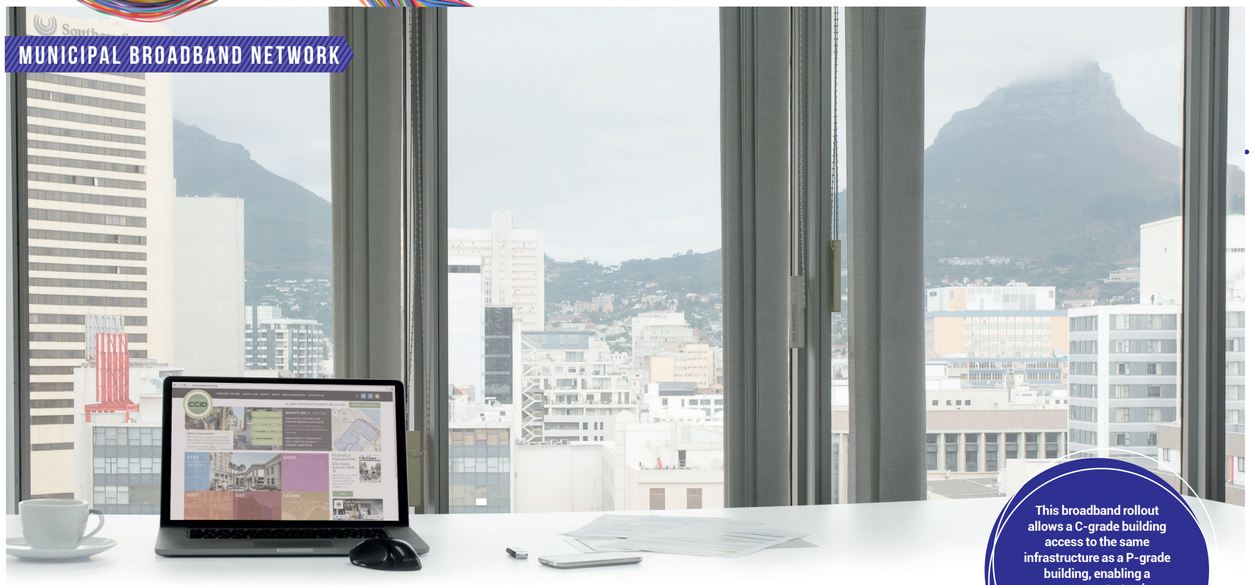
MUNICIPAL BROADBAND NETWORK

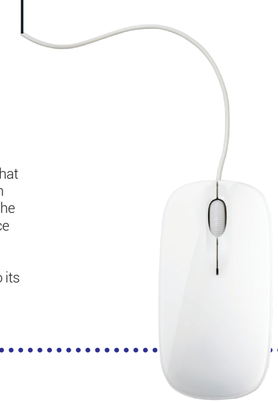


This broadband rollout allows a C-grade building access to the same infrastructure as a P-grade building, enabling a one-person startup in a coworking space to have equal footing with a large commercial operation.

LIGHTNING-FAST INTERNET

The City of Cape Town's rollout of its fibre-optic Municipal Broadband Network to its own facilities has become robust enough for leveraging by the private sector. As a result, it has begun to look towards the provision of "last-kilometre" cables from its network to private buildings in business areas across the metropole. Here are the elements that make the system work.

You know those pesky trenches being dug around town? Well, there may be a few more to come, but the results will be totally worth the hassle! The City of Cape Town's Municipal Broadband Network is positioning Cape Town light years ahead of other metros. In selecting the CBD for a pilot project, the City is looking to install a cable to every building in the area so that a request for a fibre pair allocation can immediately be provided (see "using the City's cables" far right). This will reduce the fulfilment time for a new service and give tenants/owners a choice of service providers, as well as access to its connection speed of 1Gbps.



