

ABSTRACT

Sub-Saharan Africa with its poor economy, appears to be doomed to increasing conflict. Economic growth is, however, needed for reducing poverty. Regional instability, crime, corruption and insufficient skilled people, impede the economic progress needed by African States to extract themselves from their undesirable situations. Every state requires a strong security apparatus to cushion itself from the undesirable influences of wayward neighbours.

South Africa's lack of economic growth frustrates attempts to create and distribute wealth. The lack of confidence in an Africa that is unstable causes foreign direct investment to be diverted elsewhere. A credible defence force is one of the instruments that the government of South Africa can use to bolster confidence in the region. The government aims to transform the defence force into a small, technologically advanced, but affordable organisation.

The research conducted in this study focuses on the contribution the Engineering Technical Family (ETF) may make. It then examines how these efforts may be aligned with South African defence strategies.

This study found that the ETF may be divided into two main categories: Engineering Services which create or upgrade the baselines of systems and products, and Technical Services, which employ the baselines and use them to support the systems and products.

This study also found that employing the principles of war as the key success factors for a defence force made it possible to identify the most significant areas in which the ETF could make a contribution to the organisation.

Further analysis showed that Engineering Services could be divided into three levels. Firstly, the Products Systems Engineering groups propose and implement solutions to satisfy operational requirements for User Systems. Secondly, the Joint Services Product Engineering groups propose and implement solutions to satisfy operational requirements for Product types common to the Services. Lastly, the Joint Services Engineering ensures that the desired joint capability and interoperability between the Services is identified and established. This last group would also define the support policy for Products and Systems.

These approaches in employing the ETF will align the effort of the ETF with that of the SANDF.

The management of projects, competence, technology and culture will ensure that the proposed approach is sustainable and that the SANDF becomes more cost-effective.

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