



REPORT TO: CORPORATE SERVICES PORTFOLIO COMMITTEE

1. ITEM NUMBER: CRSPC 09/06/20

2. SUBJECT

FEEDBACK ON THE STATUS OF THE BROADBAND INFRASTRUCTURE PROJECT

2. ONDERWERP

TERUGVOERING OOR DIE STATUS VAN DIE PROJEK VIR BREËBAND-INFRASTRUKTUUR

2. ISIHLOKO

INGXELO NGENKQUBELA YEPROJEKTHI YAMAZA OQHAGAMSHELWANO (BROADBAND)

3. DELEGATED AUTHORITY

In terms of delegation

This report is FOR NOTING BY

- Committee name** : Corporate Services Portfolio Committee
- The Executive Mayor together with the Mayoral Committee (MAYCO)
- Council

4. DISCUSSION

This report is about the status and progress of the Broadband Infrastructure Project.

1. Background

The Broadband Infrastructure Project is a capital project for the construction of the Broadband Network. Construction started in 2009, and was scheduled to be complete by July 2021. The number of City buildings planned to be connected by then was 572.

In August 2018, the Executive Director for Corporate Services commissioned a review of the Broadband Infrastructure Project. The review was undertaken by *PricewaterhouseCoopers* (PwC), a consulting firm. Their initial report resulted in a recommendation by the Executive Council on 6 December 2018 in terms of SMC 05/12/18 that the Project should be “paused” (in effect, halted) until a new business plan for the Project has been approved by Council. Since then, no new construction projects for fibre routes and switching facilities have been started, or outstanding projects completed. This includes new access points for Public Wi-Fi, as these are dependant on Broadband fibre.

During the period since, a range of options for the continuation of the Project have been identified and explored. On the basis of this analysis, an ‘Optimisation Project’ has been defined.

2. Broadband Optimisation Project

The Broadband Optimisation Project expects to implement the following strategies:

1. Separation of the construction and operation of the Broadband Network from other functions of the Telecommunications Branch

The scope of the Broadband Infrastructure Optimisation Project excludes the other functions of the Telecommunications Branch, which include operating the Corporate Wide Area Network, the Local Area Network cabling within each building, the City’s connection to the Internet, mobile APN services, voice telephone services, operating a private Terrestrial Trunked Radio network for public protection and disaster response (PPDR), supporting the public access to the Internet using Wi-Fi, and certain specialised electronic services. Each of these will have its own strategy and budget.

2. Focus on building and operating the passive infrastructure

The City will only build, own and operate passive network infrastructure. This will be used by a private sector operator to provide network services to the City. (This strategy is referred to as “Option 2”, as it is the second of five options identified by the PwC report.) This strategy was approved by Council in May 2019.

3. Outsource the provision of active network services

This is an outcome of the “Option 2” strategy. The City’s future Broadband investments and activities will not include owning or operating active network equipment.

4. Adopt and implement a new operating model

An operating model that provides for all of the activities and tasks required to manage the City's Broadband Infrastructure effectively has been developed, guided by international industry best practice. This is reflected in a new organisational structure with associated job specifications.

5. Adopt and implement a new commercial strategy

The City will lease spare infrastructure capacity using "sales partners" as intermediaries.

6. Conduct an exercise to properly ascertain internal demand

An extensive consultation with all other City departments to ascertain their network connection requirements is required. This has been done. The confirmed requirements are captured in a 'Master Plan' for the next phase of infrastructure construction.

7. Use the existing network infrastructure to expand connections to all remaining City sites that need one, subject to a case-by-case assessment of financial feasibility

A Prioritisation Plan has been developed and adopted to make sure that existing infrastructure is leveraged as much as possible to unlock further value.

8. Review and amend the architectural principles that will be used to design the remainder of the passive network infrastructure

A set of Design Rules has been developed and adopted to guide the design of the connection to be provided to each new site. These Rules primarily consider the "criticality" of each site, which then dictates the redundancy of the connection needed, and the medium of the connection (essentially optic fibre or radio link). Consideration is also given to whether this is best done by the City itself, or if it can be outsourced to a commercial service provider.

