



SA ENGINEERS CONFIDENT THAT STATUS OF PROFESSION WILL IMPROVE - SURVEY

5 September 2012: South Africa's engineers have grown increasingly confident in the status of their own profession, yet serious concerns remain about the current skills shortage in the profession and the standard of the education system training future engineers, according to a quarterly survey conducted by PPS.

The survey, of nearly 800 South African engineers, revealed a seven percentage point increase in confidence that the status of their profession will improve, from 55% for the first quarter of 2012 to 62% for the second quarter. Furthermore, 76% of engineers would encourage their children to enter their profession, up two percentage points from the previous quarter.

According to Gerhard Joubert, Head of Group Marketing and Stakeholder Relations at PPS, the financial services provider focused on graduate professionals, the results of the survey are very positive in light of the dire skills shortage currently facing the engineering profession.

"Possible reasons behind this boost in confidence could be the recent naming of six African infrastructure projects - two of which are located in South Africa - by global professional services firm KPMG among its list of 100 'most innovative and inspiring' infrastructure projects in the world. This accomplishment serves as an inspiration for local engineers as their hard work is being globally recognised."

Confidence levels of respondents on whether the current skills shortage in their profession will be adequately addressed by the government in the short to medium term rose by only one percentage point to 41% from 40% recorded for the first quarter. "While this confidence level is up, it is still a very low overall, highlighting the fact that engineers recognise the threat the current skills shortage presents to the profession," says Joubert.

Latest statistics from the Engineering Council of South Africa (ECSA) reveal that the ratio of one engineer to every South African citizen currently stands at approximately 3 166, which is highly unfavourable compared with other developing countries such as India and Brazil which have one engineer to every 157 and 227 citizen respectively.

Commenting on the survey results, Vaughan Rimbault, Chief Executive Officer of the South African Institution of Mechanical Engineering (SAIMechE), highlighted that skills development, particularly the conversion from graduate to engineering professional, was receiving priority attention from professional engineering institutions, ECSA, the Council for the Built Environment (CBE) and the Department of Public Works.

"We are jointly exploring a number of options to accelerate professional development, including the role of the State in employing and developing graduates via the many vacant positions in government structures. "The role of



professional institutions is key to the development and registration of these young professionals, and we see a partnership between the public sector and the professional institutions as an absolute necessity. The State, with the support of professional institutions, has the potential to generate large numbers of competent engineering professionals, possibly through a "national service" model similar to the medical profession. Private industry is slowly beginning to realise that it has a similar role to play in providing the training and development facilities and support for new graduates" says Rimbault.

Rimbault says the SAIMechE believes that engineering as a profession is one of the wisest choices that school leavers can make as there is a world demand for engineering resources and it is the most mobile of the professions.

Respondents' confidence levels on whether the current education system is providing the necessary skills for the creation of potential engineers, improved by only one percentage point to 42% quarter on quarter. When asked about their confidence levels in the standard of education, a confidence level of 42% was revealed, down two percentage points from the previous quarter. Furthermore, 95% of respondents are concerned about the lack of mathematics and science graduates in South Africa.

"A vital component that contributes to the development of engineering skills is the education system and these low confidence levels can be directly linked to the lack of confidence in local engineering skills development. Seeing as mathematics and science are key subjects for the engineering profession, it is obvious why poor Matric pass rates and low uptake of these subjects is a high concern for local engineers," says Joubert.

Joubert says other results on more general issues revealed a marginal improvement in confidence; however, the level is still very low. "Confidence on whether unemployment will improve over the next five years was just 42%, up one percentage point, while confidence that crime rates would improve over the next five years was 45%, up two percentage points from the previous quarter.

It is positive to note that local engineers are confident that they will remain in the country for the foreseeable future with the results for this question remaining unchanged at 76%, while confidence in the future of the profession only dropped one percentage point to 83% quarter on quarter.

"The survey results from engineering professionals reveal that issues such as skills development and the current state of the education sector remain areas of high concern for these professionals. In order to ensure the sustainability of the profession it is imperative that these issues are addressed by Government to ensure South Africa's economic development remains in line with other developing countries," concludes Joubert.

Other results from the survey

- Confidence that the Government can deliver on its proposed infrastructure spend remained unchanged quarter on quarter at 48%
- Confidence that their profession can maintain ethical business standards was up one percentage point from 71% to 72%



- Confidence in their ability to earn an income that keeps up with inflation was up two percentage points from 73% to 75%
- Confidence in the economic outlook for South Africa over the next 12 months was down one percentage point from 62% to 61%
- Confidence in the outlook for local equity / share markets was down one percentage point from 63% to 62%
- Confidence that South Africa has seen the worst of the global economic turmoil was 49% down 4 percentage points quarter on quarter