



## Memorandum

To: South Africa ICASA

From: Dennis Swanson, NCE  
Banner Engineering Corp.  
9714 10th Avenue North,  
Minneapolis, MN 55441, USA

Date: 2021 August 19

Subject: Banner Engineering comments to ICASA pertaining to the draft National Radio Frequency Plan 2021

---

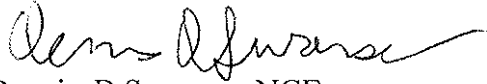
Banner Engineering manufactures and markets the T30R Radar Sensor around the world.

The T30R is a family of short range device (SRD) sensors in the 122 GHz-123 GHz band. In South Africa, the T30R would be available in the 750 MHz bandwidth FMCW configuration (122.25-123 GHz). The T30R may be used for industrial automation applications, such as collision avoidance, and tank level measurement. The device may be used continuously.

The T30R is intended for industrial automation applications, such as leveling measurements, presence/absence detection, and/or collision avoidance. Example applications include, but are not limited to mounting i) inside an enclosed tank for level detection or ii) at a loading dock aimed down at the ground for vehicle detection.

South African companies use ultrasonic, optical and a variety of other sensing technologies for logistics and factory automation. This 122 GHz radar technology provides a more robust sensing technology for dirty factory environments or in the presence of steam and extreme temperatures. Compared to other radar technology which is already in use in South African, this frequency provides better accuracy and detection of a wider range of targets. This product will allow South African companies to use the same technology which is already allowed in the US and EU to maintain their competitiveness."

Sincerely

A handwritten signature in black ink, appearing to read "Dennis D Swanson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Dennis, D Swanson, NCE  
Sr. Product Regulatory Compliance Engineer