### **TECHNICAL & FINANCIAL FILE**

# BUILDING ACADEMIC PARTNERSHIPS FOR ECONOMIC DEVELOPMENT (BAPED) SOUTH AFRICA

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### **ABBREVIATIONS**

A&FC Advisory & Follow-up Committee

AESOP+ A European South African Partnership on Heritage and Past

**APEC** Antwerp/Flanders Port Training Center

ARC-OVI Agricultural Research Council - Onderstepoort Veterinary Institute

**BAPED** Building Academic Partnerships for Economic Development

**B-BBEE** Broad-based Black Economic Empowerment

BE Belgian

**BELSPO** Belgian Science Policy Office

ВΙ **Beneficiary Institutions** 

**BTC** Belgian Development Agency

DGD Directorate General for Development Cooperation and Humanitarian Aid

**DHET** Department of Higher Education and Training

DP **Development Partners** 

DST Department of Science and Technology EMA2 Erasmus Mundus Action 2 Partnerships

EU **European Union** 

**EU-SATURN** European - South African programme in Tuning for Regional Needs in

**Higher Education** 

Europe-South Africa Partnership for Human Development **EUROSA** 

**FET** Further Education and Training **FWO** Research Foundation Flanders Government of South Africa GoSA

HAI

Historically Advantaged Institutions HDI Historically Disadvantaged Institutions

HQ Headquarters

**ICT** Information and Communication Technology

**IDC** International Development Cooperation

**INSPIRE** International Science Promoting Innovation and entreREpreneurship

ΙT Information Technology

**KUL** Catholic University of Leuven MFA Mutual Framework Agreement MoU Memorandum of Understanding MSoE Maritime School of Excellence NDP National Development Plan

nGAP New Generation of Academics Programme

**NMMU** Nelson Mandela Metropolitan University NRF National Research Foundation

NT National Treasury

PLAAS Institute for Poverty, Land and Agrarian Studies

PMU Project Management Unit

PSC Programme Steering Committee

QCC Quality Control Committee

SA South Africa(n)

SAIMI South African International Maritime Institute
SAMRC South African Medical Research Council

SCA Specific Cooperation Agreement

SETA Sector Education and Training Authority

SSAUF Staffing South Africa's Universities' Framework

TETA Transport Education Training Authority

TFF Technical and Financial File

ToR Terms of Reference

TVET Technical and Vocational Education and Training

ULB Université Libre de Bruxelles

UNIVEN University of Venda

USA United States of America

UWC University of the Western Cape

VLIR-UOS Flemish Interuniversity Council – University Cooperation Programme

VVOB Flemish Association for Development Cooperation and Technical

Assistance

### **EXECUTIVE SUMMARY**

With "Building Academic Partnerships for Economic Development" (BAPED) the South African - Belgian Cooperation wants to contribute to the economic development of South Africa through the establishment of a network between South African (SA) and Belgian (BE) academic institutions. The specific objective of the scholarship programme is to build the foundations for longstanding partnerships between South African and Belgian institutions aimed at improving business-oriented skills development, training and research in a limited number of priority areas that are key for the economic development of the country, such as

- 1. ICT: with a particular focus on the training of highly qualified and "employable" IT professionals;
- 2. Health: with a particular focus on the training of biostatisticians, the availability of which is key for South Africa to strengthen its health, medical and clinical research;
- 3. The maritime sector: with a particular focus on the development of tailor made trainings aimed at responding to the needs of the South-African maritime sector;
- 4. Others: to be identified during implementation.

Six SA Beneficiary Institutions (BI) have been selected:

- 5. The SA Department of Higher Education and Training (DHET);
- 6. The SA Department of Science and Technology (DST);
- 7. The SA Medical Research Council (SAMRC);
- 8. Transport Education Training Authority (TETA);
- 9. Transnet:
- 10. The Belgium Campus.

The programme keeps a particular focus on supporting the South African New Generation of Academics Programme (nGAP). Because of time constraints of the programme, which has a maximum duration of 31 months, there is little opportunity for the funding of "traditional" academic degrees, such as Bachelors, Masters or PhD, the duration of which is much longer than two years. Therefor the programme will focus on the institutional strengthening of the academic institutions through the funding of "accelerated" Masters or PhDs for academic staff. "Traditional" Bachelors, Masters and PhDs can be funded provided that the additional funding needed for the years after the programme has ended, can be guaranteed by the SA partner.

Apart from (accelerated) degrees, the programme also funds national and international exchange initiatives such as short trainings (3-6 months) at another institution within SA or in BE or supervision by other institutions, study tours, seminars, workshops, matchmaking visits, etc. Particular attention will be given to the inclusion of Historically Disadvantaged Institutions and Individuals (such as black females and people with a disability).

The expected results are:

- 1. Skills, competences and capacities are developed through scholarships for Bachelor, Master and PhD studies;
- 2. Skills, competences and capacities are strengthened through scholarships for national and international mobility and short term trainings;
- 3. Academic partnerships between South Africa and Belgium are fostered through the organisation of knowledge sharing initiatives.

All Beneficiary Institutions will be asked to develop a comprehensive scholarship proposal with support of the Advisory & Follow-up Committee that will be created to this end. Upon approval the selection of the bursary candidates will be done through the internal announcement and selection procedures of the respective institution. The Advisory & Follow-up Committee will also play a major role in safeguarding the programme coherence. The organisation of an end-of-programme seminar should facilitate the formulation of recommendations and the development of an action plan for the further consolidation of the South African – Belgian partnerships that were created with support of the programme.

### **A**NALYTICAL RECORD OF THE INTERVENTION

Intervention number	NN 3017842
Navision Code BTC	SAF 16 888 11
Partner Institution	SA National Treasury – International Development Cooperation
Duration of the Specific Agreement	Until the 30th of June 2019.
Expected intervention period	Maximum 31 months (from 01/09/2016 until 31/03/2019).
Contribution of the Partner Country	Beneficiary Institutions are encouraged to contribute.
Belgian Contribution	1,500,000 euro.
Sector (CAD codes)	43081 – Multi-sectoral Education and Training.
Brief description of the intervention	The programme aims at strengthening the academic institutions in South Africa and fostering academic partnerships between South Africa and Belgium in a limited number of priority sectors that are key for South African economic development. Sectors such as ICT (incl. TVET), health (biostatistics) and the maritime sector have already been identified. The primary Beneficiary Institutions are the SA Departments of Higher Education and Training (DHET), Science and Technology (DST), the SA Medical Research Council (SAMRC), TETA, Transnet, and the Belgium Campus. The scholarships are primarily – but not exclusively - intended for institutional strengthening through accelerated Masters and PhDs, supplying the economic sectors through the training of professional Bachelors, national and international exchanges, short term trainings and knowledge sharing activities such as seminars, study tours, exchange visits, etc.
Global Objective	To contribute to the economic development of South Africa through the establishment of a network between South African and Belgian academic institutions.
Specific Objective	Foundations for long-standing partnerships between South African and Belgian research and training institutions, aimed at improving business oriented skills development, training and research, are built.
Results	R.1: Skills, competences and capacities are developed through scholarships for Bachelor, Master and PhD studies.  R.2: Skills, competences and capacities are strengthened through scholarships for national and international mobility and short term trainings.  R.3: Academic partnerships within South Africa and between South Africa and Belgium are fostered through the organisation of knowledge sharing initiatives.

### 1 SITUATION ANALYSIS

### 1.1 Introduction

In its National Development Plan (NDP) – Vision 2030 the Government of South Africa (SA) identifies education, training and innovation as one of the priority areas. In spite of the fact that overall access to education – and to higher education in particular - is quite high, the quality of education remains a problem. In the NDP the SA Government expresses its concern about the quality of SA universities that are mid-level performers in terms of knowledge production, with high attrition rates and insufficient capacity to produce the required level of skills. Moreover, the SA higher education system is still characterised by historical inequities and distortions. Access of historically disadvantaged populations to quality higher education is key for social mobility and improved equity, social justice and democracy. Improving the quality of the education system will be critical for the economic and social development of the country.

The SA Department of Higher Education and Training (DHET) also emphasises the need for replacing and expanding academic personnel in view of the anticipated retirement of the current academic staff over the coming years. In order to meet this need the New Generation of Academics Programme (nGAP), was developed as a sub-programme of the Staffing South Africa's Universities' Framework (SSAUF). The SSAUF is intended to be a key vehicle for transforming and capacitating staff at SA universities and to provide a comprehensive response to the staffing challenges. The nGAP programme is the biggest programme within the SSAUF and involves the recruitment of highly capable scholars as new academics, against carefully designed and balanced equity considerations and in light of the disciplinary areas of greatest need. The nGAP specifically targets the appointment and development of a new generation of black and/or women academics. It draws from promising current senior postgraduate students or past students who hold appropriate post-graduate degrees and who have ambitions - or who can be attracted - to embark on a career as a university academic. The nGAP involves the employment of new lecturers in permanent positions from the outset on a cost-sharing basis between the universities and DHET. The new lecturers moreover participate in a 6 year development programme intended to develop their teaching and research capacities. The nGAP lecturers are expected to embark upon and complete qualifications/studies suited to their development needs. These may be at the level of Master, Doctoral or Post-Doctoral studies. The nGAP capacity development component also provides for new lecturers to be exposed to international training and research abroad for a period between three (3) to six (6) months.

# 1.2 Complementarity between the BAPED Programme and the "classic" BTC Scholarship Programme

The "Building Academic Partnerships for Economic Development" (BAPED) Programme is complementary to "classic" BTC scholarship programme which is ongoing. Whereas BAPED basically focuses on institutional strengthening, the "classic" scholarship programme provides scholarships to individuals for full Bachelors and Masters as well as for short-term training initiatives. The "classic" scholarship programme has been extended and will run parallel to the BAPED programme.

<sup>&</sup>lt;sup>1</sup> New Generation of Academics Programme at: < <a href="http://www.dhet.gov.za/SSAUF/ngap.html">http://www.dhet.gov.za/SSAUF/ngap.html</a>>.

So far, the main areas funded through the "classic" scholarship programme are ICT, health, agriculture, land reform, governance, general masters and the maritime sector, with a particular focus on port management. The Beneficiary Institutions are high level SA universities (such as the University of Witwatersrand, Stellenbosch, Western Cape, and Pretoria), the Institute for Poverty, Land and Agrarian Studies (PLAAS), the Elsenburg Agricultural Training Institute, the Agricultural Research Council – Onderstepoort Veterinary Institute, the Transport Education Training Authority (TETA), Transnet, and the Belgium Campus (a private training institution). The Beneficiary Institutions are responsible for the selection of the bursary candidates. In the maritime sector the trainings were provided by the Antwerp/Flanders Port Training Centre (APEC) both in SA and in Antwerp.

It is important for the BAPED programme to build further on the SA-BE relationships that have been established through the "classic" scholarship programme, complementing the institutional strengthening of SA institutions.

### 1.3 Other Belgian Scholarship and Training Initiatives in South Africa

### 1.3.1 VLIR-UOS University Cooperation Initiatives

In 2013 the Flemish Interuniversity Council (VLIR) approved a new country strategy for South Africa and identified the following priority areas for its University Development Cooperation (UOS) initiatives in the country:

- Food security: biotechnology, aquaculture, food production & value chain, animal sciences & production;
- Environment: water resource management, climate change;
- Health: primary health care, public health, HIV/AIDS;
- Social sciences: good governance, urban development, communication, local community development, language development.

The main transversal and cross-cutting being the following:

- Institutional strengthening: institutional policy, academic learning, research policy;
- ICT (Information and Communication Technology): E-learning & distance learning, network development.

Between 2003 and 2013 the University of the Western Cape was the main partner institution of VLIR-UOS in South Africa with the programme, "Dynamics for Building a Better Society" (DBBS). VLIR-UOS assisted the University of the Western Cape (UWC) in transforming from a mainly teaching university to a research based university. The domains covered were citizenship and democracy, development through sports, HIV prevention and care, water for ecological sustainability, multilingualism and cities in transition and student leadership development. UWC and Flemish universities can still submit joint research proposals (PhD) for VLIR funding.

In 2010 VLIR-UOS started a cooperation programme with the University of Limpopo, "Human Wellness in the Context of Global Change: Finding Solutions for Rural Africa", for a period of ten years (2010-2019). The main objectives of the programme are capacity building, research and community engagement across the two main campuses. The programme consists of eight subprojects in the following areas: data management and ICT; competent communities; multiple literacies; management of chronic diseases; food security; water quality; public health and infectious diseases.

VLIR-UOS partner universities in SA are selected through a call for proposals.

### 1.3.2 Erasmus Mundus Partnerships

### 1.3.2.1 University of Antwerp - EUROSA

The University of Antwerp is the coordinator of EUROSA, an Erasmus Mundus Action 2 Partnerships (EMA2) scholarship programme, funded by the European Commission. The first EUROSA project was launched in 2010 and granted more than 200 scholarships to South African and European students and researchers. The objective of EUROSA/EMA2 is to achieve better understanding and mutual enrichment between the European Union and South Africa in the field of higher education through promoting the exchange of people, knowledge and skills at the higher education level. EMA2 aims to promote mobility for students, researchers and academics from South Africa and to enable them to obtain qualifications and/or experience in the European Union. EUROSA/EMA2 wants to contribute to the development of human resources and the international cooperation capacity of higher education institutions through increased mobility streams between the European Union (EU) and South Africa in accordance with the principles of equal opportunities and non-discrimination.

### 1.3.2.2 University of Ghent – INSPIRE and SATURN

#### **INSPIRE**

International Science Promoting Innovation and entREpreneurship (INSPIRE) is an Erasmus Mundus Action 2 project that has identified a very concrete and structurally important node for development of the South African knowledge triangle. In the intricate system of interaction between research, education and innovation INSPIRE will focus on the creation and the development of support structures that can transfer results from research into the private sector for refinement before product development to be used in industry.

The process of transferring science to be explored and commercialized is still underdeveloped and there is a need to develop good governance at universities in order to initiate and uphold partnerships between the public and private sectors. The INSPIRE-project will tackle this is issue by training South African students and staff within the EU-universities' innovation/entrepreneur centers. INSPIRE will also, thanks to participating associate organizations, build a network for INSPIRE-alumni in which they can continue to grow personally and professionally.

#### **SATURN**

Erasmus Mundus EU-SATURN (EUropean - South African programme in TUning for Regional Needs in higher education) is a mobility programme from the European Union coordinated by the University of Groningen, the Netherlands. The co-coordinator on the South African side is the University of the Free State at Bloemfontein. EU-SATURN provides scholarships for South African PhDs and staff to spend a period of study/research at one of the European consortium universities.

#### 1.3.2.3 University of Brussels (ULB) - AESOP+

AESOP+ (A European and South African Partnership on Heritage and Past) is a multidisciplinary and inter-sectorial Erasmus Mundus consortium co-coordinated by the University Paul Sabatier-Toulouse three (3) (France) and the University of the Western Cape (South Africa). The partnership is composed by ten (10) European (including ULB – *Université Libre de Bruxelles*) and eight (8) South African university partners, as well as 6 additional associate members.

AESOP+ involves eight (8) thematic fields and encourages the collaboration between different sectors applied to cultural and natural heritage:

- 1. Engineering, Technology;
- 2. Architecture;
- 3. Agriculture:
- 4. Geography, Geology;
- 5. Humanities;
- 6. Mathematics, computer sciences;
- 7. Natural Sciences;
- 8. Social Sciences:
- 9. Humanities.

The AESOP Consortium will manage the partnership and will organize 95 mobilities (62 South African applicants and 33 European applicants in Master, Doctorate, Post Doctorate and Staff).

### 1.3.3 Flanders

The Indicative Cooperation Programme of Flanders with South Africa (2012-2016) focuses on job creation through the development of small, micro and medium enterprises in the provinces of Free State, Limpopo, and KwaZulu-Natal. The prevention of HIV/AIDS, gender and children's rights are integrated as crosscutting issues. Flanders equally supports academic partnerships between Flemish and SA universities and research institutions as well as exchange programmes for entrepreneurs.

### 1.3.4 Research Foundation Flanders (FWO)

The Research Foundation Flanders (FWO) signed a bilateral agreement with the SA National Research Foundation (NRF) for the funding of joint research projects with Flemish universities and a limited number of accredited Flemish research institutions. Research proposals are selected through a competitive call for proposals, which is open for fundamental research in all disciplines. Joint research project with South African partner(s) must have one central research question, one methodology and one implementation modality. These projects go further than the traditional exchange projects, since salary costs can also be funded.

