



## Realising the vision of the National Development Plan

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**T**he National Development Plan (NDP) provides South Africa with the hope and the dream that must now be realised to move this nation out of the doldrums of poverty and inequality.

The effective implementation of the 444-page plan (because of its wide-ranging aspects which are completely inclusive) now requires the effort and commitment of every member of business, labour and civil society to identify their unique spaces and excel in bringing them to the fore, so that together we can move South Africa forward.

I hope and believe that the government of South Africa will listen to and welcome the proposals and initiatives of those individuals and institutions in this country that are focused and wishing to make their contributions in respect of their chapters of the NDP – not by word of mouth only, but by contributing their professionally tested expertise and skill in moving South Africa forward. I urge that the input to be vetted against the illustrated track record and experience of various sectors.

Consulting engineering is a unique specialisation of the engineering field and is placed as a fundamental block or foundational step in the value chain of any infrastructure development initiative, which is planning and design, commonly called engineering.

The life cycle of infrastructure projects is defined through the following six main stages; engineering (planning and design), procurement, construction,

commissioning and testing, operation and maintenance, and scrapping or close-out. Consulting engineering is not a distributive skill, but the skill acquired through tertiary education in engineering and sheer dedicated experience focused on specific disciplines of engineering. You are only recognised as a competent consulting engineer once you have acquired a professional registered status through a legislated body, such as ECSA (Engineering Council of South Africa).

The above two paragraphs elaborate on the critical importance of the consulting engineering profession in the realisation of the NDP, especially in the successful delivery of the social and economic infrastructure delivery of South Africa.

One other element I am trying to elicit is that there is no short cut for South Africa in building this capacity other than encouraging learners to follow engineering as a career and working as engineers once they have completed their degrees, and for those wishing to be part of this critical pool of consulting engineers to be dedicated in their experiential learning to the level of registered professional engineer. Only at this stage they can be acknowledged as competent in their field of planning and design (engineering) of infrastructure projects.

South Africa does not have sufficient consulting engineers, but the distortion brought about by Preferential Procurement Policy Framework Act (PPPFA), which uses other criteria than quality in securing goods and services, and for procuring this specialised professional service, consulting engineering, in a similar manner has blinded the true picture for South

Africa. Consulting engineers who are experts in their respective disciplines have to compete for work based on price in a country that truly has a chronic shortage of engineers, especially consulting engineers, to assist in the accelerated planning and design of infrastructure projects, so that six million jobs can be unlocked in the next five years as per the electioneering manifesto of the ruling African National Congress government.

It is imperative that the government of South Africa realises and acknowledges the fact that our country, unlike many other developed countries of the world, does not have the internal capacity to plan and design for infrastructure projects. As a result the capability of the State in all three tiers of government to eliminate the backlog and build new infrastructure projects to accelerate service delivery is severely curtailed.

To unlock the participation of private sector in the economy, one will have to start by appropriate planning and design of both social and economic infrastructure. Realising that you do not have the internal capacity to perform this function, as is the case in South Africa, Consulting Engineers South Africa (Cesa), which commands about 500 member firms, is available to assist the government.

Consulting engineering is a professional service of greatest importance in unlocking the infrastructure development and assisting the government in achieving its planning objectives in eliminating the service delivery backlogs in human settlement, transportation, roads, storm water drainage, portable water, sanitation and electrification, institutions of learning, clinics and hospitals. 🏠