

# 3rd International Conference on Communication, Computing & Industry 4.0-2022 (C2I4-2022), 15-16 December 2022

## Estimating the number of people affected by switching off analogue TV

Albert A. Lysko, and Luzango Mfupe

NGEI and Water Centre, Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa

[lmfupe@csir.co.za](mailto:lmfupe@csir.co.za), [alysko@csir.co.za](mailto:alysko@csir.co.za)

Albert A. Lysko

Department of Electrical, Electronic and Computer Engineering, North-West University

Potchefstroom, South Africa

<https://ieeexplore.ieee.org/document/10051290>

### Abstract

The radio frequency spectrum is a very valuable resource. Analogue television broadcasting uses the spectrum inefficiently and television (TV) broadcasting brings less income than mobile services. With these, the world is moving to digital terrestrial television broadcasting and giving some of the TV broadcasting spectrum to International Mobile Telecommunications (IMT) services. This migration process includes turning off analogue broadcasting to clear the spectrum for digital broadcasting, and requires that the affected population has digital TV receivers. For these and other reasons, many developing countries are still considering the move. This paper looks at a methodology to estimate the number of people who are affected by switching off any particular TV broadcasting station, using an example from South Africa.