# 1.3.5 Fund for Scientific Research of Wallonia-Brussels Federation (F.R.S-FNRS)

The Fund for Scientific Research - FNRS (F.R.S.-FNRS) of Wallonia-Brussels Federation and The National Research Foundation (NRF) in South Africa entered in 2014 into a 3-year inter-agency agreement. The principle objective of the cooperation between the Parties is to foster scientific and technological cooperation by facilitating brain circulation between the two countries.

The agreement provides for different ways of cooperation including: the exchange of information and research, joint research, seminars, conferences and all other forms of cooperative activities mutually agreed by both Parties. Joint research proposals can be submitted in a limited number of areas, which are the following: natural and life sciences, engineering, social sciences (including indigenous knowledge systems) and humanities. In terms of human capital development, South African applications from previously disadvantaged researchers are encouraged, as is the involvement of historically disadvantaged higher education institutions. The June 2016 call for proposals focuses on Natural and Life Sciences, Engineering, Social Sciences and Humanities.

### 1.3.6 Belgian Science Policy Office (BELSPO)

The Belgian Science Policy Office (BELSPO) is currently preparing a Memorandum of Understanding (MoU) with the SA Department of Science and Technology (DST) aimed at facilitating the collaboration between SA and Belgian research institutions. Marine sciences and health sciences will most probably two of the priority sectors, although the latter still needs to be narrowed down to a limited number of subareas. Other priority areas that are still under discussion are earth sciences & natural risks, as well as biodiversity and sustainable management. The MoU will not include a pre-allocated budget. The MoU will most likely be put into practice on basis of call for proposals for joint research projects in one of the priority areas. Budgets will be allocated accordingly. The MoU should be finalised and put into practice by the end of 2016 or the beginning of 2017.

# 1.3.7 Flemish Association for Development Cooperation and Technical Assistance (VVOB)

In October 2011, the Flemish Association for Development Cooperation and Technical Assistance (VVOB) started a programme focusing on the improvement of the pedagogical, methodological, and professional knowledge and skills of lecturers in Further Education and Training (FET) colleges in SA. In 2014 a new programme started supporting the SA Department of Basic Education, the SA Council for Educators (SACE) and the Free State Department of Education in its efforts to institutionalise continuous capacity building of primary school teachers and managers.

### 1.4 Relevant Institutional Framework

The International Development Cooperation (IDC), Chief Directorate in the National Treasury (NT) is the direct partner for this new scholarship programme with South Africa. In South Africa development cooperation is managed by IDC, which is in charge of, amongst others:

- Facilitating negotiations between development partners (DPs) and the Government of South Africa (GoSA) in setting priorities and programmes that are aligned to national priorities, systems and processes;
- 2. Ensuring compliance with multilateral and bilateral agreements, in alignment with the National Development Plan, national policy and legislation;
- 3. Co-ordinating reporting on development cooperation to the budget and to the Parliament which, in turn is dependent on the harmonisation and transparency of reporting by all partners and stakeholders.

IDC's mandate is to mobilise development cooperation resources, ensure the optimal utilization of such resources in the context of South Africa's broader international relations, and in support of its own development priorities, and that of the region. IDC focuses on strengthening the alignment of development cooperation with the government's spending priorities, prioritising the need for South African-led development cooperation, the optimal utilisation of limited resources in support of South Africa's development priorities, investing in technological advancements and innovation, strategic partnerships (technical and academic), and enhancing long-term sustainability.

In close consultation with IDC/NT and the Belgian Embassy in SA the following institutions have been selected as Beneficiary Institutions of the new programme:

The national Department of Higher Education and Training (DHET)<sup>2</sup>: In 2009 the SA national Department for Education was reorganised and split into two ministries, i.e.: the Department of Basic Education (DBE) and the Department of Higher Education and Training (DHET). DHET is responsible for the Further Education and Training (FET) colleges, higher education, and sector education and training authorities (SETAs). DHET supports the GoSA in the development of an efficient and quality higher education and training system that meets the development goals of the country and that is able to deliver well-educated and skilled citizens who can compete in a diversified and knowledge-intensive international economy. DHET is in charge of reducing skills bottlenecks, especially in priority and scarce skills areas. According to its Strategic Plan 2015/16-2019/20 "Together, turning every workplace into a training space", DHET will focus on reinforcing the technical and vocational education and training (TVET) system, and on improving the qualifications of university academic staff. DHET pays specific attention to the development of a differentiated and fully-inclusive post-school system through consciously addressing social inequality, race, gender, age, geography, HIV/aids and disability issues that might hamper equal opportunities of access to quality education and training. nGAP is one of the major programmes managed by DHET.

The Department of Science and Technology (DST)<sup>3</sup>: Through the National Research Foundation the Department of Science and Technology supports research in SA through funding, human resource development, and the provision of the necessary facilities. These capabilities facilitate the creation of knowledge, innovation and development in all fields of research and thereby contribute towards establishing a knowledge-based economy. DST focuses on supporting the "next generation" of academics, "emerging" researchers and "established" researchers in the South African science system. The objective is to achieve the human capital development targets set out in the NDP, which are: the increase in the academic staff with doctoral degrees; the production of more doctoral graduates; the production of more doctoral graduates in science, engineering and technology disciplines; and the increase in post-graduate students.

The South African Medical Research Council (SAMRC)4: The research mandate of the SAMRC is guided by the SAMRC Act and the country's health needs and priorities. SAMRC both conducts and funds research that may lead to drug or vaccine discovery, affordable diagnostics and devices and other health solutions and evidence that will impact on the health, the wellbeing and the quality of life of all who live in South Africa. To achieve this, the SAMRC works with the Department of Health, the Department of Science and Technology, the Department of Higher Education and Training, Science Councils, Medical Schools, Universities, Research Institutes and other local and international collaborators. The SAMRC core mandate is to fund competitive health research across South Africa's 26 public universities, science councils research organisations and within its own intramural and extramural research units. Lack of adequate funding for researchers and post-graduate students, need of extensive supervision and mentoring of newly qualified scientists and need for greater collaborative partnerships between South African and international higher education institutions in order to enable cross-fertilisation of best practices are some of the major challenges to sustain scientific excellence in the South African Higher Education sector. SA health research, in particular, is facing serious challenges of lack of PhD qualified and competent scientists in critical disciplines needed to grow medical and clinical research. The SAMRC research agenda and action plan is informed by the SAMRC 2015/16-2019/20 Strategic Plan.

The SA Transport Education and Training Authority (TETA): TETA is responsible for monitoring education and training in the Transport Sector in SA and also functions as an Education and Training Quality Assurance Body. TETA promotes learnership in the sector through the identification of sites for

<sup>&</sup>lt;sup>2</sup> More information about DHET at : < <u>http://www.dhet.gov.za/SitePages/AboutUS.aspx</u>>.

<sup>&</sup>lt;sup>3</sup> More information about DST at : < http://www.dst.gov.za/>.

<sup>&</sup>lt;sup>4</sup> More information about the SAMRC at: < <a href="http://www.mrc.ac.za/">http://www.mrc.ac.za/</a>>.

practical workplace experience, supporting the development of learning materials and improving the facilitation of learning in general in the sector. The transport sector includes eight demarcated subsectors: aerospace, forwarding and clearing, freight handling, maritime, rail, road freight, road passenger and taxi subsectors and related industries. Improving skills in the maritime sector is done by a number of stakeholders such as DHET, the SA Maritime Safety Authority (SAMSA), Transnet, the Department of Transport (DOT) and TETA. In 2007 BTC, TETA and the Antwerp/Flanders Port Training Centre (APEC) signed a MoU for maritime and logistics related training to candidates selected from TETA's stakeholders. The agreement comprised training in Belgium and in South Africa. TETA was responsible for programme coordination, selection and screening of the candidates, BTC for approving and funding the candidates and APEC for the delivery of the training programmes. A tracer study conducted in 2015 revealed that the trainings did not really respond to the SA needs and recommended the development of tailor made curricula adapted to the specific needs and characteristics of the SA maritime and port management. Further training interventions should be developed to strengthen the role of the SA institutions in this respect, such as the Maritime School of Excellence (MSoE) and the SA International Maritime Institute (SAIMI).

Transnet: Transnet is the largest and most crucial part of the freight logistics chain in SA delivering thousands of tons of goods through its pipelines, and both to and from its ports throughout the country. Transnet is a state-owned entity but operates as a corporate entity aimed at both supporting and contributing to the country's freight logistics network. Transnet operates as an integrated freight transport company, formed around a core of five operating divisions that complement each other, i.e.: Transnet freight rail, Transnet rail engineering, Transnet national ports authority, Transnet port terminals and Transnet pipelines. The MSoE as well as the Nelson Mandela Metropolitan University (NMMU), are major partners in training, research and benchmarking for all aspects related to the maritime and maritime economy, including port management, port security, port engineering, port logistics etc. Both institutions are meant to become SA hubs of excellence in maritime sciences. Through TETA Transnet participated in the Belgium funded training programmes with APEC. At the moment Transnet has no expressed wish to continue the collaboration with APEC unless the training programmes are adapted to SA needs.

Belgium Campus<sup>5</sup>: Belgium Campus is a private, non-profit institution accredited by DHET and DST and focuses exclusively on the training of diplomas and degrees in ICT. The institution was established in 1999 in response to a high unmet need for skilled ICT experts in SA. Belgium Campus delivers 10% of IT graduates in the country and boasts a 100% graduate employment rate. Its training programme aligns with the SA National e-Skills Plan of Action 2013 and the National ICT Policy "Green Paper" (2013). Its success stems from the proactive approach of its Participative Development Model of Education that takes the needs of all stakeholders (students, industry, academia, government and society) into account, which results in a demand-driven, student-centred and business-focused higher learning system. In response to the Broad-Based Black Economic Empowerment<sup>7</sup> strategy of the GoSA, Belgium Campus also invests in the training and employment of historically disadvantaged people, and more particularly black females and disabled persons through the development of an adapted Bachelor Degree in IT for deaf students (2015). This is in collaboration with the National Institute for the Deaf, and the recent establishment of a new project aimed at black female students from disadvantaged communities. Belgium Campus is also setting up an Open Learning University which will allow for blended learning and research through web streaming. Belgium Campus is also collaborating with the University of Venda, a historically

<sup>&</sup>lt;sup>5</sup> More information about the Belgium Campus at : < <a href="http://www.mrc.ac.za/">http://www.mrc.ac.za/</a>>.

<sup>&</sup>lt;sup>6</sup> National Integrated ICT Policy « Green Paper », December 2013, at :

<sup>&</sup>lt;a href="http://www.gov.za/sites/www.gov.za/files/37261\_gon44.pdf">http://www.gov.za/sites/www.gov.za/files/37261\_gon44.pdf</a>.

<sup>&</sup>lt;sup>7</sup> More information about the BEE strategy at : < http://www.southafrica.info/business/trends/empowerment/bee.htm#.V01H42df3IU>.

disadvantaged university in SA and has developed strong international partnerships with the Catholic University of Leuven (KUL, Belgium) and Penn State University (USA).

All selected Beneficiary Institutions, except for the SAMRC, were supported by the "classic" BTC scholarship project. All are mandated to launch calls for proposals and for bursary candidates. All utilise internal evaluation and selection procedures and mechanisms.

### **2 STRATEGIC ORIENTATIONS**

### 2.1 General Principles

Given the high diversity among the Beneficiary Institutions that have been selected for the scholarship programme and the variety of areas in which they are operating, the Belgian cooperation and the NT/IDC agreed upon a set of general principles that should be taken in to account for the evaluation and selection of the proposals. Although they are not compulsory, both parties agreed that it is highly recommended to take them into account to the maximum extent possible. The general principles are the following:

- 1. Focus on institutional capacity building;
- 2. Fostering **partnerships** between SA historically advantaged and historically disadvantaged institutions, and between SA and Belgian institutions;
- 3. Maximal support to the **nGAP** programme;
- 4. Inclusiveness of historically disadvantaged individuals;
- 5. Demand-driven and business-oriented;
- 6. Job-oriented training and education;
- 7. Combination of capacity development initiatives;
- 8. **Co-funding** through own contributions.

### 2.1.1 Focus on Institutional Capacity Building

The focus will primarily be on the institutional capacity building of the Beneficiary Institutions through creating opportunities for lecturers, researchers, post-graduates, etc. through short term knowledge development and knowledge sharing initiatives. Where necessary, and in order to improve the scientific quality of the academic staff, the scholarship programme can also support them to finalise their degree, granting short leaves for finalising their research, writing and defending their thesis (Master or PhD).

In order to ensure that the BAPED programme actually contributes to the institutional capacity building of the Beneficiary Institutions it is crucial that the bonding mechanisms that have been developed by the BI in order to commit staff who have benefited from a scholarship to remain at the institution during a certain period of time, are respected and implemented.

# 2.1.2 Fostering Partnerships between SA Historically Advantaged and Historically Disadvantaged Institutions, and between SA and Belgian Institutions

Whereas several of the top ten universities in the African continent are located in SA (e.g. the University of Witwatersrand, University of Stellenbosch or the University of Cape Town), and are renowned worldwide for the quality of their research, the country is still facing a huge gap between the Historically Advantaged Institutions (HAI) and the Historically Disadvantaged Institutions (HDI). Staff constraints, combined with high number of students results in a high teaching burden, hampers the HDI in assuring due monitoring and supervision of their students to fully develop the skills required to become centres of excellence in scientific research. Moreover, they often lack the time and human resources to participate in tendering processes to acquire additional funding or to develop full-fledged partnerships with international institutions. In the evaluation of the proposals, due attention will be given to the efforts made by the Beneficiary Institutions to include HDIs, to strengthen their research and training skills and capacities and to pave the way for effectively involving them in international partnerships.

International partnerships are key for knowledge sharing, improving the quality of research and training, triggering new and innovative ideas, and having an impact on the international research agenda setting and implementation. Well-conceived partnerships entail a win-win for all partners, for both students and academic staff. In the development of international academic partnerships, the focus will basically be on fostering partnerships between SA and Belgian research and training institutions. The programme aspires to create opportunities for strengthening existing partnerships as well as for developing new partnerships. The programme will also explore new opportunities in areas that are of priority interest for SA and where Belgian institutions are excelling but where there is little or no tradition of collaboration with SA institutions, such as nanotechnology at the KUL, biotechnology at Ghent University or biostatistics at the University of Hasselt.

Ideally the SA-BE exchange component of this programme will build the foundations towards a possible future South African – Belgian Academic Network in the medium term. Such a network could become a major reference for all stakeholders that are already investing in SA-BE academic partnerships (such as VLIR, BELSPO, VVOB, etc.) but also for other South African and Belgian institutions interested in furthering the academic collaboration between both countries. The network could also provide a platform for creating a multidisciplinary South African – Belgian Alumni Network. Though the creation of the South African – Belgian Academic Network is beyond the scope of this programme, the programme can contribute to initiating the reflection on the relevance and the objectives of such a network. A proper follow-up and evaluation of the activities in view of building the foundations for longstanding partnerships in the future will be paramount in this respect.

### 2.1.3 Support to the nGAP Programme

The nGAP programme recruits new academics against carefully designed and balanced equity considerations and in light of the disciplinary areas of greatest needs. DHET plans to take in a new cohort of nGAP lecturers every year. Through the BAPED programme priority will be given to academics in those areas where Belgian institutions can be of added value.

### 2.1.4 Inclusiveness of Historically Disadvantaged Individuals

The BAPED programme aligns with the Broad-Based Black Economic Empowerment strategy and makes sure that opportunities are created for historically disadvantaged individuals such as black females and people with a disability to participate. The programme can also fund specific activities targeting such individuals to improve and refine their applications, ensuring a better success rate of securing scholarships through their respective institutions.

### 2.1.5 Demand-driven and Business-oriented

The BAPED programme focuses primarily on (a selected number of) the priorities areas as identified by the GoSA and more particularly on those areas that are of interest for both the economic development of the country and the reinforcement of the SA academic institutions to become centres of excellence in the respective areas. Compliance with the GoSA needs and priorities is a guiding principle in the identification of Belgian partner institutions. In this respect the BAPED programme can also support the adaptation of existing curricula and modules used by the Belgian institutions to the specific needs of South Africa, on request of the SA institutions and provided that SA institutions can fully participate in this process. Training activities should not only focus on improving academic skills and competences but also take into account the contribution of such skills to economic development and growth.

