



JOINT SADIBA /NAB DIGITAL RADIO DAB+ TRIAL



DAB+ (Digital Audio Broadcasting) in South Africa

Presented to ABU-ASBU-WorldDAB workshop

Joint SADIBA/NAB Digital Radio Working Group



Introduction and Definition



- **SADIBA** - Southern African Digital Broadcasting Association:
A member of WorldDAB
- **NAB** - National Association of Broadcasters: Representing
Radio and TV broadcasters (Public, Commercial and
Community) as well as signal distributors and industry
associates



Why a DAB+ Trial



- Radio Industry saw a need to keep radio relevant in the digital age
- There is “NO” high power FM spectrum available for new entrants or the expansion of existing FM services in SA’s major metropolitan areas – DAB+ will create extra channels and allow for the expansion of services
- DAB+ technology is well established worldwide and growing
- Numerous success stories in the world
- DAB+ receivers are widely available
- Traditional Radio listening is not being replaced by Internet Radio





Advantages of DAB+



Provides the following benefits:

- Efficient use of frequency spectrum, Multiple channel capability (up to 24)
- Economical - Lower transmitter power per audio service
- Advanced Audio Quality
- Consistent quality of Reception
- All Broadcasters on a mux have exactly the same coverage
- Retains the FM capability of Portable and Mobile Coverage
- Enhanced service offerings, including data (Visual radio with information displayed on screens)



The Purpose of the DAB+ Trial



To test and evaluate DAB+ technology against the following criteria:

- End to end technical functionality (studio to receiver)
- Extent of portable mobile coverage (moving vehicle)
- Signal permeability – building penetration
- Effects of vehicle penetration loss
- Interference and clutter on coverage (high rise buildings)
- Demonstrate value added services, Dynamic Label System (DLS) and Slideshow
- Field testing typical professional and consumer equipment
- Testing Audio quality at different data bit rates



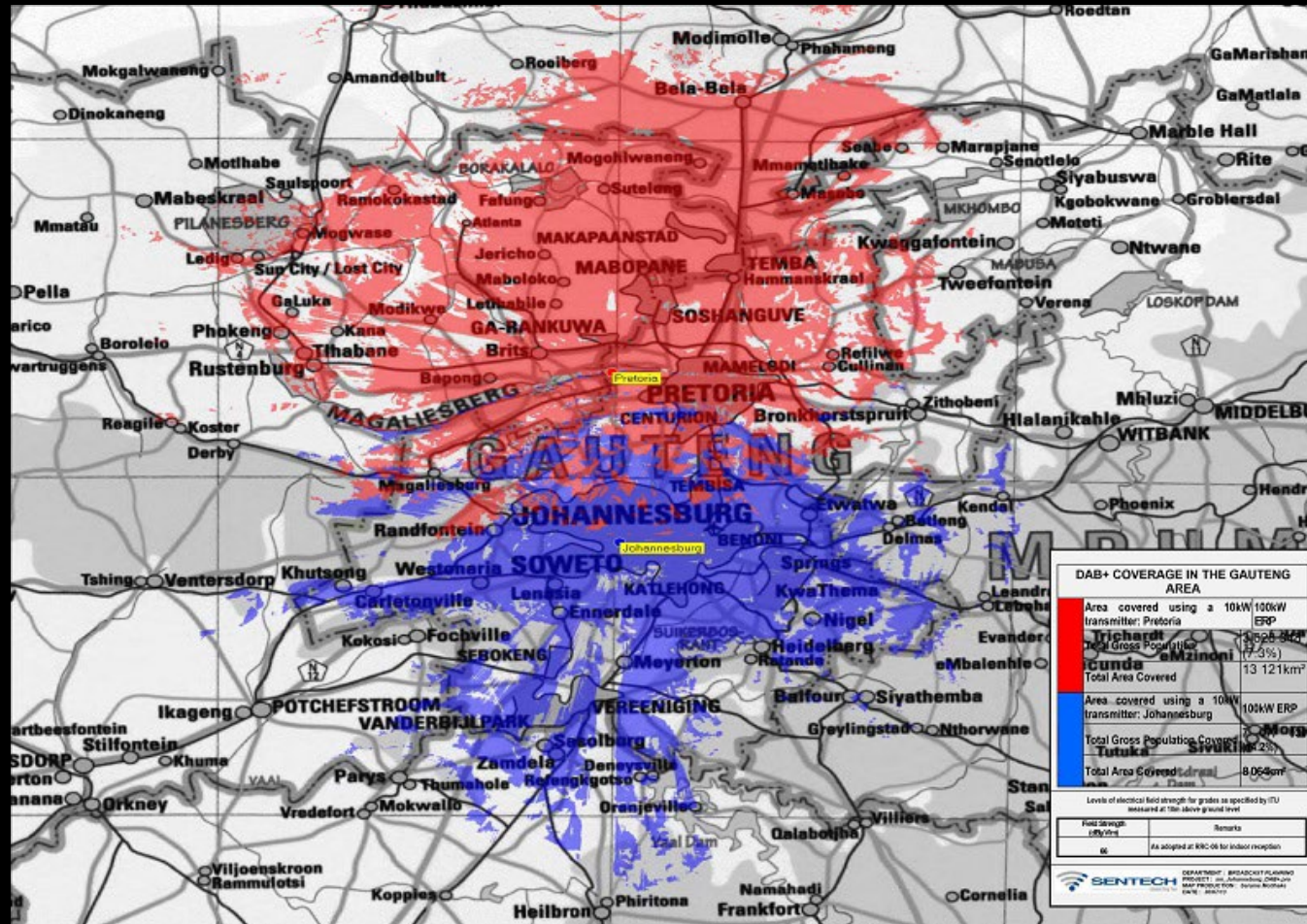
Challenges experienced



- Delays in procuring Band III VHF Spectrum ASO since 2015
- Delay has led to loss of focus by some in the industry
- The trial period provided in Regulations is limiting (8 months) and can potentially yield unintended consequences
- Delays in the granting of licence extensions affect the flow of the trial
- TX Combiner Issues due to sharing with Analogue TV resulting in only limited 10kW transmitter power operation, the optimum power to cater for building penetration and solidness of signal in the South African trial area



DAB+ Coverage in Gauteng





Brixton Transmitter site and Sentech Test Vehicle





Questions / Information



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