Address by the Minister of Education, Naledi Pandor, MP, at the colloquium on Information and Communication Technology (ICT) education and training, Birchwood Conference Centre

19 March 2007

Professor Saleem Badat, Vice-Chancellor of Rhodes University
Professor Loyiso Nongxa, Vice-Chancellor of Wits University
Deans, faculties and Heads of Departments
Representatives from the private sector
Ladies and gentlemen

Good Morning

Government's target is to halve unemployment by 2014. In order to reach that target our growth rate needs to be 6% by 2010.

The Accelerated and Shared Growth Initiative for South Africa (AsgiSA) has identified a number of constraints to achieving this target, one of which is a shortage of skills. In this regard, AsgiSA has placed a strong emphasis on training more engineers, architects, town planners, accountants, actuaries, artisans and ICT professionals.

Chairperson, it is within this context that I am pleased to be part of this gathering, which brings together the private sector, researchers and information and communications technology experts to discuss the state of education for our ICT sector.

In 2001 the President established the Presidential International Advisory Council on Information Society and Development, a body constituted to ensure that South Africa does not lag behind in the ICT field.

The Council consists of a group of Chief Executive Officers, Presidents and heads of major international corporations and experts, who are active in the field of information and communications technology; it also includes cabinet ministers.

The President announced important new projects to improve our ICT infrastructure this year, as part of our effort to improve our global connectivity for the benefit of business and individuals.

We, in the education and training system, must play our part in these new developments. It is thus very appropriate that this colloquium is to focus on graduate shortages in the ICT field, and to formulate steps that might be taken to address those shortages.

I am particularly pleased to note that the programme is structured to include perspectives from industry, higher education and government. I hope that those perspectives will not just articulate problems, but will also propose solutions.
Government's intention to improve our ICT capacity has been firmly established in higher education. The 2001 National Plan for Higher Education emphasised the need to increase enrolment and graduation in science, engineering and technology programmes.

I am pleased to report that the recently concluded enrolment-planning exercise of the Department of Education indicates that science and technology enrolment will comprise 30% of total enrolment by 2010; it was 25% in 2001.

This represents an enrolment of 246 000 students in SET by 2010. However, information technology represents only 5% of total enrolment, and 4% of total graduates, representing approximately 5 000 graduates per year. These numbers fall short of industry projected needs.

In addition, we only produce an annual average of 150 masters and doctoral graduates in the ICT sector.

Higher education is the only sector to provide responses to our ICT challenges alone. The Further Education and Training (FET) college sector has been reshaped to respond.

The colleges now offer eleven programmes as part of the new National Vocational Certificate. Students enrolling in these programmes currently receive a full-cost bursary. The Information Technology and Computer Applications programme is oversubscribed. Given the demand for such skills, I am particularly interested in partnering with the private sector to develop innovative options for increasing our ability to respond to such demands.

In addition to our concerted effort to increase the number of ICT graduates at universities and colleges, we are introducing ICT education in schools in line with the policy outlined in the e-Education White Paper.

The challenge for us is to ensure that all students who enrol at either higher education institutions or FET colleges succeed and complete their programmes. Moreover, students will be encouraged to pursue postgraduate studies.

The private sector can also play a significant role in the provision of skills for our economy. We are fortunate that a significant number of companies - like CISCO Systems, Sun Microsystems - have established ICT academies.

The private sector has also been very supportive in partnership with higher education institutions, in the training of graduates and the search for knowledge solutions. Examples are numerous and range from the donation by Cray Computers of the use of their supercomputer to the South African Bioinformatics Institute at the University of the Western Cape to the partnership between Sun Microsystems, Telkom and the Nelson Mandela Metropolitan University to develop new solutions in the fast-evolving telecommunications sector.

Similarly, government has established, in partnership with higher education institutions and science councils, the Centre for High Performance Computing often
referred to as the Africa Advanced Institute for ICT or the Meraka Institute. The Centre is our national research, training and service centre.

I would like to conclude by posing a few challenges to those gathered here.

First, how do we deepen and expand the existing partnerships between the key role-players: between education institutions, the private sector and government to increase the number of graduates in IT?

Second, what new partnership opportunities are possible?

Third, what are the innovative solutions that could assist higher education institutions improve the throughput rates of their graduates?

Fourth, what are the actual skills needs, in which areas, who is doing the research on this?

Fifth, what innovative mechanisms should we consider to encourage universities and the private sector to increase their investment in ICT research and skills development?

These are some of the questions that I hope this colloquium will attempt to address.

During the launch of the Joint Initiative on Priority Skills Acquisition (JIPSA) on 27 March 2006, the Deputy President said:

"As a country, South Africa has as yet not taken the matter of skills to a skills revolution level. To achieve that, we must be united as a nation in pursuit of this goal."

I have no doubt that the discussions here today will provide a focused implementable, rich and rewarding response to that challenge.

Thank you.

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