### 2.1.6 Job-oriented Training and Education

Although priority is given to institutional capacity building, scholarships for individual students are not excluded. This can be the case where the development of a critical mass of professional and well-skilled graduates is mostly needed for the economic and social development of the country. For example, sectors such as the maritime, ICT or statistics, are coping with a shortage of well- trained people or with

high numbers of graduates whose qualifications are not compatible with the needs of the sector.

### 2.1.7 Combination of Capacity Development Initiatives

The programme will finance a variety of initiatives:

- Bachelor, Master and PhDs studies;
- Accelerated Master and PhD studies;
- Mobility between SA HAI and SA HDI;
- International mobility between SA and BE institutions;
- Short term knowledge sharing initiatives such as workshops, seminars, conferences, study tours, match making visits, etc.

Given the relatively limited budget and duration of the project, as well as the fact that the Belgian governmental cooperation with SA is phasing out, preference is given to scholarships for accelerated Master and PhD studies. It will be difficult to provide scholarships for the full duration of "traditional" Bachelor, Master or PhD studies with a duration of three (3) years or more. Scholarships for long term university studies can only be provided by the programme if the SA partner can assure additional funding in order to enable the bursary candidates to finalise their degree. In this respect and in view of the focus on institutional capacity building, preference will be given to providing scholarships for accelerated Masters and PhDs in order to enable staff to complete their degree through creating possibilities for doing their research, preparing their exams, finalising their theses, etc.

### 2.1.8 Co-funding

The Beneficiary Institutions will be required to provide co-funding to finance certain aspects of their respective scholarship proposals, such as transport cost within SA or from SA to Belgium or additional budgets needed for "traditional" bursary candidates to finalise their degree after funding through the BAPED programme has ended. These co-funding arrangements and responsibilities will be discussed bilaterally between the BI, BTC and the IDC, and formalised.

### 2.2 Priority Sectors

The BAPED programme provides funding for capacity building initiatives in a limited number of priority areas. These comprise areas that were funded by the "traditional" scholarship programme, such as ICT, the maritime and health. Per area the BAPED programme will focus on specific aspects conform the needs that have been identified for each sector, such as, for example:

- ICT:
  - o Training of highly qualified, skilled and business oriented ICT experts;
  - Improving the quality of TVET in ICT;
  - Improving the quality of ICT lecturing at SA training institutions;
  - setting up ICT Open Learning Models.

#### Maritime:

- Strengthening the role of SA institutions, such as the MSoE and NMMU, in business oriented maritime skills development, lecturing, research and benchmarking adapted to the SA needs and priorities;
- Priorities in the maritime sector that have already been identified are: ocean economy, marine operations and terminal operations, port management and port policy regulations, port engineering and seafaring.

#### Health:

- Strengthening SA capacity and competences in health research, medical research and clinical research through the training of professionals, lecturers and researchers in biostatistics and epidemiology;
- o Health financing.

The focus for each of the "traditional" sectors can be fine-tuned during the start-up phase of the programme and complemented by other priority sectors that are key for the economic development of SA. It is preferable that the number of priority sectors is not too high — maximum five (5), for example — in order to avoid dispersion, to ensure programme efficiency and to facilitate the creation of hubs of excellence. The governmental institutions that were consulted in preparation of the formulation process, have already shortlisted a number of priority sectors technical file. This list might need to be narrowed down. §

In the selection of additional priority sectors, the availability of expertise at Belgian institutions and complementarity with other programmes such as the VLIR-UOS programme and the MoU with BELSPO, will be part of the selection criteria. Potential sectors that have been identified during the programme formulation were land reform, technical and vocational training and education (TVET) and road safety.

# 2.3 Guiding Principle for the Development of the Scholarship Proposals and the Selection of the Bursary Candidates

Given the short duration of the programme it is important that the selection procedure is as swift as possible, though fully transparent, and makes maximal use of the internal selection procedures and mechanisms existing at the respective Beneficiary Institutions.

During the formulation of the BAPED programme the Beneficiary Institutions were asked to prepare a short concept note and to give a rough description of what could be a meaningful contribution of the programme in response to their respective needs and priorities (See Annex 7.6). These concept notes will be the major reference for the further development of full-fledged, comprehensive scholarship proposals. These proposals will be negotiated between the respective Beneficiary Institutions and the Advisory & Follow-up Committee (A&FC). The A&FC will be created by the BAPED programme in order to ensure

**DHET shortlist of priority sectors:** Animal and Human Health, Biotechnology, Climate Change, Engineering Sciences, Humanities and Social Sciences/ Human and Social dynamics, Management, Maritime Studies, Natural and Physical Sciences, Nuclear and Renewable Energy, Space Science and Technology, Statistics, Teacher Education (TVET, ECD, Special Needs), Telecommunications,

**DST shortlist of priority sectors:** Aerospace & Space, Advanced Manufacturing, Chemicals, Mining & beneficiation, Advanced metals, ICT, Bioeconomy, Nanotechnology, Photonics, Health, Energy,

Others: Health financing, Land reform, Technical and vocational training and education (TVET), Road safety, Biotechnology, Nanotechnology, Biostatistics.

<sup>&</sup>lt;sup>8</sup> Priority sectors that emerged during the formulation process:

maximal programme coherence. The finalisation of the list of priority sectors will be part of the negotiation process. The scholarship proposals should also include a detailed budget and a work plan of maximum two (2) years.

The evaluation of the scholarship proposals and the selection of the candidates will be guided by the general principles of the programmes, although slight deviations depending on the characteristics of the Beneficiary Institutions are possible. For example, it might well be that Belgium Campus will mainly focus on the training of students, and less on the capacity building of academic staff.

### 3 INTERVENTION FRAMEWORK

### 3.1 General Objective

The general objective of the BAPED programme is to contribute to the economic development of South Africa through the establishment of a network between South-African and Belgian academic institutions.

### 3.2 Specific Objective

The specific objective of the BAPED programme is "to build the foundations for long-standing partnerships between South-African and Belgian research and training institutions aimed at improving business oriented skills development, training and research."

### 3.3 Expected Results

- **R.1:** Skills, competences and capacities are developed through scholarships for Bachelor, Master and PhD studies.
- **R.2:** Skills, competences and capacities are strengthened through scholarships for national and international mobility and short term short term trainings.
- **R.3:** Academic partnerships within South Africa and between South Africa and Belgium are fostered through the organisation of knowledge sharing initiatives.

### 3.4 Activities

### 3.4.1 Preparatory Activities in the Start-up Phase of the Programme

The start-up phase of the programme will be key for further implementation. During this phase it is important that:

- 1. The list of priority sectors is finalised;
- 2. All necessary manuals, guidelines and templates are developed;
- 3. All Beneficiary Institutions submitted a comprehensive and detailed scholarship proposal.
- 4. The scholarship evaluation procedures are finalised.
- 5. All required governance structures and linked mechanisms are developed and in place to ensure transparency and allows for reporting and accountability to both NT/IDC and BTC.

The manuals guidelines and templated needed for due implementation of this programme will be based on an adaptation of existing documents used by similar BTC programmes in other countries. As soon as the Specific Agreement is signed, the Department of Scholarships and Traineeships, together with the Department of Sectoral and Technical Expertise at BTC Headquarters (HQ) will start to prepare manual, guidelines and template proposals in order to speed up the programme implementation. BTC HQ will also make an overview of existing expertise and centres of excellence at Belgian academic institutions in the priority sectors as identified by the NT/IDC and the SA BIs.

Finalisation of the list of priority sectors.	At the start of the programme the list of priority sectors will be fine-tuned and finalised according the principles and strategic orientations set out in chapter 2 of the TFF. This exercise will be done in close consultation with the NT/IDC and the BI and will be supported by the Programme Coordinator and the Advisory & Follow-up Committee (A&FC). The final list will be submitted to the Project Steering Committee for final approval.
2. Manuals, guidelines and templates	At the start of the programme the Programme Coordinator will develop guidelines for the comprehensive scholarship proposals as well as the necessary templates for the proposal submission. The scholarship proposals should also include a baseline (a state of the art of available competences and skills in the selected priority sectors as well as an analytical overview of existing partnership initiatives within SA and between SA and BE in the respective sectors), a detailed budget and a work plan for maximum two (2) years.
	To the extent possible, the templates will be based on existing templates within the BI and with BTC in order to make the proposal writing as simple as possible.
	At the start of the programme the Programme Coordinator will also make a manual with the Guiding Principles and Governance Rules of the Advisory & Follow-up Committee (A&FC). This is part of the governance structure that will be developed during the start-up phase of the programme.  All guidelines, manuals and templates will be submitted to the Programme Steering Committee (PSC) for formal approval.
3. Comprehensive scholarship proposals.	The BI are asked to develop a comprehensive scholarship proposal. The concept notes developed during the formulation of the programme (and included as annexes in the TFF) will be taken as a starting point. Full proposals will be developed taking into account the general principles and strategic orientations as explained in Chapter 2 of the TFF. The BI will be invited to discuss the scholarship proposal with the A&FC and will be given the opportunity to make the necessary adaptations based on the A&FC recommendations and instructions.
4. Evaluation of the scholarship proposals	The A&FC approves or rejects the final proposals and formulates an advice for the PSC that will formalise the decision of the A&FC (as part of the governance structure that will be developed during the start-up phase of the programme).

### 3.4.2 Expected Results and Activities in the Operational Phase of the Programme

### <u>Result 1:</u> Skills and capacities are developed through scholarships for Bachelor, Master and PhD studies.

#### A 1.1 Selected bursaries.

The selection of the bursary candidates is done by the BI according to their respective internal procedures. The Programme Coordinator will participate as an observer and non-voting member in the respective selection procedures. The role of the Programme Coordinator is advisory in order to ensure compliance with the BTC rules and regulations and supportive to the secretariat of the respective selection committees. The Programme Steering Committee is informed through the Programme Management Committee for tabling.

In view of the institutional strengthening of the academic institutions, the focus will rather be on granting scholarships to academic staff for accelerated Masters of PhD. In the case of Belgium Campus, specialised in the training of business oriented professional experts in ICT, the focus will rather be on scholarships for Bachelors in ICT for black female and deaf students. These Bachelors are residential and conditional, depending on the guarantees given by South Africa to ensure funding for the Bachelor students for the period needed to finalise their studies after the BAPED programme expired.

### A 1.2 Follow-up of the bursary candidates.

Follow-up of the bursary candidates will be done by the respective BI according to their internal procedures and guidelines. They will report to the A&FC about the number and kind of bursary candidates finalising their degree and about the measures that have been taken in order to ensure additional funding needed for bursary candidates who started their degree under the BAPED programme but the duration of which extends beyond the duration of the programme.

### Result 2: Skills and capacities are strengthened through scholarships for national and international mobility and short term short term trainings.

### A 2.1 Identification of potential BE partner institutions.

On request, the Departments of Scholarship & Traineeship and of Sectoral & Thematic Expertise at BTC HQ will support the BI in the identification of BE institutions providing short term training (3 to 6 months) in the priority sectors funded by the programme and BE academic staff willing – and available – to engage in the mentoring and supervision of SA bursary candidates. Flemish and francophone institutions in Flanders, Brussels and Wallonia will be approached.

A 2.2 Selected bursaries.	The selection of the bursary candidates is done by the BI according to their respective internal procedures. The PSC is informed through the PMU for tabling.
A 2.3 Follow-up of the national and international mobility activities and the short term trainings.	It is important that the mobility activities and the short term trainings respond to the needs of the SA BI and also meet the expectations of the BE institutions. Satisfaction surveys will be done on a regular basis. On basis of the results of these surveys the A&FC will formulate recommendations for improving the relevance and the coherence of these activities.
	within South-Africa and between South Africa and Belgium ion of knowledge sharing initiatives.
A 3.1 Identification of potential BE partner institutions.	On request, the Departments of Scholarship & Traineeship and of Sectoral & Thematic Expertise at BTC HQ will support the BI in the identification of potential BE partner institutions, the organisation of matchmaking visits and study tours for SA institutions in Belgium. Flemish and francophone institutions in Flanders, Brussels and Wallonia will be approached.
A 3.2 Organisation of the activities.	The BAPED programme wants to create opportunities for the organisation of activities such as exchange visits, study tours, workshops, seminars, etc. that enable SA and BE institutions to share knowledge and to identify opportunities for joint research proposals or joint curriculum development. Workshops can also be organised for very practical issues such as proposal writing, scientific writing, etc.
A 3.3 Evaluation and follow-up of the activities.	It is important that the knowledge sharing initiatives meet the expectations of both the SA and the BE institutions. All activities will be systematically evaluated and assess the satisfaction of the participants. The evaluations will be consolidated in an evaluation report that will be submitted to the A&FC. The A&FC will formulate recommendations for further improvement.
A 3.4 Organisation of end-of programme seminar.	An end-of-programme seminar will be organised in order to enable SA and BE stakeholders to make a state of the art of the results and their importance for the economic development of SA and to reflect on the way forward and on how to consolidate the partnerships within SA and between SA and BE that have originated or strengthened as a result of the programme.

### 3.5 Indicators and Means of Verification

The scholarship proposal developed by the BI will provide a status of the existing competences and skills in the selected priority sectors, as well as an analytical overview of existing partnership initiatives within SA and between SA and BE in the respective sectors. This information will be used as the baseline for measuring the outcome and assessing the results of the programme.

In the logical framework a series of indicators have been suggested. They can be adapted and refined according to the results of the respective baselines. The baseline value and intended targets are integrated in the logical framework which can be found in annex 7.1.

### 3.6 Description of Beneficiaries

A more detailed description of the six Beneficiary Institutions (BI) is given in Chapter 1.3. Each of the beneficiaries has its own network of academic and training institutions and economic actors that should be able to benefit from the programme. The bursary candidates will be selected by the BI according to their respective internal rules and regulations.

### 3.7 Risk Analysis

### 3.7.1 Implementation Risks

Risks	Risk Level	Probability	Alleviation measure
Missing the start of the new academic year in SA due to delay in signing the Specific Agreement and the employment of staff.	High.	High.	Possibility of funding a wide array of activities.  Strong focus on short term initiatives.
Delays in the selection of the bursary candidates.	Medium.	Medium.	Active role of the A&FC in the follow-up of the programme implementation. Involvement and active participation of BIs in the selection process.

### 3.7.2 Management Risks

Risks	Risk Level	Probability	Alleviation measure
Closure of the BTC Representation in SA before the end of the programme.	Medium.	Medium.	Follow-up by the BTC Representation for Mozambique and South Africa.  Strong Programme Management Unit (2 full-time equivalents of which 1 Programme Coordinator and 1 Administrative & Financial Officer).  Special budget line for "Support Finance".

### 3.7.3 Effectiveness Risks

Risks	Risk Level	Probability	Alleviation measure
Poor quality of the comprehensive scholarship proposals.	Medium.	Low.	Negotiation of the scholarship proposals at the level of the A&FC.
Lack of a common view on how academic relationships between SA and BE can be sustained and strengthened after the exit of BTC.	Medium.	Medium.	The establishment of the Advisory & Follow-up Committee.  Participation of the Belgian Embassy as observer in the PSC and the A&FC.
Mismatch between SA and Belgian institutions.	Low.	Medium.	Systematic evaluation and follow-up of the activities by the A&FC.
Poor governance structures.	Medium.	Medium.	The stewardship role of the National Treasury in the Programme Steering Committee and the Advisory & Follow-up Committee.
Failing bonding mechanism.	Medium.	Medium.	Regular Reporting to the Advisory & Follow-up Committee.

### 3.7.4 Sustainability Risks

Risks	Risk Level	Probability	Alleviation measure
Uncertainty about funding possibilities with other donors (public and private; SA, BE and others) to continue investing in an initiative that was initiated by the Belgian governmental cooperation without their input right from the start.	Medium.	High.	Continued consultation with other Belgian actors in SA (VVOB, BELSPO, Flanders, VLIR-UOS, Belgian francophone universities, ARES).  Organisation of knowledge sharing activities for proposal writing, the development of joint proposals, etc.

### 3.7.5 Fiduciary Risks

Risks	Risk Level	Probability	Alleviation measure
Lack of transparency in the bursary selection procedures.	Low.	Low.	Active involvement of the Programme Coordinator in the selection procedures used by the BI.  Full oversight of the governance structures are instituted.

### 4 RESOURCES

### 4.1 Financial Resources

### 4.1.1 Belgian Contribution

The Belgian contribution amounts to 1,500,000 euro.