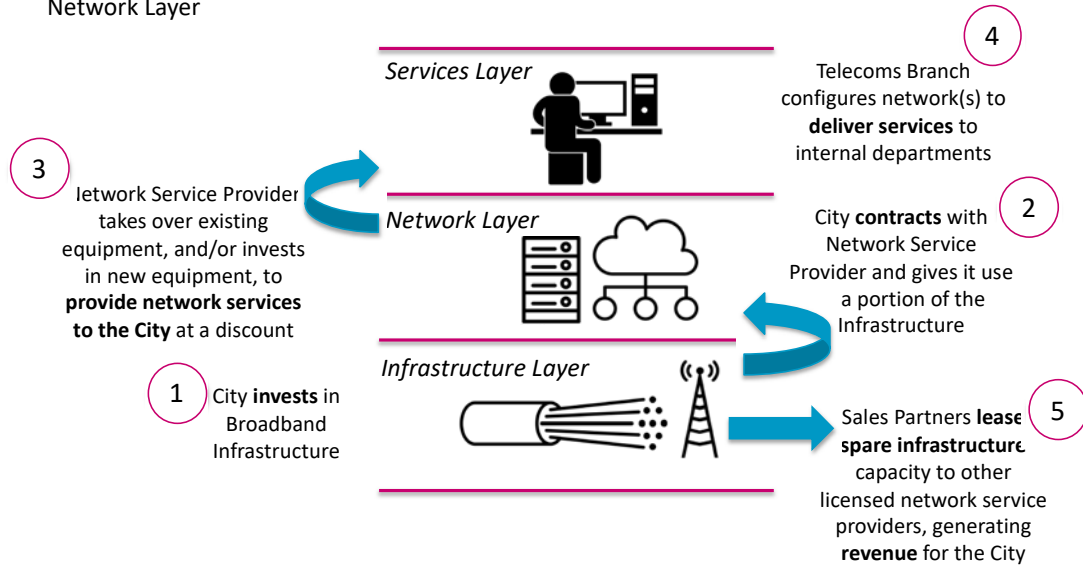
9. Ensure that the Optimising Project is subject to a high level of governance oversight

A steering committee has been established, co-chaired by the Executive Director for Corporate Services and the Director of IS&T. Annual budgets will be assessed by the Corporate PPM Office, and will be submitted to the City Council for ratification.

The business model implicit in these strategies is illustrated by the following diagram:

Broadband Infrastructure Business Model

Business model requires the City to contract with a commercial service provider which will use the City's Broadband Infrastructure to deliver network service to the City, with the expectation that this will be delivered at a discount, at less cost than if the City were to self-provide the Network Layer



3. Tasks completed to date

Some of the key tasks undertaken to implement this plan are:

1. Needs Assessment

An exercise to establish and confirm the demand for network services by City departments has been completed. This identified over 1 000 additional City sites, of which 572 will be provided with a Broadband connection over a ten-year period.

As a result, a new 'Master Plan' for future construction of optic fibre cable routes and microwave radio links has been developed. This Plan uses the Prioritisation Plan and Design Rules to optimise the benefit.

The City also issued a formal Request for Information (RFI) to the telecommunications industry to assess the interest in engaging with the City as Sales Partners and to determine market demand for City broadband infrastructure – this is currently being evaluated.

2. Corporate Services Portfolio, Programme and Project Management Office

The Project is in the process of being evaluated by the Corporate Services Portfolio, Programme and Project Management Office ("C3PM"), using the Gate Review process. This review process aligns with best practice stage gate lifecycle and National Treasury Framework for Infrastructure Procurement and Delivery Management (FIPDM). The Project has passed through the Feasibility and Conceptual Design Gates, and is now in the Detailed Design phase.

