Executive summary

SA DIGITAL VILLAGES (SADV) provides turnkey Tripple Play Solutions to Residential, Business and Commercial customers with services required to enable them to enjoy the full experience of Secure, Digital Living and Working offered at competitive prices, utilising Fibre-to-the-Home (FTTH) or Fibre-to-the-Business (FTTB) and other leading-edge technologies and services.

We are a fully licensed Telecommunications Operator as well as an Internet Service Provider holding an ECNS and an ECS license enabling us to install our own infrastructure as well as to operate these services.

SA Digital Villages' services currently include High-Speed Broadband, Digital Telephony, Turnkey Security Solutions, Multi-Channel Digital TV and with a range of Value Add Services.

DFA, a local open access dark fibre infrastructure provider and Level 2 B-BBEE company, finances, builds, installs, manages, and maintains a world-class fibre network to transmit metro and long-haul telecommunications traffic in South Africa. We started rolling out our network in South African cities during October 2007. To date, we've invested over R7 billion and installed more than 9500 kilometres of fibre infrastructure nationwide.

We provide connectivity infrastructure and services to telecommunications operators, Internet service providers, media conglomerates, tertiary education institutions, municipalities, government organizations, and other businesses, large and small, on an open access basis. All our clients have access to the same dark fibre infrastructure with our industry-leading reliability and almost limitless capacity.

SADV, in partnership with DFA, is pleased to present our proposal to be the open access FTTH network service provider to CROYDON VINEYARD ESTATE.

SADV and DFA propose to deploy a GPON-based fibre network throughout CROYDON VINEYARD ESTATE delivering *up to 1Gbps* service to each premises. We will build and provide this infrastructure on an open access basis to all service providers that want to provide services to residents within the complex. The service providers will be connected to the SADV network at the nearest DFA aggregation node and thus allow for service aggregation to take place in an open access hosting environment.

The solution that SADV and DFA is proposing will be granular enough to allow a resident to choose a voice service from one service provider, Internet breakout from another and a video service from a third provider.

As part of the solution offering, we propose the following to CROYDON VINEYARD ESTATE:

- No cost to the CROYDON VINEYARD ESTATE HOA,
- No minimum uptake requirement,
- Free SADV on net calls within the Development – Can also be used as intercom system between residents and the guardhouse,

- Wifi in the Common Areas (If Required),
- Spare Fibre to be used for a future DSTV System Upgrade (If Required).

Costs

Fibre Backbone Network	No Charge
FTTH Network Headend	No Charge
PABX/Intercom Communication System	No Charge
Cost of Handsets (Intercom & Voice)	Traditional Analogue phone or VOIP Phone (R699 - R1399)
Other costs associated with PABX	No Charge
Phone line rental fee	Included in all SADV Packages
ISP Connection Fee to residents	R1700 incl. VAT (Once-Off) Fibre Drop into Home. (some ISP's waiver this fee)

1. Introduction

SA Digital Villages (SADV), in partnership with DFA is pleased to present our proposal to be the open access FTTH network service provider to CROYDON VINEYARD ESTATE.

SADV is a wholesale open-access FTTH service provider that specializes in the installation, operation, and maintenance of last-mile optical-fibre networks. DFA holds a significant minority stake in SADV. SADV serves a wide range of customers, including some of South Africa's major operators, leading businesses, and a large number of premium residential complexes.

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Our headquarters are in Irene, Centurion, and we have regional offices in Centurion, Johannesburg, Durban and Cape Town. Our state-of-the-art network monitoring centre in Rivonia, Johannesburg, provides round-the-clock monitoring and maintenance to ensure that our network remains up and running 24/7.

2. Business and Technical Plan

SADV and DFA's approach to design, installation, operation and management of the network and the services to meet the scope-of-work requirements is discussed in this section.

2.1 Technology

2.1.1 Network design

SADV & DFA will leverage its existing infrastructure to link CROYDON VINEYARD ESTATE to its nearest aggregation node and from its aggregation node to the networks of the service providers (SPs). The physical Fibre Backbone infrastructure will be installed using existing sleeve and conduit infrastructure or via Trenching throughout the Development.