### 4.1.2 South African Contribution

As specified in chapter 2.1.7 the Beneficiary Institutions will be asked to indicate the amount of the contribution or co-funding of the SA partner in the final comprehensive scholarship proposals.

### 4.1.3 Detailed Budget

TOTAL I	BUDGET SAF 16 888 01 in euro	execution modality	TOTAL BUDGET	%	YEAR 1	YEAR 2	YEAR 3
A	Foundations for long-standing partnerships between South-African and Belgian institutions aimed at improving business oriented skills development, training and research are built in a limited number of priority areas.		1,134,580	76%	437,000	551,500	146,080
A 01	Result 1: Skills, competences and capacities are developed through scholarships for Bachelor, Master and PhD studies.		601,000	40%	300,000	300,500	500
A 01 01	Selected bursaries	BTC MGMT	600,000		300,000	300,000	0
A 01 02	Follow-up of the bursary candidates	BTC MGMT	1,000		0	500	500
A 02	Result2: Skills, competences and capacities are strengthened through scholarships for national and international mobility and short term trainings.		459,250	31%	115,750	229,250	114,250
A 02 01	Identification of potential BE partner institutions	BTC MGMT	2,500		1,500	1,000	0
A 02 02	Selected bursaries	BTC MGMT	456,000		114,000	228,000	114,000
A 02 03	Follow-up of the national and international mobility a	BTC MGMT	750		250	250	250
A 03	Result3:Academic partnerships within South- Africa and between South-Africa and Belgium are fostered through the organisation of knowledge sharing initiatives		74,330	5%	21,250	21,750	31,330
A 03 01	Identification of potential BE partner institutions	BTC MGMT	2,500		1,000	1,500	0
A 03 02	Organisation of the activities	BTC MGMT	55,000		20,000	20,000	15,000
A 03 03	Evaluation and follow-up of the activities	BTC MGMT	750		250	250	250
A 03 04	Organisation of an end-of-programme seminar	BTC MGMT	16,080		0	0	16,080
Х	Budgetary reserve		79,089	5%	21,920	36,092	21,077
X 01	Budgetary Reserve		79,089		21,920	36,092	21,077
X 01 01	Budgetary reserve BTC MGMT	BTC MGMT	79,089	5%	21,920	36,092	21,077
Z	General Means		286,331	19%	104,540	100,368	81,423
Z 01	Staff Expenses		160,640	11%	72,708	55,536	32,396
Z 01 01	Programme Coordinator (100%)	BTC MGMT	143,468		55,536	55,536	32,396
Z 01 02	Administrative & Financial Officer	BTC MGMT	14,172		14,172	0	0
Z 01 03	HR Recruitment Costs	BTC MGMT	3,000		3,000	0	0
Z 02	Investments		3,000	0%	3,000	0	0
Z 02 01	IT Equipment	BTC MGMT	3,000		3,000		
Z '03	Operational expenses	DT0 14014T	39,691	3%	15,332	15,332	9,027
Z 03 01	Office costs	BTC MGMT	26,691		10,332	10,332	6,027
Z 03 02	Transport	BTC MGMT	10,000		4,000	4,000	2,000
Z 03 03 Z 04	Other operational expenses	BTC MGMT	3,000	6%	1,000	1,000	1,000
	Audit and Monitoring and Evaluation	DTO MONT	83,000	6%	13,500	29,500	40,000
Z 04 01	Monitoring and Evaluation costs	BTC MGMT	30,000		0	16,000	30,000
Z 04 02	Audit	BTC MGMT	16,000		10,000	16,000	10,000
Z 04 03 Z 04 04	Support finance	BTC MGMT	30,000		10,000	10,000	10,000
	Backstopping	BTC MGMT	7,000		3,500	3,500	049.500
TOTAL			1,500,000		563,460	687,960	248,580
		BTC MGMT	1,500,000	[	563,460	687,960	248,580

### 4.2 Human Resources

The programme will recruit two people: one Programme Coordinator (National Technical Assistant, full time at 100%) and one Administrative & Financial Officer (national, part-time at 50%). In order to facilitate the recruitment process candidates can be selected from existing recruitment pools at the NT/IDC, provided that they comply with the BTC selection criteria, otherwise the BTC will conduct the recruitment with inputs from the NT/IDC.

The Administrative & Financial Officer will be recruited for a period of 12 months. The need for this function will be evaluated before the end of the first year. If necessary the PSC can decide to extend the contract of the Administrative & Financial Officer (provision is made under the budgetary reserve, budget line X\_01\_01).

BTC HQ, and more particularly the Scholarships & Trainee Department and the Sectoral and Technical Expertise Department, will also support the programme in the identification of potential BE partner institutions and the organisation of study tours or exchange visits in Belgium.

### 4.3 Material Resources

The programme will be based at the office of the BTC Representation. An all-inclusive Office Service Delivery, covering all expenses (telecommunication, rent, electricity, maintenance, use of desk, use of the vehicle, office equipment, etc.) will be signed between the BTC Representation and the programme.

The budget provides for the purchase of two (2) laptops.

A budget line for traveling costs within South-Africa is also included.

### 5 IMPLEMENTATION MODALITIES

### 5.1 Legal Framework and Administrative Responsibilities

The legal framework for the programme is given by the Specific Agreement signed between the Government of the Kingdom of Belgium represented by the Belgian Minister for Development Cooperation and the Government of the Republic of South Africa represented by the Chief Directorate - International Development Cooperation of National Treasury.

The present Technical and Financial File (TFF) is part of the Specific Agreement signed between the Republic of South Africa and the Government of the Kingdom of Belgium, determining the legal framework of the intervention.

The Specific Agreement shall enter into force on the date of its signature by both Parties and will expire on the 30<sup>th</sup> of June 2019. Contract should be committed on the 31<sup>st</sup> of December 2018 at the latest. The ultimate date for payment linked to the contract is the 30<sup>th</sup> of March 2019.

### The South African Government designates:

The National Treasury: International Development Cooperation, Chief Directorate (IDC) as the contracting authority which is mandated to take a leading role in managing and monitoring the ODA flows to the government sector. The National Treasury signs all Financing Agreements on behalf of the Government of South Africa and is thus accountable to development partners;

The National Treasury: International Development Cooperation, Chief Directorate (IDC) is the administrative entity responsible for the implementation of the programme.

### The Belgian Government designates

- The Directorate General for Development Cooperation and Humanitarian Aid (DGD) represented by the Belgian Embassy in Pretoria as the authority responsible for the Belgian government contribution.
- The Belgian Technical Cooperation (BTC) represented by the BTC Resident Representative to South Africa as the Belgian entity responsible for the implementation and follow-up of the programme.

### 5.2 Technical Responsibilities

There is a joint Belgian-South African technical operational responsibility for the execution of this programme.

The mode "joint responsibility" applies at the level of the Programme Steering Committee between the Belgian (BTC Resident Representative) and the South African partner (National Treasury).

Technical and operational responsibility for the execution of the intervention activities and achievements of results to reach the specific objective is shared between the Programme management unit (PMU) and the members of the Advisory &Follow-up Committee (A&FC). Decisions on technical management will be taken jointly.

### **5.3 Programme Life Cycle**

The Specific Agreement will expire on the 30<sup>th</sup> of June 2019 and will have a maximum duration of 36 months. The intervention will end on the 31st of March 2019 and has a maximum duration of 31 months.

The implementation phase starts when the Specific Agreement is signed and includes a start-up phase (estimation: 4 months) and a closing phase (3 months). All contracts should be committed on the 31<sup>st</sup> of

December 2018 at the latest. The ultimate date for payment linked to the contract is the 30<sup>th</sup> of March 2019. All programme activities must be terminated at the end of the implementation phase.

The programme life cycle entails the following 3 phases:

### 5.3.1 Preparatory Phase

This phase starts at the validation of this TFF and ends with the Implementation agreement notification (CMO).

Before the actual start of the programme a series of tasks can already be done during a preparatory phase:

- · Recruitment of programme staff
- Procurement of IT equipment
- Opening of the bank account, etc.

Except for those linked to recruitment and logistics, no other programme expense will be made during that period.

Estimated costs during the preparatory phase:

Ge	General means							
Z	01		Human resources					
Z	01	03	HR recruitment costs	3,000 EUR				
Z	02		Investments					
Z	02	01	IT equipment	3,000 EUR				
ТО	TAL	6,000 EUR						

### 5.3.2 Implementation Phase

### 5.3.2.1 Programme start-up phase

At the beginning of the programme's implementation phase a starting phase of maximum 4 months will start during which starting activities will be carried out, such as:

- 1st Programme Steering Committee (PSC);
- Finalize the recruitment of staff;
- First programme operational planning (Year 1);
- Establishing monitoring system;
- Finalisation of the selection of the priority areas ;
- Development and approval of the necessary manuals, guidelines and templates;
- Negotiation, finalisation and approval of the scholarship proposals;
- Start-up report (including work plan).

### 5.3.2.2 Operational phase

Operationalization of the intervention:

- The operational phase ends on the 31th of March 2019.
- At the end of this phase a planning of the operational closure is validated by the PSC.

### 5.3.2.3 Procedure for the approval of the scholarship proposals and the selection of the bursary candidates

The full selection procedure consists of seven (7) steps:

- 1. The Project Management Unit (PMU) develops a generic template for the scholarship proposals based on the TFF general principles;
- 2. The PMU formally invites the Beneficiary Institutions to develop a full proposal;
- 3. The programme's Advisory & Follow-up Committee (A&FC) invites the Beneficiary Institutions to present their proposals and negotiates adaptations if necessary;
- 4. The PMU submits the proposal to the Project Steering Committee for final approval;
- 5. The Beneficiary Institutions do the selection of the bursary candidates according to their internal procedures;
- 6. The Beneficiary Institutions submit a list of approved bursary candidates to the PMU.
- 7. The PMU submits the list of approved bursary candidates to the PSC for tabling. Tabling is done within two weeks after receipt.

The Programme Coordinator will participate in the selection committees of the respective BI.

### 5.3.2.4 Operational closure phase

The preparation of the operational closure starts at the latest 3 months before the end of the Specific Agreement (the 30<sup>th</sup> of June 2019). A close monitoring of this phase will be done using BTC tools.

Moreover, a strict planning of closure must be respected (see point 5.8. Closure of the intervention).

The final report must include the following chapters:

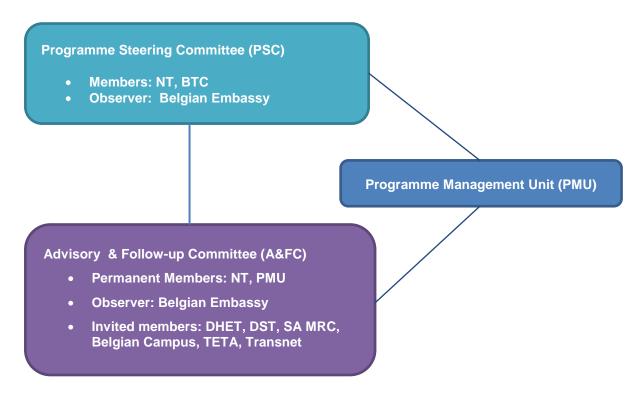
- Administrative information;
- Financial information;
- · Operational information;
- Information on Results.

Beyond the validity of the Specific Agreement, no expenditure will be accepted and no payments will be done.

### **5.3.3 Administrative Closure Phase**

The final report is sent to DGD and the programme is administratively closed.

### 5.4 Implementation and Follow-up Structures



### **5.4.1 Programme Steering Committee (PSC)**

The Programme Steering Committee (PSC) represents the highest coordination and management level of the programme. It provides strategic guidance to the Programme Management Unit and assures that the programme objectives are timely achieved.

The PSC is created at the programme start-up. It meets at the beginning of the programme to approve the indicative action plan. Within the limitations imposed by the Specific Agreement, the PSC shall lay down its own internal rules and regulations and take its decisions by consensus.

### The PSC will consist of the following members:

- The Chief Director of the International Development Cooperation Department (National Treasury) as Chairperson;
- The Resident Representative for BTC in South Africa as Co-chairperson;
- A representative of the Belgian Embassy as observer.

The PSC Chairman and Co-chairman can invite different stakeholders, as non-voting members, to attend the PSC meeting.

The Programme Steering Committee will meet on a six-monthly basis. PSC members can request an extraordinary meeting to the PSC Chairman.

The PSC must not necessarily meet physically. Decisions can also be made through teleconferences and be formalised per e-mail.

### The PSC will assume the following responsibilities and is mandated to:

- Ensure that the roles and responsibilities of the different entities involved in the programme are clearly defined;
- Define and approve any adjustment in programme strategies; provide policy and implementation guidance to all programme stakeholders;
- Finally approve of the comprehensive scholarship proposals of the respective BIs;
- Approve awarding decisions when such responsibilities have not been delegated to the Advisory &Follow-up Committee and/or to the PMU;
- Approve modifications of activities, modalities and budget realignments provided that such modifications do not alter the programme's general and specific objectives nor its overall budget;
- Approve proposals to modify the programme indicators;
- Approve the programme inception report, including the overall work and financial plan of the programme;
- Approve the six-monthly progress and financial reports;
- Approve the six-monthly action and financial plans;
- Approve the implementation manuals at the start of the intervention and any subsequent changes, including:
  - o The Programme Operational and Financial Procedures Manual;
  - A list of decisions that can be made by e-mail;
  - The Guiding Principles and Governance Rules of the "Advisory &Follow-up Committee;
- Appreciate the terms of reference (ToR) of the final evaluation mission and endorse the recommendations;
- Ensure that an external audit is carried out by an accredited accounting firm, appraise any findings and recommendations and follow up their implementation;
- Recommend any essential modification of the objectives, the total budget and/or the duration of the programme to the South African and Belgian Government;
- Approve the changes of the composition and responsibilities of the PSC, the Advisor and follow-up committee and the PMU;
- Approve modifications to the TFF, except for modifications of the objectives, the total budget and the duration of the programme;
- Approve the action plan related to the closing process (planning, last operational and financial commitments), the final report and the final closure of the programme, following the procedure mentioned in the guideline "Closing procedures" provided by BTC;
- Approve the final report and the final closure of the programme.

### **5.4.2 Programme Management Unit (PMU)**

The PMU will be headed by a Programme Coordinator (appointed by BTC, with a no-objection provided by NT) who will be responsible for the daily management of the programme.

### The PMU will be composed of:

- a Programme Coordinator full-time (100%) for maximum 31 months;
- an Administrative & Financial Officer part-time (50%) with a contract of 12 months. If necessary this contract can be extended for maximum 19 months.

Both staff members will be recruited and financed by the programme. In order to facilitate the recruitment process candidates can be selected from the existing recruitment pool at IDC/NT or be selected by BTC following a separate selection procedure.

The need for administrative and financial support will be evaluated before the end of the first year (See Point 4.2). The budget required for a possible extension is included in Budgetary Reserve.

The PMU will be based in Pretoria.

### The Programme Coordinator will:

- Execute the daily management of the programme activities described in this TFF and the approved programme work plans;
- Ensure that all activities and related outputs contribute to the expected programme results and specific objective, through a close monitoring based on pre-defined indicators;
- Provide guidance on programme methodology and strategy;
- Assure the administrative support for the PSC (secretariat, agenda, documents, minutes and dissemination of minutes);
- Prepare and submit to the PSC the implementation manuals, guidelines and templates, at the start of the intervention and any subsequent changes, including:
  - o the Programme Operational and Financial Procedures Manual (POM);
  - the Guiding Principles and Governance Rules of the Advisory &Follow-up Committee;
  - o the guidelines and templates for the comprehensive scholarship proposals;
- Establish the programme work plan and budget that will be presented to the first Programme Steering Committee (PSC) during the first 3 months of the programme starting phase;
- Prepare the quarterly (operational & financial) planning and progress reports to be submitted to BTC for approval;
- Prepare and submit to the PSC the six-monthly (operational & financial) planning and progress reports; Appropriately prepare any issues and proposals to be submitted for decision or guidance by the PSC;
- Coordinate the execution of the programme in accordance with the programme work plans approved by the PSC;
- Compile the programmes annual reports and final report at the end of the programme following BTC guidelines;
- Undertake regular monitoring and report on monitoring findings;
- Ensure the transparency and integrity of all awarding processes of the programme, conduct and/or monitor quality control of key capacity building services funded by the programme, ensure good governance and economic use of the programme resources and met BTC requirements with respect to treasury and budget management;
- Prepare a draft ToR for the End-Term Review and other review missions as deemed required and submit to the PSC;

- Facilitate the work by providing all necessary information to the external audit, evaluation mission, backstopping mission and to guarantee the good execution of their recommendations;
- Follow-up all the necessary administrative procedures for tax and VAT exemption/refund;
- Ensure the adequate closure of the programme activities, including the preparation of the final report at the end of the programme duration and other needed activities following the procedure mentioned in the guideline "Closing Procedure" provided by BTC;
- Provide administrative support to the Advisory &Follow-up Committee (secretariat, agenda, documents, minutes, dissemination of minutes);
- Propose to the PSC any essential modifications of the objectives, the total budget and/or the duration of the programme to the South African and Belgian Government;
- Tender (where such responsibility has been delegated to the PMU) for the procurement of services in conformity with applicable regulations;
- Preparing an end-of-programme consolidated report to be presented to the PSC no later than
  one month before the end of the programme. The report includes the minutes of this PSC
  meeting and provides a full account of the expenditures of both the South African and
  Belgian contributions. It also includes a list of the equipment to be handed over to the South
  African Government and the destination of the remaining budgets.