3. Project budget

The provisional budget for the Broadband Project over the next ten years was developed during the course of the Conceptual Design phase. This budget has a projected capital cost of R992m over ten years, with an lower variance of R843m and an upper variance of R1 141m. This should be seen within the context of a total project budget of R5 478m, including operational costs, staff costs, overheads, and the cost of contracting a network service provider to deliver network service to the City using the City's Broadband Infrastructure.

			Years 1-5		Years 1-10			
			Lower Variance	Total	Higher Variance	Lower Variance	Total	Higher Variance
Income	Net Revenue	External revenue, minus specific sales costs	R 72m	R 85m	R 98m	R 183m	R 215m	R 248m
OPEX	BIP Operational cost	Network operational cost, network maintenance cost, vehicles, rentals, software licensing	R 415m	R 488m	R 561m	R 929m	R 1,093m	R 1,257m
	BIP Staff cost	Based on detailed planned organogram, consultants and applicable salary bands	R 452m	R 532m	R 611m	R 1,242m	R 1,461m	R 1,689m
	Non BIP External procured service cost	Services falling outside the scope of the option, procured from other departments or external service providers	R 535m	R 629m	R 723m	R 1,250m	R 1,470m	R 1,691m
Overheads	Overheads	City allocated overheads for SAP, IT, Finance, Procurement, HR services and management	R 197m	R 232m	R 267m	R 464m	R 546m	R 628m
CAPEX	Capital cost	Capital cost for refreshment of end of life equipment and new build as per detailed master plan	R 392m	R 462m	R 532m	R 843m	R 992m	R 1,141m
	Remediation cost	Costs incurred to have a fully optimized functional network	R 119m	R 140m	R 161m	R 120m	R 141m	R 162m
Total cash requirements			R 2,038m	R 2,397m	R 2,757m	R 4,664m	R 5,487m	R 6,311m

4. Report to Council

A Report requesting authorisation to implement the proposed operating model and to restart construction will be presented to Council in May 2020.

If approved by Council, the Detailed Design will be implemented. New construction work is then scheduled to start in March 2021.

Financial Implications

None Opex Capex

Capex: New Projects

Capex: Existing projects requiring additional funding

Capex: Existing projects with no additional funding requirements

Policy and Strategy

Yes No

Legislative Vetting Yes No

Legal Compliance

Staff Implications Yes No

Risk Implications Yes No

5. RECOMMENDATIONS

It is recommended that the committee take note of this report submitted for information

5. AANBEVELINGS

Daar word aanbeveel dat die komitee kennis neem van hierdie verslag wat ter inligting voorgelê is

5. IZINDULULO

Kundululwa ukuba ikomiti ithathele ingqalelo le ngxelo engeniselwe nje ukwazisa ukuba kuqhubeka ntoni.

ANNEXURES

FOR FURTHER DETAILS CONTACT

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Approval Form

Supported for inclusion on the agenda



Broadband Infrastructure Project feedback

Report Reference: 514875
Meeting: Section 79 Portfolio Committee - Corporate Services
Meeting Date: 06.05.2020
Meeting Venue: Meeting Room 2 6th Floor Podium

Contact Person: T Bosman
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Item	Section	Approver	Approval	Approved Date	Approver Comments
01	Author	THOMAS BOSMAN	Approved	17.04.2020 08:43:52	Apologies. Translations added.
02	Author	THOMAS BOSMAN	Approved	17.04.2020 08:46:29	Apologies, trans;lations added....
03	Author	THOMAS BOSMAN	Approved	17.04.2020 08:47:39	Apologies, translations added...
04	Director	Omeshnee Naidoo	Approved	20.04.2020 08:32:54	
05	Executive Director	Keith SMITH	Approved	21.04.2020 09:06:09	
06	Legal Compliance	Joan Mari Holt	Approved with Comments	21.04.2020 15:29:09	For information.
07	Chairperson	Theresa Uys	Approved	12.05.2020 15:05:12	

ECS Officer: Cynthia Minnaar