The fibre infrastructure will require the installation of joints, in which passive optical splitters may be installed. The service will terminate on a desktop optical network termination (ONT) unit that requires AC power and will be installed inside the residence. The FTTH connectivity is illustrated in Figures 1 and 2.

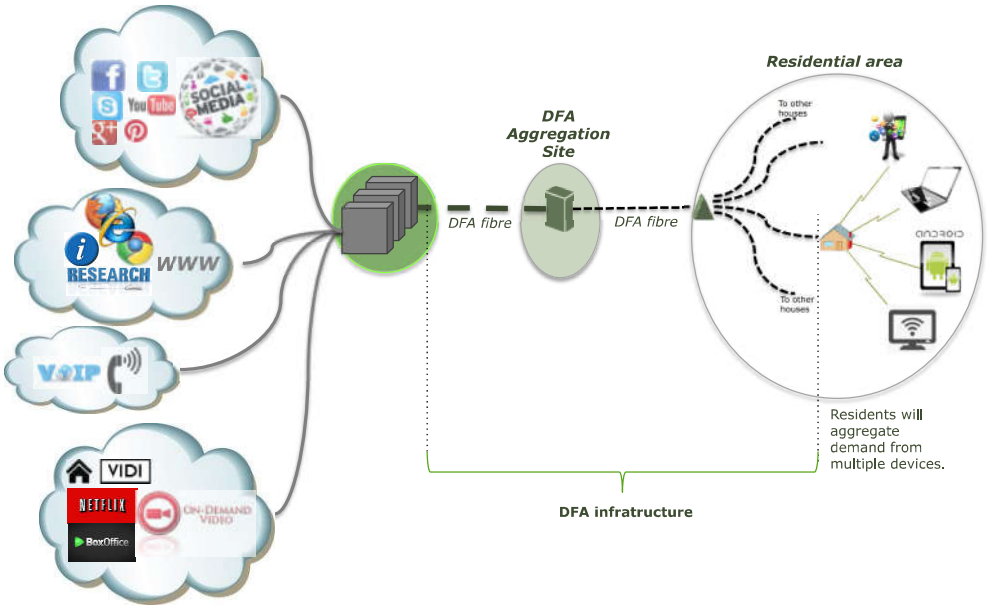

Figure 1: Overview illustration of SADV/DFA FTTH connectivity

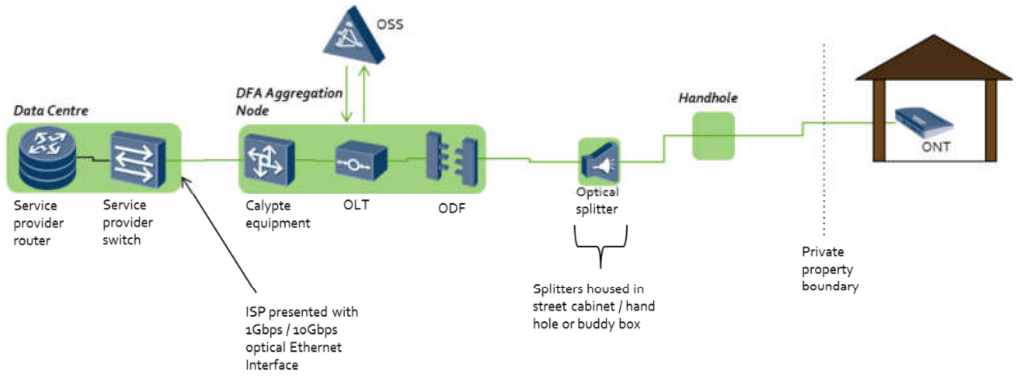

Figure 2: Detailed illustration of SADV/DFA FTTH connectivity

The SADV & DFA FTTH infrastructure will be based on GPON technology, using a port downstream of about 2.5Gbps (1.2Gbps upstream). The ultimate capacity per residence is 1Gbps, but the next generation GPON 2 equipment can provide up to 10Gbps. Note that the DFA service is uncapped, with no limitation on the throughput. A 1:64 split ratio can support up to approximately 20 km from the OLT to subscribers (using Class B+ optics: 28dB loss budget). The GPON OLT will be located at the nearest DFA aggregation node so there is no requirement for housing the equipment on site. The DFA aggregation node has its own backup power systems.