The PMU reports directly to the PSC in terms of activities and results linked to the programme. The PMU has to ensure that adequate human resources are deployed in order to achieve qualitative and timely results.

The organization and operation of the PMU will be further described in the Programme Operational and Financial Procedures Manual (POM) to be approved by the PSC.

### 5.4.3 Advisory & Follow-up Committee

The Advisory & Follow-up Committee will be established with a mandate to:

- Advise and support the Beneficiary Institutions on the development of their respective scholarship proposals;
- Advise and support the PMU and the PSC on the final approval of the scholarship proposals;
- Advise and support the PMU and the PSC on the coherence of the scholarship proposals based on the results of the evaluation reports and the satisfaction surveys;
- Advise and support the PMU and the PSC on the ToR of the end-of-programme seminar.

### Composition of the Advisory & Follow-up Committee:

- Permanent Members: Representative of NT, PMU;
- Observer: Belgian Embassy;
- Ad-hoc (Invited) members: Belgium Campus, DHET, DST, S.A MRC, TETA, TRANSNET.

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## Operating rules:

- The Advisory & Follow-up Committee will meet at least three times a year;
- Decisions are taken by consensus by the permanent members. Invited members and Observer have no voting power;
- A manual with the Guiding Principles and Governance Rules of the "Advisory & Follow-up Committee; will be developed at the start of the programme and submitted to the PSC for approval. Once approved by the PSC, it will be the basis for the general operations and specific tasks of the Advisory & Follow-up Committee;

# 5.5 Operational Management

### 5.5.1 Human Resources

NT will appoint the chairperson of the PSC.

The BTC in South Africa will select the Programme Coordinator and Administrative & Financial Officer through BTC procedures with the non-objection of NT and BTC will manage their contract and salary.

### Additional remarks:

- All positions are equal opportunity, however, female candidates will be encouraged to apply.
- If the ToR defined in this TFF must be revised before advertisement, the revised ToR need to be approved by the PSC.

## 5.5.2 Financial Management

### 5.5.2.1 Introduction

The management of the Belgian contribution is done according to BTC-Direct-management and the funds will be made available according to the BTC system.

In accordance with the partnership principles between the Belgian and South African parties, the planning of the financial commitments will be done with mutual agreement. The public procurements and grant awards will be done according to Belgian regulations.

## 5.5.2.2 Bank Accounts

For the management of the funds in BTC management, BTC will open a specific bank account in Euro at the Deutsche Bank and a specific bank account in ZAR at a commercial bank in South Africa after the signature of the Specific Agreement.

The management of these funds will remain BTC's responsibility and will be done in accordance with the internal rules and procedures of BTC.

In terms of signature, the double BTC-signature is compulsory.

### 5.5.2.3 Funds Transfer

### First transfer

From the notification of implementation agreement between **the Belgian State and BTC**, a **first** cash-call can be submitted by the PMU to BTC Representation. The requested amount must be in line with the financial needs of the first three months and will follow the BTC internal procedures.

### Subsequent transfers

To receive subsequent transfers, the PMU must request a cash call to the BTC Representation, following BTC procedures.

Subsequent requests for transfers must be based on action and financial plans approved by the PSC.

Each transfer should equate to the estimated funding requirements of the programme as prepared by the PMU for the succeeding three months, plus a small margin for contingency, possibly paid in several tranches. The transfer of funds by BTC to the programme bank account will be made at the beginning of each quarter provided that:

- The financial accounts for the programme are up to date and have been submitted to the BTC Representative;
- The financial plan for the quarter to be financed has been submitted to the BTC Representative;
- The amount of the transfer request does not exceed the remaining budget balance;
- Any recommendations proposed by external audits have been followed up or implemented and reported to the BTC Representation.

In addition, intermittent urgent cash transfers may be requested; but such urgent cash calls are only acceptable if they are fully justified in relation to extraordinary events.

The final payment of the programme will follow the same conditions as described above.

## 5.5.2.4 Financial planning

## Preparation of annual and multiannual budgets

The programme management unit will develop an annual budget proposal for each year of implementation, following BTC procedures. In this budget proposal, an indicative budget for the following years should also be included. This budget proposal must be approved by the PSC.

The annual budget is part of the annual plan and provides the basis for the monitoring of budget execution of the next year.

## Monitoring and budgetary commitments

Each quarter, the programme must report on the budget execution and the forecast of expenditure, compared to the total budget and annual budget approved. The reporting is done according to the format provided by BTC and is part of the quarterly reporting.

The programme must ensure proper control and regular budget monitoring of commitments.

# 5.5.2.5 Accounting

Accounting is done on a monthly basis according to BTC rules and regulations and its own financial system.

The accounting documents must be signed for approval by the Programme Coordinator. The accounting documents that must be forwarded to the BTC Representation include an electronic file, the supporting documents as well as the bank statements and petty cash statements.

The accounting documents must be up to date, accurate and reliable and conform accounting standards and rules in place.

## 5.5.3 Budget Management

## 5.5.3.1 Budget constraints

The budget of the programme sets out the budgetary limits within which the programme must be executed. The total budget and the budget per execution mode may not be exceeded.

## 5.5.3.2 Budget change

Overshooting of a general means section or a result less than 10% of the amount budgeted for on this section or result in the latest version of the budget is authorized.

At budget line level, budget overshooting is allowed if the overshooting is less than 20% of the amount of the latest approved budget for this line or if it is less than 50.000 €

At the level of the annual budget, there are no constraints, except for the general means section for which the annual budget overshooting can be no more than 5%.

In case a budget increase is needed, a written request for the increase must be submitted by the national party to the Belgian state after agreement of the steering committee. If Belgium accepts the request an exchange of letters is signed by both parties.

For all other budget changes, a written agreement of the authorizing officer and co-authorizing officer is sufficient.

For each request for budget change, the programme management unit must elaborate a budget change proposition according to BTC's procedures.

The contingencies budget can only be used for programme activities and after approval of the Resident representative.

## **5.5.4 Public Procurement Management**

Tendering shall be managed in accordance with the Belgian Procurement Rules and Procedures. However the South African partner will be as much as possible be involved in the process (ToRs, evaluation and selection of the offers).

In order to ensure transparency of programme procurement practices, all members of the programme steering committee, upon request, will have access to all administrative, financial and technical documentation regarding programme procurement.

## **5.5.5 Grant Agreements Management**

In accordance with Article 8 of the BTC Law, BTC can provide financing to one or more third-party partners for the achievement of part of the activities of the TFF or for an own action of the partner that contributes to the achievement of the objectives of the intervention. Grants will be awarded in accordance with the modalities of the BTC for the elaboration and follow-up of Grant Agreements. Public or private entities that are awarded grants are called "beneficiary contractors". The beneficiaries of the actions funded by the grant are called "final beneficiaries".

### 5.5.5.1 Identified grants in the TFF

No grant agreements are identified in the framework of the intervention.

## 5.5.5.2 Case of non-identified grants in the TFF

If the case of a non-identified Grant in the TFF but emanating from a management proposal of the intervention during the implementation, it is necessary to obtain approval of the Programme Steering Committee, recorded in minutes based on a clear argument motivating why the public procurement modality does not apply. The above modalities concerning information to the Belgian State on recipients

of grants or approval of beneficiaries by the Minister of Cooperation are obviously applicable.

## 5.5.6 Management Mutualisation Framework Agreements

The so-called "public-public" cooperation agreements may be materialized for BTC through "mutualisation framework agreements" (MFA), operationalized through a "specific cooperation agreements" (SCA).

This type of agreement will be retained in case the intervention aims to encourage synergies of expertise coming from other public institutions, mainly Belgian ones, even if cooperation with a non-Belgian institution is also possible.

In such agreements, the public interest and the concept of 'non-profit' are highlighted. The contracting authorities shall cooperate to jointly ensure the execution of public service missions.

The signing of SCA will follow the internal BTC modalities, which will be communicated to the stakeholders, as for the Grants Agreements.

### 5.5.6.1 Non identified MFA/SCA in the TFF

A partnership as MFA / SCA can be identified during the execution. In this case, the Programme management unit (PMU) must obtain the agreement of the steering committee, recorded in minutes, and follow the procedure as described in the MFA / SCA BTC Modalities to initiate the process.

## 5.5.7 Monitoring & Evaluation

## 5.5.7.1 Monitoring

	Report Title	Responsibility	System	Frequency	Users
Comprehensive Baseline	Baseline Report	Programme management unit	втс	Unique	Programme, PSC, BTC
Operational Monitoring	MONOP	Programme management unit	втс	Quarterly	Programme, BTC Rep office
Results Monitoring	Results report	Programme management unit	втс	Annually	Programme, partner, PSC, BTC rep office
Backstopping	Backstopping report	BTC-HQ experts	втс	Max. 4	Programme, partner, PSC, BTC rep office
Final Monitoring	Final Report	Programme management unit	втс	Unique	PSC, Partner, BTC rep office BE embassy

### Operational Monitoring

Operational monitoring refers to both planning and follow-up of the intervention's management information (inputs, activities, outputs) and its purpose is to ensure good programme management. It is an internal management process of the intervention team. Every quarter the Operational Monitoring update is sent to and discussed with BTC representation. BTC Resident Representative has the overall responsibility of ensuring that all programmes conduct Operational Monitoring in a correct and timely manner.

## Results Monitoring

Results Monitoring refers to an annual participatory reflection process in which intervention team reflects about the achievements, challenges, etc. of the past year, and looks for ways forward in the year(s) to come. The PSC approves or disapproves recommendations made by the intervention team in the annual result Report.

## **Backstopping**

Two (2) technical follow-up and support missions by BTC-HQ experts will be conducted. The PMU will facilitate such backstopping missions and collaborate intensively with them.

### Final Monitoring

The purpose of final monitoring is to ensure that the key elements on the intervention's performance and on the development process are transferred to the partner organisation, the donor and BTC and captured in their "institutional memory". This enables the closure of the intervention (legal obligation for back-donor of BTC), the hand-over to the partner organisation and the capitalisation of lessons learned. It can be considered as a summary of what different stakeholders might want to know at closure or some years after closure of the intervention.

### 5.5.7.2 Evaluation: End-term review

	Responsibility	System	Frequency	Users
End term- review	BTC HQ	втс	Unique (3 months before end of programme)	PSC, Partner, BTC rep office BE embassy

End term-review is organised three months before the end of the intervention.

BTC-HQ is responsible for organising the review. The ToR of the review and its implementation is managed by BTC Brussels, with strong involvement of all stakeholders. The role of the PSC is to approve or disapprove the recommendations made in the review.

### 5.5.8 Financial and Procurement Audits

## 5.5.8.1 Programme audit

The programme must be audited once during the implementation (one audit will be budgeted) following BTC procedures, BTC will deploy an independent qualified audit firm (International Accounting Standards) to audit the dedicated programme accounts. BTC will write the ToR of the audits. This audit will be carried out by the auditors according to the BTC framework contract in force.

BTC and the Steering Committee may request additional audits if necessary.

The auditor's reports must be presented to the steering committee.

The audit reports will include recommendations and proposal of corrective actions.

The PMU will prepare an action plan to improve the procedures and justify that corrective measures were taken.

### 5.5.8.2 BTC Audit

The College of Commissioners will yearly audit BTC accounts. They also audit the programmes at that moment. BTC Audit Committee can also request that BTC internal auditors audit a programme.

## 5.6 Taxes and Duties

No part of the Belgian contribution should be used to pay any taxes, customs and import duties or other tax-related fees on supplies, equipment, works and services. If duties and taxes are due according to the national legislation, they will be covered by the South African party.

## 5.7 Modification of the TFF

The Programme Steering Committee can approve any modification of the TFF, except for adjustment of the programme name, programme owner, general and specific objectives, the total budget and the duration of the programme.

# 5.8 Closure of the Intervention

### 5.8.1 Procedures

The closing will be done following BTC rules and regulations as described in the closing manual. Moreover, for this project 2 specifics will be applied: for the planning of the closing and for the management of the cash and budget balances.

## a) Planning of the closing

Moreover the following planning must be respected:

- No new commitment will be authorized after 31/12/2018;
- No payment will be done after 30/06/2019 (end of the Specific Agreement) with no exception.

### b) Balances

Unused funds on bank accounts will be transferred to BTC.

The unused budget amounts at the end of the programme will return to the Belgian State.

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# **6 CROSS-CUTTING THEMES**

# 6.1 Gender and Human Rights

In the selection of the bursary candidates the SA regulations regarding the inclusion of the historically disadvantaged individuals will be followed. These also pay specific attention to the so-called positive discrimination of black females and people with a disability.

One of the major principles underlying the economic development strategy of SA is the "Broad-based Black Economic Empowerment" (B-BBEE). "Black people" is a generic term meaning Africans, Coloured and Indian people. The B-BBEE Act 53 of 2003 aims to promote the economic empowerment of the black community as one of the measures that have been taken to overcome the historic social and economic inequalities generated by decades of Apartheid in the recent history of the country. The goal is to distribute wealth across a broad spectrum of historically disadvantaged South Africans. In addressing the inclusion of historically disadvantaged South Africans, particular attention is paid to the empowerment of black women, youth, people with a disability, and people living in rural areas. Empowerment is not only understood in terms of black people becoming entrepreneurs or managers but also in terms of black people having access to skills development, human resource development activities aimed at improving their employment chances.

This programme will pay attention to the inclusion of historically disadvantaged individuals and HDIs, whereby particular attention is given to facilitating the participation of black women (or "black females"), black females from rural areas and people with a disability.

# **7** ANNEXES

# 7.1 Logical Framework

	Logical of the intervention	Indicators	Baseline	Target	Sources of verification	Hypotheses
GO	Global objective  To contribute to the economic development of South Africa through the establishment of a network between South-African and Belgian academic institutions.					The Belgian Embassy will continue supporting efforts for the creation of sustainable academic partnership in priority sectors for the SA economic development after the exit of BTC.
so	Specific objectives  Foundations for long-standing partnerships between South-African and Belgian institutions aimed at improving business oriented skills development, training and research are built.	Degree of satisfaction of the BI with the quality and the relevance of the training and education activities financed through the programme.  Number of SA-BE academic partnerships that have been formalised in a Memorandum of Understanding or joint research proposals with support of the programme.	0%	75% 6	Reports of the satisfaction surveys.  Annual programme reports.	Belgian research and training institutions are interested in developing and strengthening the relations with SA academic institutions.  SA-BE academic partnerships are successful in resource mobilisation with other donors.

	Logical of the intervention	Indicators	Baseline	Target	Sources of verification	Hypotheses
R 1	Result 1: Skills, competences and capacities are developed through scholarships for Bachelor, Master and PhD studies.	% of bursary candidates for Accelerated Bachelors, Masters and PhD finalising their degree. % of selected bursary candidates being black females. % of selected bursary candidates being persons with a disability.	0% 0% 0%	80% 40% 5%	Reports of the BI.	The programme can start in time, i.e. September 2016 so that payments for the bursary candidates can be made at the start of the academic year in SA (January 2016).  DHET can effectively launch a specific nGAP call for the BAPED programme in Q4 2016.
R 2	Result 2: Skills, competences and capacities are strengthened through scholarships for national and international mobility and short term trainings.	Number of exchange initiatives for supervision and short term training between SA HDI and SA HAI  Number of exchange initiatives for supervision and short term training between SA and BE institutions.  % of selected bursary candidates being black females.  % of selected bursary candidates being persons with a disability.	0 0 0% 0%	Min. 1 per priority sector.  Min. 1 per priority sector.  40%	Reports of the BI.	SA HAI are interested in partnering with SA HDI.  The expertise sought by the SA BI is available at the BE institutions.  BE institutions are interested in receiving bursary candidates from SA.
R 3	Result 3: Academic partnerships between South Africa and Belgium are fostered through the organisation of knowledge sharing initiatives.	Number of knowledge sharing activities involving both SA HDI and SA HAI as well as BE institutions	0	Min. 1 per priority sector.	Reports of the BI.	SA and BE institutions are motivated for setting up longstanding SA-BE partnerships and convinced of the added value that these partnerships can bring generate in the future.