TYPICAL BUILDING CONNECTION SPEED:
1Gbps

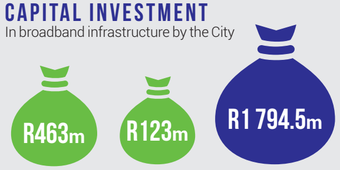
COMMERCIAL DATA CENTRES IN THE CBD

Several commercial data centre operators located in the CBD offer fibre-based services (including those in the graphic below). The Bree Street building occupied by Internet Solutions and RSAWEB also houses the Cape Town Internet Exchange (CINX), where network operators are able to exchange traffic on a peer basis. Other operators offering fibre-based services in the CBD include eNetworks, Neotel and Telkom.

1. Cybersmart (Canterbury Street)
2. Internet Solutions (Bree Street)
3. MTN (Harrington Street)
4. RSAWEB (Bree Street)
5. Vanilla Networks (Buitengracht)
6. Vodacom (Martin Hammerschlag Way)

> "THE CCID'S ROLE IN THE PROJECT AT THIS STAGE IS FACILITATING BETWEEN THE CITY'S TELECOMMUNICATIONS BRANCH AND PRIVATE PROPERTY OWNERS."

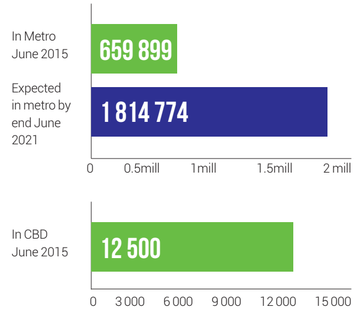
CAPITAL INVESTMENT
In broadband infrastructure by the City



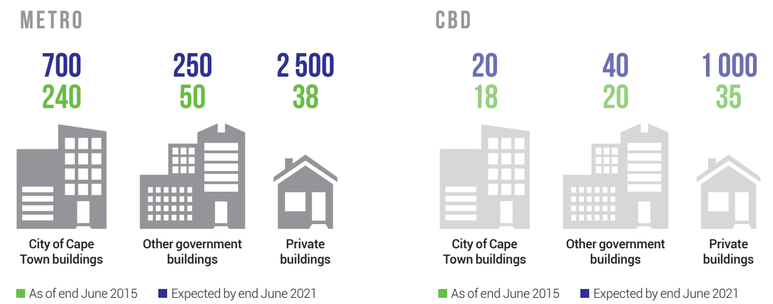
WHAT IS A SWITCHING FACILITY?

A switching facility works like a telephone exchange for data. It's the central point where all internet traffic is routed.

LENGTH OF CABLES IN METRES



TOTAL NUMBER OF BUILDINGS CONNECTED TO THE CITY'S BROADBAND INFRASTRUCTURE



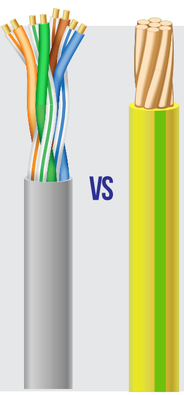
USING THE CITY'S CABLES

Buildings in the CBD can be connected to the City's network infrastructure once a service provider asks the Telecommunications Branch to lease an access fibre to it and the building owner has given permission. The process is as follows.

1. A tenant of a building asks its service provider for a fibre-based broadband service.
2. The service provider (which must have an ECS or ECNS license) requests the City to lease a fibre between the building and a switching centre. (The City installs the cable if one is not already installed.)
3. The City allocates and leases a fibre pair on the cable to the service provider.
4. The service provider uses the fibre pair to deliver a broadband service. The service provider recovers the cost of the lease as part of its charge for the broadband service.

WHAT IS A FIBRE-OPTIC CABLE?

A fibre-optic cable is made up of thin strands of glass or plastic known as optical fibres. Each strand is less than a 10th as thick as a human hair. Fibre-optic cables carry information between two places using light-based technology. Information is sent through the strands in the form of light beams.



FIBRE-OPTIC CABLES HAVE THREE ADVANTAGES OVER COPPER CABLES:

1. Less attenuation (signal loss);
2. No interference;
3. Higher bandwidth (more data in cables of the same diameter).

(Source: www.explainthatstuff.com)