

**MEDIA HEADS-UP** The Academy of Science of South Africa (ASSAf)  
and the Department of Science and Innovation (DSI)

cordially invite you to the

**INNOVATION FOR INCLUSIVE DEVELOPMENT (IID) SEMINAR SERIES**

on

**Building Profitable and Sustainable Community Owned Connectivity Networks**

**Date:** 31 August 2020  
**Time:** 10:00 – 13:00  
**Venue:** Online Zoom Webinar  
**RSVP:** [Click here](#) to register

The invitation is open to all stakeholders: business, government, network operators, the public, civil society, academia, media etc. The link to the meeting will be sent to participants who RSVP before the event. Should you have any queries about this seminar, please contact Dr Tebogo Mabothe at [tebogo@assaf.org.za](mailto:tebogo@assaf.org.za).

## BACKGROUND

According to Statistics South Africa (annual General Household Survey, 2018), household access to the Internet at home was highest in the Western Cape (25,8%) and Gauteng (16,7%) and lowest in Limpopo (1,7%). While 17,3% of households in metropolitan areas had access to the Internet at home, only 1,7% of rural households in general had access (0,8% in North West and 0,6% in Limpopo). Rural areas, particularly those in developing countries, provide challenging environment to implement communication infrastructure for data and Internet based services. The main challenges are the high cost of network implementation and lack of customer base, as rural areas are characterised by low income, highly scattered and low population density. Installations of cables or fibre in remote rural areas is difficult and prohibitive in terms of costs.

The National Development Plan (NDP), the 2016 National Integrated Information and Communication Technology (ICT) Policy and the 2019 White Paper on Science, Technology and Innovation recognise the pivotal enabling role of information and communication technologies (ICTs) in realising an inclusive, vibrant and prosperous information society and knowledge economy. The Department of Science and Innovation (DSI) has partnered with the University of Western Cape (UWC), the Mankosi Village community, with support from the Technology Innovation Agency (TIA) on scaling-up the Zenzeleni Community Owned Connectivity Networks (COCN), a community based model that enables timely, reliable and affordable connectivity, primarily in rural areas. The Zenzeleni COCN has been in existence since 2012 and provides Wi-Fi connectivity to the remote rural areas of Mankosi and Zithulele in Mthatha.

An ecosystem like Zenzeleni COCN offers a great potential to increase the number of people who are connected in the rural settings. One of DSI's key role is to catalyse the digital ecosystem and develop scalable model to replicate the community owned connectivity networks model to other areas. To this end, the DSI in partnership with the Academy of Science of South Africa (ASSAf) will hold a webinar to look at other models

of rural and township wireless connectivity through Wi-Fi and TV White Spaces. The webinar will focus on the following:

- 1. Sustainability design** of these community wireless connectivity schemes/networks. How these structures can be self-sustained in terms of design, governance and benefit beneficiaries.
- 2. Replicability.** Investigate how successful schemes/networks can be scaled-up and rolled-out to other communities to benefit these communities.
- 3. Revenue generation.** Are these schemes profitable, if so, who is profiting? Consider the possibility of issuing licenses to run such schemes to generate income/employment to uplift communities.
- 4. Business models.** What is the ideal business model that can make these schemes to work efficiently, taking into account, income and revenue generation? The business model will ideally bring to light an understanding of the challenges faced by these kinds of structures and the type of support they require, including policy/regulatory issues, to ensure that they are sustainable.
- 5. Governance structures.** What are the structures and systems used to govern the networks? Do these structures promote community ownership of the technologies? Who is part of the governance structures?

The IID seminar series is project is an initiative of the DSI **programme 5**, designed to provide a platform for open and collective thinking between the science policy and community of practice to generate evidence-based knowledge on Science and Technology (S&T) innovations to advance local economic development and also provide insights to support evidence-based policy and decision making to enhance service delivery.