	Activities to reach Result 1	Means	Belgian Contribution
R 1	Result 1: Skills and capacities are developed through scholarships for Bachelor, Master and PhD studies.		Costs in Euros
A 1.1	A 1.1 Selection of the bursary candidates.	Bursary budgets Meeting costs	600,000
A 1.2	A 1.2 Follow-up of the bursary candidates.	Meeting costs	1,000
	Activities to reach Result 2		
R 2	Result 2: Skills and capacities are strengthened through scholarships for national and international mobility and short term short term trainings.		
A 2.1	A 2.1 Identification of potential BE partner institutions	Support from BTC HQ Meeting costs	2,500
A 2.2	A 2.2 Selection of the bursary candidates	Bursary budgets, Meeting costs	456,000
A 2.2	A 2.3 Follow-up of the national and international mobility activities and the short term trainings	Meeting costs	750
	Activities to reach Result 3		
R 3	Result 3: Academic partnerships within South-Africa and between South Africa and Belgium are fostered through the organisation of knowledge sharing initiatives.		
A 3.1	A 3.1 Identification of potential BE partner institutions	Meeting costs	2,500
A 3.2	A 3.2 Organisation of the activities	Activity related expenses	55,000
A 3.3	A 3.3 Evaluation and follow-up of the activities	Meeting costs	750
A.3.4	A 3.4 Organisation of end-of-programme seminar	Seminar related expenses	16,080

# 7.2 Implementation calendar

The programme has a maximal duration of 31 months and consists of the following phases:

- Start-up phase
- Operational phase
- Administrative closure phase

For more details: see chapter 5.3.

# 7.3 Chronogram

			Ye	ar 1		V0	V2
Budget Code	Results/activities	Q1	Q2	Q3	Q4	Year 2	Year 3
A_01: Result 1: Skil Master and PhD stu	ls, competences and capacities are developed through scholarships for Bachelor, dies						
A_01_01	Selected bursaries		Х		Х		
A_01_02	Follow-up of bursaries				Х	Х	Х
	ls, competences and capacities are strengthened through scholarships for national obility and short term trainings.						
A_02_01	Identification of potential partner institutions	Х	Х	Х	Х	Х	Х
A_02_02	Selected bursaries		Х	Х	Х	Х	Х
A_02_03	Follow-up of the national and international mobility activities and the short term trainings		X	Х	Х	Х	Х
	lemic partnerships within South-Africa and between South-Africa and Belgium are e organisation of knowledge sharing initiatives						
A_03_01	Identification of potential BE partner institutions	Х	Х	Х	Х	Х	Х
A_03_02	Organisation of the activities		Х	Х	Х	Х	Х
A_03_03	Evaluation and follow-up of the activities		Х	Х	Х	Х	Х
A_03_04	Organisation of an end-of programme seminar						Х

# Start-up activities to be realized in Q1:

- 1. Finalisation of the list of priority sectors;
- 2. Development of manuals, guidelines and templates;
- 3. Development of comprehensive and detailed scholarship proposals;
- 4. Evaluation of the scholarship proposals.

# 7.4 ToR Long-Term Personnel

## 7.4.1 Programme Coordinator (National Technical Assistant) (100%)

#### Context

With "Building Academic Partnerships for Economic Development" (BAPED) the South African - Belgian Cooperation wants to contribute to the economic development of South Africa through the establishment of a network of South African and Belgian academic institutions. The specific objective of the scholarship programme is to build the foundations for longstanding partnerships between South African and Belgian institutions aimed at improving business oriented skills development, training and research in a limited number of priority areas that are key for the economic development of the country.

### **Position**

The Scholarships Programme Coordinator will be responsible for the BAPED Programme to achieve its objective of building the foundations for long standing partnerships between South-African and Belgian research and training institutions aimed at improving business oriented skills development, training and research.

The BAPED Programme Coordinator reports to the BTC Resident Representative in South Africa. He/she supervises the BAPED Programme Administrative & Financial Officer.

### Key responsibilities & tasks

- Execute the daily management of the programme activities described in this TFF and the approved programme work plans;
- Ensure that all activities and related outputs contribute to the expected programme results and specific objective, through a close monitoring based on pre-defined indicators;
- Provide guidance on programme methodology and strategy;
- of minutes);
- Establish the programme work plan and budget that will be presented to the first Programme Steering Committee (PSC) during the first 3 months of the programme starting phase;
- Prepare the quarterly (operational & financial) planning and progress reports to be submitted to BTC for approval;
- Prepare and submit to the PSC the six-monthly (operational & financial) planning and progress reports; Appropriately prepare any issues and proposals to be submitted for decision or guidance by the PSC;
- Coordinate the execution of the programme in accordance with the programme work plans approved by the PSC;
- Compile the programmes annual reports and final report at the end of the programme following BTC guidelines;
- Undertake regular monitoring and report on monitoring findings;
- Ensure the transparency and integrity of all awarding processes of the programme, conduct and/or monitor quality control of key capacity building services funded by the programme, ensure good governance and economic use of the programme resources and met BTC requirements with respect to treasury and budget management;
- Prepare a draft ToR for the End-Term Review and other review missions as deemed required and submit to the PSC;

- Facilitate the work by providing all necessary information to the external audit, evaluation mission, backstopping mission and to guarantee the good execution of their recommendations;
- Ensure the end of the programme duration and the realization of the end of programme activities following the procedure mentioned in the guideline "Closing Procedure" provided by BTC;
- Propose to the PSC any essential modifications of the objectives, the total budget and/or the duration of the programme to the South African and Belgian Government;
- Tender (where such responsibility has been delegated to the PMU) for the procurement of services in conformity with applicable regulations;
- Preparing an end-of-programme consolidated report to be presented to the PSC no later than one month before the end of the programme. The report includes the minutes of this PSC meeting and provides a full account of the expenditures of both the South African and Belgian contributions. It also includes a list of the equipment to be handed over to the South African Government and the destination of the remaining budgets;
- Support NT/IDC with the implementation of the "classic" BTC scholarship project (UNI20XX/01).

## **Qualifications and Experience**

- Degree/Diploma in Economic Sciences, Social Sciences, Public administration or development studies;
- Minimum 5 years of relevant professional experience;
- Proven experience in working with government institutions;
- Proven experience in working with the higher education & training sector (post-secondary education and beyond)
- Proven experience in working with international partners.

### **Skills/Competencies**

- Strong interpersonal and communication skills both written and verbal;
- Ability to interact with different stakeholders;
- Ability to build consensus and manage interinstitutional relations.
- Demonstrated ability to train and build capacity of others, including officials of beneficiary organizations;
- Experience in the management of scholarship programmes will be an advantage
- Well-organised, resourceful with good planning and problem-solving abilities;
- Team player, flexible, quick-thinking and able to work well under pressure;
- Excellent computer knowledge with command on MS Excel among other packages of MS Office;
- Fluency in written and spoken English;
- Knowledge of public procurement procedures.

## Contract

Full-time (100%).

Fixed term contract of maximum 31 months.

## Starting date

To be defined.

### Salary package

Category VII - BTC salary Scale.

## 7.4.2 Administrative & Financial Officer (50%)

### Context

With "Building Academic Partnerships for Economic Development" (BAPED) the South African - Belgian Cooperation wants to contribute to the economic development of South Africa through the establishment of a network of South African and Belgian academic institutions. The specific objective of the BAPED programme is to build the foundations for longstanding partnerships between South African and Belgian institutions aimed at improving business oriented skills development, training and research in a limited number of priority areas that are key for the economic development of the country.

### **Position**

The Administrative & Financial Officer is responsible for assuring the correct and efficient administrative and financial support to the BAPED programme and for supervising all matters related to finances, logistics & procurement – in order to allow for optimal processing of data, files and information related to the BAPED Programme. He/she reports to BAPED Programme Coordinator.

### **Key responsibilities & tasks**

- Guarantee the correct and efficient administrative and financial monitoring of the programme by ensuring proper budget implementation and correct administration of funds.
- Follow up all the necessary administrative procedures for tax and VAT exemption/refund;
- Assist the Programme Coordinator in assuring the administrative support to the PSC (secretariat, agenda, documents, minutes and disseminations of minutes)
- Assist the Programme Coordinator in preparing and submitting to the PSC the implementation manuals, guidelines and templates, at the start of the intervention and any subsequent changes, including:
  - o The Programme Operational and Financial Procedures Manual (POM);
  - The Guiding Principles and Governance rules of the Advisory & Follow-up Committee;
  - The guidelines and templates for the comprehensive scholarships proposals;
- Assist the Programme Coordinator in ensuring the adequate closure of the BAPED Programme's activities, including the preparation of the final report at the end of the programme duration and other needed activities following the procedure mentioned in the guideline "Closing Procedure" provided by BTC;
- Assist the Programme Coordinator with supporting the implementation of the "classic" BTC scholarship project (UNI20XX/01);
- Carry out general administrative tasks (mail, follow-up of documents, etc.) to guarantee effective administrative support :
  - Centralize internal and external calls, take in requests for the BAPED Programme and receive visitors
  - Ensure that correct information is given to whom it may concern
  - Organize and follow-up of meetings or internal or external events related to the BAPED Programme
- Be responsible for the filing and conservation of all relevant correspondence and all documents useful to the service.

## **Qualifications and Experience**

- National Diploma in Accounting/Finance or B Com minimum Bachelor's or equivalent level;
- Minimum 5 years relevant experience;
- Proven experience in accounting/finance and administration;
- Proven experience with developing budgets and providing budgetary monitoring and analysis;
- Proven experience with financial responsibilities or as the person with final responsibility for an entity's accounts.

## **Skills/Competencies**

- Knowledge of standard accounting plans;
- Mastery of cost accounting;
- Excellent computer knowledge with command on MS Excel among other packages of MS Office;
- Good knowledge of computerised accounting tools;
- Mastery of public procurement procedures;
- Knowledge of project cycle and logical framework is an advantage;
- Ability to analyse and summarize;
- Fluency in written and spoken English;
- Proven oral and written communication skills;
- Good organisational and filing skills;
- Pro-active attitude, dynamism.

### Contract

Part-time contract (50%).

Fixed term contract of 12 months. Possibility of extension with maximum 19 months.

## **Starting date**

To be defined

## Salary package

Category V - BTC salary Scale

# 7.5 DHET and DST List of Priority Sectors<sup>9</sup>

## 7.5.1 DHET List of Priority Sectors for International Scholarships

- · Animal and Human Health
- Biotechnology
- Climate Change
- Engineering Sciences
- Humanities and Social Sciences/ Human and Social dynamics
- Management
- Maritime Studies
- Natural and Physical Sciences
- Nuclear and Renewable Energy
- Space Science and Technology
- Statistics
- Teacher Education (TVET, ECD, Special Needs)
- Telecommunications

## 7.5.2 DST Priority Sectors

DST priority sectors for the period 2015 – 2020 in line with the "Industrial Policy Action Plan (IPAP)":

- Aerospace & Space
- Advanced Manufacturing
- Chemicals
- Mining & beneficiation
- Advanced metals
- ICT
- Bio-economy
- Nanotechnology
- Photonics
- Health
- Energy

## **7.5.3 Others**

Potential sectors, apart from ICT, health and the maritime, that have been identified during the programme formulation were the following:

- Health financing
- Land reform
- Technical and vocational training and education (TVET)
- · Road safety
- Biotechnology
- Nanotechnology
- Biostatistics

<sup>&</sup>lt;sup>9</sup> The sectors marked in bold have been identified as priority sector for this project during the formulation mission. Other sectors can be added according to the principles set out in the TFF. For all the preselected priority sectors Belgian academic expertise is available.

# 7.6 Concept Notes

## 7.6.1 Department of Higher Education and Training



## Proposal

on a

Belgium - South Africa Partnership on implementing the
New Generation of Academics Programme as part of the Staffing South Africa's Universities'
Framework

## Submitted 16 May 2016

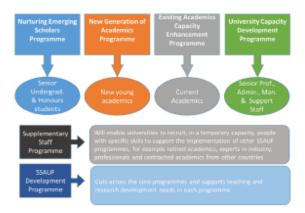
### Background

As a meeting between Belgium Embassy team and the Department of Higher Education and Training's (DHET) University Education Branch which took place on the 12th May 2016, it was agreed that a concept paper and proposal will be developed on a possible partnership with Belgium to support the implementation of the DHET's New Generation of Academics Programme (nGAP).

On the Belgium side, support for the partnership will be considered through use of a portion of 1,500,000.00 Euro that the Belgium government has made available to support a scholarship programme in South Africa.

## The New Generation of Academic's Programme

The New Generation of Academics Programme (nGAP) falls under the ambit of a bigger programme called the Staffing South Africa's Universities' Framework (SSAUF). The SSAUF is intended to be a key vehicle to transform and capacitate staff at universities and to provide a comprehensive response to the staffing challenges at South African universities. A diagrammatic representation of the SSAUF programme is shown below. The nGAP component is described in more detail below. Further information about the full SSAUF programme can be accessed from framework document which accompanies this proposal.



The New Generation of Academics Programme (nGAP) recruits new academics against carefully designed and balanced equity considerations and in light of the disciplinary areas of greatest need. Specifically the nGAP targets the appointment and development of a new generation of black and/or women academics. It draws from promising current senior postgraduate students or past students who hold appropriate post-graduate degrees and who have ambitions or who can be attracted to embark on a career as a university academic.

The nGAP involves the employment of new lecturers in permanent positions from the outset. Employment works on a cost-sharing basis between the universities and the DHET. The DHET caries the full cost of employment for the first three years, with the university picking up 25% of costs in the fourth year, 50% of costs in the fifth year and 75% of costs in the sixth year. From the seventh year onwards, universities take full responsibility for the employment of the lecturers.

The DHET plans to take in a new cohort of nGAP lecturers every year. In 2015, 125 posts were allocated, and in 2016 a further 79 posts have been allocated. 104 nGAP lecturers have taken up their posts with others in various stages of appointment.

The new lecturers participate in a 6 year development programme intended to develop their teaching and research capacity. During this period, the nGAP lecturers are expected to embark upon and complete qualifications/studies suited to their development needs. These may be at the level of masters, doctoral or post-doctoral studies.

The extensive support that the nGAP lecturers benefit from during the 6 year programme includes support to participate in an appropriate international mobility opportunity that is linked to their study and development trajectory. It is intended that the mobility opportunity will enable the nGAP lecturer to spend substantive time at a host university that has recognised expertise in the nGAP lecturers field of study, and so will enable the nGAP lecturer to benefit from interaction and support from leading experts in his/her field. The mobility opportunity should also enable the nGAP lecturer to develop long-term research partnerships in the host country, and to cement relationships between his/her university and the host university.

The proposal: A partnership between the DHET and Belgium to enable quality mobility opportunities for nGAP lecturers and supervisors.

It is proposed that the DHET and Belgium enter into a partnership that enables scholarships to be made available for 30 nGAP lecturers to participate in a study visit/mobility opportunity at appropriate Belgian universities.

The study visits would be of minimum 3 months duration, and would involve a high quality, structured, supported learning experience for the new lecturer, who would benefit from direct support from a leading academic/researcher in his/her field at the host university. Whilst the nGAP lecturer would benefit from exposure to high quality research and teaching development opportunities, the emphasis would be on supporting/enabling the nGAP lecturer to make progress in his/her research study.

2

Whilst the main purpose of the mobility opportunity would be to contribute to the development of the nGAP lecturer as a new academic, an important secondary goal would be to develop long term research relationships between individuals and between South African universities and Belgian universities.

## To this end, it is further proposed that:

- a mobility opportunity of 1-2 weeks duration be made available to the South African based supervisor of the nGAP lecturer to visit the Belgian university whilst the nGAP lecturer is based there. This visit would enable the supervisor and Belgian-based supervisor to confer on progress of the nGAP lecturer and discuss development trajectories. It would also enable the two counterparts to confer on, and concretise research partnerships and structure research proposals for which support could be sought through international funding instruments such as Erasmus +.
- A mobility opportunity of 1-2 weeks duration be made available to the Belgian collaborator to visit South Africa. Such a visit could serve to take the research collaboration further, and for the Belgian partner to conduct seminars and guest lectures in his/her field of expertise.

