



REQUEST FOR OFFICIAL QUOTATION

QUOTATION NUMBER: RFQ/FREQUENCY/001/TT/2011

CLOSING DATE: 15 APRIL 2011

TIME: 15H00

SUBMISSION METHOD:

- ONE ORIGINAL DOCUMENT
- SOFTCOPY
- TAX CLEARANCE CERTIFICATE
- CERTIFICATE OF INDEPENDENCE (SD9)
- COMPANY PROFILE
- REFERENCES
- COMPANY REGISTRATION DOCUMENTS
- BEE CERTIFICATE
- JV AGREEMENTS WHERE APPLICABLE
- QUOTES WILL BE EVALUATED BASED ON 80:20 PRINCIPLE AS PER PPPFMA

ONLY DOCUMENTS IN A SEALED ENVELOPE WITH THE RFQ NUMBER CLEARLY INSERTED AND ADDRESSED TO:

THE ACTING HEAD SUPPLY CHAIN MANAGEMENT
Mr. TSOTETSI THULO
SENTECH LIMITED
SENDER TECHNOLOGY PARK
RADIOKOP
HONEYDEW

TECHNICAL ENQUIRIES:

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1. BACKGROUND

Sentech is currently rolling out digital terrestrial television (DTT) networks based on the DVB-T standard. On the 14th January 2011, the Minister of Communications announced that South Africa has adopted the latest DVB-T2 standard. The new analogue switch off date is December 2013. Switch on of the DVB-T2 network is expected to commence in 2012. The DVB-T2 standard is significantly more complex than DVB-T, offering many additional benefits and a wide range of options (requiring various important choices to be exercised).

One of the most important decisions that incumbent broadcasters need to make is to select a set of transmission parameters that best suite their business objectives. Transmission parameter choice entails a coverage versus payload (number of services that can be transmitted in a multiplex, at a given picture quality) trade-off. Sentech needs to assist broadcasters with these important transmission parameter choices by providing broadcasters with accurate population coverage predictions, at both station-level and at network-level, for different transmission parameter scenarios.

The outcome of the respective predicted population coverage shortfalls (relative to existing Analogue Television coverage) is also important to ICASA, DOC and government. Such information would inform the required review of Analogue-to-Digital Migration Policy and – Regulations, as well as the budget provision for domestic receiving equipment subsidies.

Given the importance and impact of decisions that would be based on Sentech's DVB-T2 population coverage predictions, as well as the financial impact of Sentech's proposed amendments to the Frequency Plan (notably increases in Effective Radiated Power), is it recommended that an independent expert consultant be appointed to:

- Verify the accuracy of Sentech's population coverage predictions
- Confirm the appropriateness of Sentech recommended amendments to the Broadcast Spectrum Plan.

2. SCOPE OF CONSULTANCY SERVICE REQUIRED

Short term consulting services to assist with the following:

- Verify Sentech's DVB-T2 coverage (area) predictions when using different sets of transmission parameters chosen by broadcasters.
- Verify Sentech's population coverage calculations for abovementioned coverage predictions.
- Assess and confirm accuracy and appropriateness of Sentech proposed corrections and amendments to the Broadcast Frequency Plan (specifically recommendations to allow higher Effective Radiated Powers). Confirm that proposed solutions are compliant (not in conflict) with the GE06 Regional

Frequency Co-ordination agreement. I.e. That ICASA could implement the recommended amendments without having to re-coordinate with neighbouring countries.

- o Accompany Sentech to meetings with broadcasters and other stakeholders to verify that abovementioned work conducted by Sentech had been independently verified to be accurate.

Consultants will be required to prove or demonstrate their capability to conduct the required consultancy services and also to provide customer references to whom similar services have been provided.

Familiarity with South African broadcasting: legislation; regulations; industry in general; Broadcast Frequency Plan; Broadcast infrastructure; population demographics is essential.

The consultant must be able to accompany Sentech to meetings with South African broadcasting stakeholders on short notice (of a few days).

Consultants will be required to quote the following rates:

- o Hourly rate to conduct DVB-T2 (area) coverage predictions
- o Hourly rate to do DVB-T2 population coverage calculations
- o Hourly rate to assess Sentech's findings and recommendations i.t.o. the South African Broadcast Spectrum Plan
- o Hourly rate to accompany Sentech to meetings with South African Broadcasting stakeholders.
- o Travelling rate/cost to accompany Sentech to meetings.

Abbreviations and Acronyms	Description
DTT	Digital Terrestrial Television
DVB-T2	Second generation Digital Terrestrial Television transmission standard
GEo6	ITU facilitated Regional Frequency Coordination agreement concluded in Geneva 2006 concluded in Geneva