### The three key objectives of the partnership would therefore be:

- 1. To develop research and teaching capacity for the nGAP lecturer.
- To enable the nGAP lecturer, his/her supervisor and the collaborating colleagues from the Belgian university to build valuable international contacts and networks.
- To establish long term relationships between the host university and the South African university at which the nGAP lecturer and his/her supervisor is based.

### Funding requirements

It is proposed that the action should be co-funded, with the DHET making a contribution to enabling the mobility opportunity for the nGAP lecturer. The table below shows what the approximate funding requirements for the action would be, as well as showing what the South African and Belgian contributions would amount to:

	Approximate cost per	Approximate cost for 30	South Afric	can (DHET)	Belgian con	tribution
	person in Rands	people in Rands	Rands	Euros*	Rands	Euros*
3 month Belgium – based study visit for 30 nGAP lecturers	150 000	4 500 000	1 500 000	85 714	3 000 000	171 429
2 week collaboration visit for 30 South African supervisors	60 000	1 800 000	-	-	1 800 000	102 857
2 week collaboration visit for 30 Belgian collaborators	60 000	1 800 000	-	-	1 800 000	102 857
TOTAL	270 000	8 100 000	1 500 000	85 714	6 600 000	377 143

<sup>\*</sup>Based on an exchange rate of 1 Euro = R17.50

### Conclusion

The DHET welcomes and looks forward to envisaged partnership with Belgium. The proposal is structured so that the possibilities for long term partnerships between South African and Belgian participants and universities is created.

If there is support for the concept, the proposal will be developed more fully to unpack the mechanisms of the action, including how Belgium and South Africa will collaborate to agree on the criteria for participation, the deliverables that will be achieved from the action, and the project management modality. An important criterion that could be considered is the need to establish trilateral partnerships involving Belgian, and South African universities from both historically advantaged and historically disadvantaged universities.

## Submitted by:

Ms M Cakwe

Director: Teaching and Learning Development in Universities cakwe.m@dhet.gov.za

Dr W Green

Chief-Director: Teaching and Learning Development

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## 7.6.2 Department of Science and Technology

## **A Draft Concept Document**

## A Collaborative Postgraduate Funding Instrument

### 1. Introduction

The Department of Science and Technology (DST), through the National Research Foundation (NRF), supports research through funding, human resource development and the provision of the necessary facilities in order to facilitate the creation of knowledge, innovation and development in all fields of research, and thereby contribute to establishing a knowledge-based economy. In order to achieve this mandate, the Department of Science and Technology (DST) has made significant investment towards supporting the "next generation", "emerging researchers", and "established researchers" in the South African science system. The objective is to achieve the human capital development targets set out in the 2030 National Development Plan (NDP), which are:

- Increase the percentage of academic staff with doctoral degrees from 43% to 75%;
- Produce more than 100 doctoral graduates per million population by 2030;
- Produce an additional 100 000 doctoral graduates, most of which should be in the Science, Engineering and Technology (SET) disciplines; and
- Over 25% of university enrolments should be postgraduate students.

Given the country's limited financial, human and infrastructures resources, the DST has established a number of strategic partnerships with the international community to sustain and give effect to its human capital development ambitions.

The Belgian Development Agency (BTC) has presented an opportunity for supporting human capital development in South Africa through a commitment of 1.5 million Euros spread over two years. The Belgian interest is in capacitating historically disadvantaged institutions (HDIs) through linkages with historically advantaged institutions (HAIs), and through further linkages with Belgian higher education institutions. The NRF has an established Collaborative Postgraduate Funding Instrument (CPFI) whose purpose talks to the BTC.

## 2. The Collaborative Postgraduate Funding Instrument

The Collaborative Postgraduate Funding Instrument involves inter-university partnerships and preferably include relevant industry partnership(s), international university partnerships and/or public research institutions partnerships; all working together toward a common objective to produce and sustain a growing stream of well-rounded postgraduate students.

The objectives of this funding instrument are to:

- train a cohort of students in a specified scarce skill discipline or emerging research area spanning the physical, natural, social and human sciences, engineering and technology fields;
- · facilitate postgraduate training within a collaborative multi-institutional network; and
- improve institutional capacity in order to enhance postgraduate training programmes at public universities in South Africa.

The Collaborative Postgraduate Funding Instrument (CPFI) allows for consortia institutions to apply for funding support aimed at enhancing postgraduate training and supervisory capacity across different institutions by supporting the following human capital development cost items:

- Bursary candidates, Scholarships and Fellowships,
- Mobility of Staff and Students (may include short term visits to Belgium Institutions),
- Small research equipment,

- Workshops, Conference and Seminars, and
- · Project and administrative fees.

The NRF will invite lead applicants from public universities in South Africa to submit applications for the funding support of not more than R3m per annum for a two-year grant (R6 m over two years) per consortium. There will be two consortia of institutions funded and therefore R12m is requested over a two year period.

### 3. The Proposed Focus Areas

Subject to further discussions, the proposed priority areas to be considered for the CPFI from the BTC are:

- ICT
- · Land Reform and Rural Development.
- Health
- Maritime Studies

The calls for the CPFI will be opened around July/August for awards to be made in October/November and for the programme to start in the 2017 academic year and conclude at the end of the 2018 academic year.

### 3.1. The First Call

The First Call will focus on ICT and will include the matching of the Belgian ICT campus (a private university) with one or two Universities of Technologies, at least two historically disadvantaged universities and also at least two historically advantaged universities. Therefore, the smallest ideal number of partners is 6. The Call must demonstrate the contribution the consortia would make towards the achievement of some of the goals enshrined in the DST's ICT Roadmap.

In terms of the students, the thrust of the Programme will be on Masters and Honours students (as the duration of support may not see the Doctoral students through their qualifications).

## 3.2. The Second Call

This Call will be predicated/seeded on an existing and established research collaboration between a South African university and a Belgian university in any of the following areas:

- · Land Reform and Rural Development.
- Health
- Maritime

It would not matter which of the South African universities already has a established relationship with the Belgian universities as long as the relationship has been existing for more than two years in the areas identified above. It is also envisaged that the consortium will also consist of 6 institutions, made up of preferably three historically disadvantage institutions, two historically advantaged institutions and a Belgian institution.

In terms of the students, the thrust of the Programme will be on Master's and Honours students. Doctoral students funded under this programme would be absorbed into the NRF funding stream after the conclusion of the programme.

### 4. Allocation Principles

Below are the set of parameters for the utilisation of funds per consortia:

**Postgraduate scholarships**: Approximately 60% of grant costs should be used for Honours, Master's and Doctoral bursary candidates;

**Institutional Capacity Building**: Approximately 40% of the grant costs may be requested for institutional support comprising of small equipment costing less than R400 000; specialised software for research purposes; training workshops; international guest lecturers; technical staff in selected

disciplines such as curators and artists in training and science communication and outreach activities that may include programmes for supporting research exposure to undergraduate and post graduate students.

The programme funding decisions will be guided by the following principles:

**Equity and redress**: In keeping with the equity and redress objectives the grant is based on a preferential funding model. In terms of this model, targets for supporting individuals from designated groups will be set.

**Institutional capacity development**: historically disadvantaged universities are encouraged to use this funding to improve institutional infrastructure *e.g.* computer software in order to enhance postgraduate training programmes and to attract students in the chosen fields.

**Support for full time and full-time postgraduate studies: funding** support will prioritise full time students. As a result, the target is to support 90% full-time students and 10% full-time students. In improving efficiencies, the time to completion for postgraduate students must be monitored;

**Developmental**: even though the programme has a developmental focus, only quality proposals that are scientifically sound in terms of research and training, will be considered for funding;

**Achievability**: the research and training programmes must be realistic, *i.e.*, achievable in terms of the objectives, the resources required and the projected completion times;

### 5. Application Requirements

The lead applicant will apply for the Collaborative Postgraduate Training grant indicating the following:

- Details of lead applicant and university;
- Objectives of the Collaborative Postgraduate Training initiative;
- Motivation indicating alignment with national priorities, scarce skill area and/or a vulnerable discipline;
- Expected outputs and outcomes in advancing HCD in the given discipline;
- Collaborating partners;
- · Partner universities where students will be registered for postgraduate studies;
- Postgraduate supervisors and research projects for training of postgraduate training;
- Availability of research running costs;
- Requested number of scholarships at Honours, Master's and Doctoral levels; institutional capacity and mobility; and
- Motivation for full-time student support where applicable.

Applicants must attach the *Curriculum Vitae* of all supervisors listed in the application.

### 6. Application Process

The NRF will invite applications, for a two -year grant, from applicants at public universities in South Africa. The call for applications will be open from July/August 2016 to September/October 2016. Applications will be submitted via the NRF Online Submission System https://nrfsubmission.nrf.ac.za.

The budget allocation must take into consideration the targets for the programme *viz.* sixty percent (60%) for postgraduate scholarships and forty percent (40%) for institutional capacity and mobility. Each application shall indicate projected costs, for years one (1), and two (2). The total requested budget (Human Capital Development, Infrastructure and Operational cost) for the two years under this programme cannot exceed R6m.

### 7. Other Principles

### 7.1. Postgraduate scholarships

The duration and value for postgraduate scholarships is listed in the table that follows. These values will be reviewed annually to maintain alignment with the Innovation Bursary candidates for Honours, Master's and Doctoral students.

Table 1: Scholarship values and maximum periods of support

Study Level	Scholarship Value for 2016/17 (Rand per annum)	Maximum Funding Period (Years)
Honours full-time	50 000	One
Honours full-time	20 000	Two
Masters full-time	80 000	Two
Masters full-time	30 000	Three
Doctoral full-time	110 000	Three
Doctoral full-time	40 000	Five

Note: The period of support is calculated from the first year of registration for the study or research regardless of NRF funding.

### 7.2. Demographics targets for postgraduate students

Student nominations shall be made as follows:

- 87% to South African citizens and permanent residents;
- 5% to students from the South African Development Community (SADC) region; and
- 4% to students from the rest of Africa; and
- 4% to students from non-African countries.

The overall student composition shall comprise of 55% women, 80% Black (African, Coloured and Indian) and 4% students with disabilities.

## 7.3. Institutional capacity and mobility

The following budget items may be included in the application and all requests must be fully motivated for in the application.

- Small to medium-sized equipment costing no more than R400 000 (two hundred thousand rand);
- Specialised computer software required for postgraduate training;
- Postgraduate training workshops;
- Travel and Subsistence for International guest lecturers;
- Technical staff in selected disciplines such as curators and artists in training; and
- Science communication and outreach activities that may include programmes for supporting research exposure to undergraduate students.

## 7.4. Mechanism of the cooperation

Details of the cooperation will have to be refined between BSP and the NRF through an MOU instrument with the NRF indicating achievable activities, budgets and other pertinent details of the cooperation.

### This first draft was commented and reviewed in the following mail correspondence:

From: Khaya Sishuba < Khaya. Sishuba@dst.gov.za>

To: Marleen BOSMANS <Marleen.BOSMANS@btcctb.org>

Cc: Tebogo Mokoma < Tebogo. Mokoma @dst.gov.za >, Moratabatho Sefora

<Moratabatho.Sefora@dst.gov.za>

Date: 02/06/2016 09:00

Subject: RE: A Draft Concept Document on the Belgian Scholarship Programme fin vers

#### Dear Marleen

I am sorry for the delayed response, it is occasioned by a need to consult a bit more widely particularly our National Research Foundation (NRF). After careful consideration of your email it became apparent that the best institution to manage the cooperation will be the NRF as it is mandated with managing institutional capacity building. They have therefore suggested the following:-

programme in the short-term should serve to:

- 1. consolidate and strengthen <u>existing partnerships</u> between South African HDI researchers and the Belgian researchers, if any; and
- 2. support the South African HDIs in <u>establishing new partnerships</u> with their Belgian counterparts in limited number of priority areas within both the SSH and natural sciences.

The programme could, for the first 2-years, focus on (1) providing mobility support (short-term visits to Belgian institutions) for South African HDI researchers (staff and postgraduate students), (2) procurement of small research related equipment, (3) participation in workshops, conference and seminars, (4) training of South African technical staff in selected disciplines such as curators and artists, (5) hosting of Belgian experts/scientists/researchers for public lecturers/ training courses, (6) short-term exchange of postgraduate students, etc.

We will obviously have to agree to refine the modalities of such a programme through a bilateral agreement (and call guideline) between the NRF and the relevant/responsible Agency in Belgium. But I think this present us with an opportunity to boldly design a capacity development programme for HDIs.

Would this suffice for now?

Kind regards,

### Khaya Sishuba

Director: Bilateral Relations (Europe and Middle East)

Department of Science and Technology

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**From:** Marleen BOSMANS [mailto:Marleen.BOSMANS@btcctb.org]

**Sent:** 27 May 2016 12:12

To: Khaya Sishuba

**Cc:** Moratabatho Sefora; Patrick.DeBouck@diplobel.fed.be; ravi.reddy@btcctb.org **Subject:** Re: A Draft Concept Document on the Belgian Scholarship Programme fin vers

Importance: High

Dear Mr. Sishuba,

Thanks for sending us the concept note.

As you know, we are working under high time pressure as the Technical and Financial File of the new scholarship programme should be ready by next week. This is one of the reasons why the concept notes will be used as a major reference in the further rolling out of the project, in spite of the fact that these proposals are draft documents.

Given the "rush" of this formulation, the communication about the scope and the limitations might not always have been clear. Given the importance of the concept notes in this respect, please allow me to share some concerns.

- 1.As we explained at the meeting with DS on Tuesday last week, we (i.e. the Belgian cooperation, the National Treasury and the other SA Beneficiary Institutions that we visited) decided to focus primarily on **institutional capacity building** through supporting short term training initiatives, national and international mobility, study tours, seminars, workshops, etc. for lecturers and other academic staff and managers, rather than giving scholarships to individuals, although the latter is not totally excluded. Support to the nGAP programme will be a particular point of attention. Would it be possible to see how this concern can fit in into the concept note?
- 2.The short term activities are actually meant to build the foundations for consolidating/strengthening existing **partnerships** between SA HAI and SA HDI and between SA and Belgian training and research institutions and/or to establish new partnerships in a limited number of priority areas. Could you please clarify how our support to the CPFI can contribute.
- 3. We also clarified that the budget of 1.5 million euro should rather be used The limited duration of the programme will not allow for paying "traditional" scholarships for Masters and PhD. Actually I am afraid that the concept note is not taking into account the budgetary limitations. It would be good keeping this in mind and to think about what would be a **minimal meaningful budget and meaningful activities** to be supported. Could you include some indications in this respect?
- 4. During the meeting with DST we also asked to reflect on other **priority areas** than the ones proposed at the start of the formulation (ICT, health, land reform, the maritime) in which a collaboration with Belgian institutions could be a win-win for both parties. We have been informed that DST is currently negotiating a MoU with BELSPO, teh Belgian Science Policy Office. If we understood well, marine sciences has already been identified as a priority area, but there are still other options under consideration such as earth sciences & natural risk, biodiverstity and health (although the latter still needs to be downsized). We assume that the scholarship programme can be complementary to the MoU with BELSPO, particularly since it appears that the MoU will not include a budget as yet. Have you thought about including these or other areas and do you think this is relevant?

Would it be possible to adapt the concept note by Monday afternoon, 31th of May? My apologies for the pressure, but time constraints oblige me to.

If you wish, we can also talk this over and clarify one and another Monday morning, as our office will be closed this afternoon.

Thanks for your comprehension.

Yours sincerely,

Marleen

## 7.6.3 South African Medical Research Council



# CONCEPT PROPOSAL FOR DEVELOPING SUSTAINABLE NEXT GENERATION OF BIOSTATISTICIANS IN SOUTH AFRICA

Academic Partnership between South Africa and Belgium

## Compiled by:

Professor Carl Lombard - Director of Biostatistics Unit, SAMRC, Cape Town, carl.lombard@mrc.ac.za

and

Professor Jeffrey Mphahlele - Vice President, SAMRC, Pretoria, jeffrey.mphahlele@mrc.ac.za

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### 2. STATEMENT OF PURPOSE

South African health research is facing a serious challenge of lack of PhD qualified and competent scientists in critical disciplines needed to grow medical and clinical research. These include, but are not limited to, biostatistics, bioinformatics and epidemiology. Research has shown that health research groups or institutions which are supported by a team comprising at least biostatisticians and epidemiologists are more competitive compared to those without these expertise. These disciplines are therefore considered targeted national priority areas to strengthen South African health research.

South Africa is facing a shortage in high level skills and in particular in Statistics and also in the sub-area of Biostatistics. This is a national challenge. The state of affairs has been recognised by the South African science community and various actions have been taken to mitigate the problem. This concept proposal aims at establishing a bilateral cooperation between South Africa and Belgium to address the critical shortfall of biostatistics professionals in South African health research space. The initiative is critical for the SAMRC to improve research capacity of South Africa in terms of maintaining world class scientific stature, excellence and increasing scientific outputs.

The proposed structure of the bilateral partnership will focus on four (4) broad objectives:

- a) Supporting exchange of staff and expertise between South Africa and Belgium
- b) Accelerating improvement of staff with PhD qualification in biostatistics
- c) Providing scholarships to train the next generation of academics in Statistics and Biostatistics
- d) Supporting the set-up of networks and twinning programmes in the areas of statistics and biostatistics

The above strategic areas are critical for South Africa to:

- a) strengthen the capacity in universities and research institutes;
- b) improve research outputs of resource limited institutions;
- c) improve and accelerate the training and transformation of the next generation of academics in Statistics and Biostatistics;
- d) increase the research pool and critical mass of Biostatisticians;
- e) improve supervisory capacity of postgraduate students; and
- f) retain and/or attract PhD qualified biostatisticians in academia

## 3. OVERVIEW OF CURRENT INITIATIVES

### 1. SASA-NRF crisis in academic statistics 2016 funds proposal

Statistics Department at universities are facing a shortage of PhD level staff for their academic activities. Through the effort of the South African Statistical Association (SASA), a special funding allocation was made by the Department of Science and Technology, to fund the studies of PhD and Master's students and their supervisors. The outline of this activity and funding is provided in Appendix A. The overall aim of this activity is a concerted effort to increase the pool of statisticians with high level skills at the universities.

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### Wellcome Trust Sub-Saharan Africa Advanced Training Programme for Leadership and Excellence in Biostatistics

On the Biostatistics front there has also been an effort to increase the pool of biostatisticians in South Africa as well as in Sub-Saharan African. One of the major efforts is the Sub-Saharan African Consortium of Advanced Biostatistical Training which is hosted at the University of Witwatersrand and is funded by the Wellcome Trust and DFID. A number of South African institutions are involved in the Consortium such as the SAMRC, HSRC, University of Stellenbosch and Kwazulu-Natal. Details of the program is provided in Appendix B.

### 3. Initiative University of Cape Town

Another effort is from South African Universities to establish dedicated high level Masters Programs in Biostatistics. The University of Cape Town launched their Master's program in 2016 within the Department of Statistical Sciences and the University of Stellenbosch is planning to launch their Masters in Biostatistics Program in 2017 in the Faculty of Medicine and Health Sciences. Biostatistics training at post graduate level also happens at other South African Universities but this is part of the general Master's program of the department such as for example the program at University of Kwazulu-Natal. With the establishment of formal Master's program in Biostatistics this would shorten the time for the training and development of PhD level Biostatisticians. The Master's level students would no longer require a year or two of orientation into Biostatistics but could use this time to secure a topic of interest and complete a PhD within five years from their Master's degree.

## Training South African statisticians abroad at European, American and Common Wealth based Institutions in Biostatistics

Finally, there is an effort to train South African statisticians abroad at European, American and Common Wealth based Institutions in Biostatistics. The American effort is described in paper by Gezmu et al (2011) (Appendix C). The Fogarty and Connect Africa Scholarships are existing programs that have provided Biostatistics training opportunities at American based Institutions.

## 4. WHY THE NEED FOR A PARTNERSHIP BETWEEN SOUTH AFRICA AND BELGIUM

The SAMRC continues to cooperate and strengthen relationships with the National Department of Health (NDoH), Department of Science and Technology (DST) and health sector partners to facilitate and support the implementation of Sustainable Development Goals (SDGs), National Service Delivery Agreement (NSDA) outcomes and outputs, and the National Development Plan (NDP) 2030.

The challenge of lack of PhD qualified and competent scientists in biostatistics which is critical to grow medical and clinical research in South Africa and the African region is one of the core functions of the SAMRC. This is in line with building capacity for the long-term sustainability of the country's health research as articulated by the SAMRC 2015/16-2019/20 Strategic Plan (Table A1). The SAMRC does have a dedicated Biostatistics Unit as part of Intramural Research Unit. The unit has fostered training and development of Biostatisticians in the country and there are number of lessons learned over the years.

For example, the SAMRC has been able to find excellent applicants from the pool of master students produced by local universities over the last 5 years. These staff were attracted through MRC internships, NRF internships of formal advertisement. These new staff members however do need orientation and training in special biostatistics topics and epidemiology which is often not that readily available in South Africa ie. Statistical genetics. This bottleneck can easily be overcome if we have exchanges of staff and expertise between South Africa and Belgium. Developing new and using existing international exchange programmes for staff and postgraduate students to study at other institutions would also fast track this process.

The SAMRC and other medical based institutions however struggle to find staff at the PhD level to appoint. Senior positions are often vacant for more than two years. To address this problem the SAMRC has appointed master levels student with PhD potential with the aim to grow their own specialist statisticians. This is a long term strategy since and the SAMRC faces the challenge of the retention of such developed talent. At the current moment the Biostatistics Unit of the SAMRC has three senior vacancies. This bottleneck can easily be overcome if we increase the number of South African PhD qualified biostatisticians through accelerated programme with Belgium.

In addition, SAMRC as the largest science council dedicated to funding and conducting health research in South Africa, is a credible organisation to foster research networks (research groups, consortia and capacity development initiatives) with the overall aim of supporting and growing health and clinical research. To this end, a number of new initiatives such as SAMRC/Newton Fund (UK), SAMRC/NIH (USA), SAMRC/BMGF (USA) and SAMRC-Forte (Sweden) have been successfully concluded. These initiatives are managed and administered by the SAMRC in partnership with participating organisations.

Through this application, the SAMRC proposes to be the custodian of the initiative between South Africa and Belgium for building sustainable next generation of biostatisticians in South Africa. The SAMRC is uniquely placed to enact this function as part of its core responsibility and specialised funder of health research.

### 5. PROPOSED STRUCTURE OF THE PROGRAMME AND KEY ACTIVITIES

This concept note is about proposing how South Africa and Belgium can leverage the resources for this effort in the four objective areas proposed under section 2 above.

## 1. Exchange of staff and expertise

### 1.1 Belgium

The Master Programs in South Africa will benefit from participation of Belgium biostatisticians. Specific activities would be:

- a. Reviewing of course material and input based on their experience
- b. Visiting South Africa and teaching a module in the programs
- c. Acting as supervisors/co-supervisors on Masters theses of mini-theses
- d. Conducting workshops on a specific topic, invited presentations at local conferences

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Some of these activities have taken place especially (d) but not within a structured framework.

PhD students in South Africa (not necessarily supported by the current Belgian funding) will benefit from participation of Belgium biostatistician in the following way:

- PhD candidates attending workshops, conferences in specialised topics such as number (d) in the Masters list
- Acting as supervisors/co-supervisors on PhD theses
- 3. Acting as external examiners on PhD Theses
- Providing mentoring sessions to PhD candidates on selection of topics, supervisors, institutions and funding posibilities.

Post PhD level student in South Arica (not necessarily supported by the current Belgian funding) will benefit from participation of Belgium biostatisticians in the following way:

- 1. Completion of publications that should emanate from their PhD studies
- 2. Serve as mentors / collaborators for further research by Post Doc.

### 1.2 South Africa

South African staff would benefit from:

- Visiting Belgian institutions for participating in the Master's program ie attending some modules, teaching some elements, etc.
- 2. Acting as supervisors /co-supervisors on Masters projects
- Attending and participating in workshops on specific topics relevant to the South African programmes

### 2. Accelerating improvement of staff with PhD qualification in biostatistics

The acceleration of PhD completed by South African Biostatisticians will depend on the quality of the Master's level programs on offer. By having a balanced Master's program that will allow students to pursue a number of topics in Biostatistics and being at the standard of well recognised Masters Programs in developed countries, the bridging time between Masters and PhD can be shortened as well as the actual duration of the PhD studies. A student from the Master's program versed in theoretical methods, computing and programming and relevant applications will have a solid base to start his/her PhD program. Having a continuation between the Master thesis topic and the PhD topic will be ideal but this will only happen in institutions with a strong research portfolio which can accommodate such activity.

The accrediting mechanism for student across South African and Belgian Institutions can sometime be a stumbling block and delay the start of the PhD. An example of this is a staff member of the SAMRC Biostatistics Unit currently doing her PhD at Hasselt University. The initial proposal was a shared student between this Belgian institution and a South African University. The accreditation policy of the local university would not allow this and after months of delay the student registered only at Hasselt University. The exchange framework should therefore be cognisant of the formal policies of participating institutions to facilitate the studies of PhD level students.

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As summarised in the HESA 2014 Annual Report, the National Development Plan: Vision for 2030 has set ambitious targets and priorities for South African universities. These include, *inter alia*, the prescripts made on universities to:

- increase the percentage of PhD qualified academic staff from 34% to 75% by 2030;
- increase the number of postgraduate students to 25% of total enrolments by 2030;
- produce more than 100 doctoral graduates per million of the total population by 2030, i.e. an increase from 1420 in 2010 to well over 5 000 a year; and
- · increase the number of women and black postgraduates.

### 3. Providing scholarships to train the next generation of academics in Statistics and Biostatistics

A number of scholarships of good formal Masters and PhD candidates are available in South Africa through other initiatives (see Appendices A to C). In addition, through this bilateral cooperation between South Africa and Belgium, dedicated scholarships for Master students in Biostatistics would ensure that both countries continue to invest in potential staff and students with the right level of skills. For example, to facilitate the orientation of Master students who have done a general degree but are interesting in switching into the Biostatistics stream, some funding would be required to facilitate the switch through specific courses, workshop, and conferences. Scholarships for this kind of activity is less available.

The MRC would be able to host some Biostatistics interns doing their post graduate degrees and that are linked to local programmes at Universities in Cape Town, Durban and Pretoria, which are very strong in these programmes. Such interns will have to be self-funding for the cost of living whereas the SAMRC would provide the work environment to some extent. Thus enhancing the experience of students in the Master programs in this way would orientate them towards working in a research environment and prime them for doing further studies.

## Supporting the set-up of networks and twinning programmes in the areas of statistics and biostatistics

We anticipate that the spin-off of the three objectives described above would be crucial in supporting the set-up of networks and twining programmes between universities and research institutes/science councils in statistics and biostatistics. This is premised on the fact that despite acute shortage of biostatisticians in the country, not all historically advantaged institutions (HAIs) have specialised programmes for Biostatistics. Given this situation, it is apparent that the need at historically disadvantaged institutions (HDIs) is even dire.

The HDIs are resource limited institutions and are challenged by a culture of heavy teaching and service delivery, and often constrained resources (financial and human) are not always directed towards research. Consequently, these institutions lack capacity to compete for mainstream research funding nationally and internationally. The key question is how should an initiative such as this one respond to this national challenge without compromising on the key principles required to develop and sustain research capacity and scientific excellence? At the core is financial constraints and lack of support for researchers and postgraduate students largely due to historical reasons. This initiative should therefore foster twining programmes between HDIs and HAIs in South Africa, and further encourage a culture of collaboration and mentorship between South African and Belgian researchers, to enable cross-fertilization of best practices.

### 5. FINANCIAL IMPLICATIONS

The concept note is based on assumption that the Belgian government will invest a minimum of ZAR 5 million over two years (Sep 2016 to Dec 2018) to fund the objectives and activities as proposed, or with further adaptation to suit both partners (breakdown of the budget can be provided later). It is evidently clear from ongoing initiatives that the NRF, DST, and other South African institutions, are heavily committed to funding scholarships locally. This initiative could further encourage NRF and SAMRC to fund scholarships for PhD overseas (Belgium and other countries). In addition, the bilateral initiative will be critical for SAMRC to leverage funding elsewhere, locally and abroad, to address the critical shortfall of Biostatisticians in the South African health research space. The SAMRC will approach potential funders locally and internationally, using its network, to raise scholarships for postgraduate student training and staff development. Thus, our proposal regards the Belgian funding as a seed funding to stimulate and ignite number of activities to strengthen long-term development of Statisticians and Biostatisticians for South Africa and the region.

#### 6. ANNEXES

Table A1: Strategic goals and objectives as presented in the SAMRC 2015/16 - 2019/20 Strategic Plan.

Str	ategic Goals	Objectives	
1.	Administer health research effectively and efficiently in South Africa	1.1. To ensure good governance, effective administration and compliance with government regulations 1.2. To promote the organisation's administrative efficiency to maximise the funds available for research	rnme te tl
2.	Lead the generation of new knowledge and	2.1 To produce and disseminate new scientific findings and knowledge or health	e an
	facilitate its translation into policies and	2.2 To promote scientific excellence and the reputation of South African health research	
	practices to improve	2.3 To provide leadership in the generation of new knowledge in health	e lea
	health	2.4 To facilitate the translation of SAMRC research findings into health policies and practices	
		2.5 To provide funding for the conduct of health research	e fun
3.	Support innovation and technology development to improve health	<ol> <li>To provide funding for health research innovation and technolog development</li> </ol>	
4.	Build capacity for the long-term sustainability of the country's health research	4. To enhance the long-term sustainability of health research in Soutl Africa by providing funding for the next generation of health researchers	pro

## PLEASE REFER TO SEPARATE ATTACHMENTS FOR THE FOLLOWING

Appendix A: The SASA-NRF crisis in academic statistics 2016 funds proposal

Appendix B: The Wellcome Trust Sub-Saharan Africa Advanced Training Programme for Leadership and

Excellence in Biostatistics

Appendix C: The NIH Strengthening Biostatistics Resources in Sub-Saharan Africa

## 7. SOME KEY REFERENCES CONSULTED

MRC Strategic Plan 2015/16 to 2019/2020

- NDOH Health Sector NSDA 2010 2014
- HESA 2014 Annual Report
- National Development Plan: Vision for 2030
- Department of Higher Education and Training Report on the Evaluation of the 2014 Universities' Research Outputs, January 2016

# 7.6.4 TETA





# **CONCEPT NOTE**

ON

# MARITIME AND LOGISTICS COLLABORATIONS

16 May 2016

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# 1. LIST OF ABBREVIATIONS

втс	Belgian Development Agency
DEA	Department of Environmental Affairs
DHET	Department of Higher Education and Training
DOT	Department of Transport
ETQA	Education and Training Quality Assurance
IMO	International Maritime Organisation
MSoE	Maritime School of Excellence
NMMU	Nelson Mandela Metropolitan University
SA	South Africa
SAIMI	SA International Maritime Institute
SAMSA	South Africa Maritime Safety Authority
STCW	Standards for Training Certification and Watchkeeping
ТЕТА	Transport Education and Training Authority
QСТО	Quality Council for Trades and Occupations

### 1. BACKGROUND

In order to advance the objectives of the International Standards through South African National Qualifications Framework in the Transport sector, a Memorandum of Understanding to establish an agreed framework for cooperation and collaboration was concluded between Belgian Technical Corporation (BTC) and the Transport Education and Training Authority (TETA). This describes the nature of the partnership and agreement between TETA and BTC on the content of the programmes, funding model and logistical support for candidates on the training bursary scheme within the Maritime context.

In February 2015, TETA and BTC called for a tracer study to determine the impact made by the training interventions in the maritime and logistics focus areas for both the Belgian and South African (SA) components for the period 2010-2014. The study generated information on the shortcomings of the training programme; progress of the candidates in respect of income, career and status levels; and the relevance of the acquired skills and knowledge for the workplace. The study aimed at assessing the possibility of delivering the training programme that is currently offered in Belgium through the Maritime School of Excellence (MSoE) in SA. On this basis, this concept note has been developed for enhancing and consolidating the current collaboration and existing partnerships.

### 2. ALIGNMENT TO NATIONAL PRIORITIES

Efforts have been made to improve skills in the maritime sector through a number of initiatives by a number of stakeholders including Department of Higher Education and Training (DHET), SA Maritime Safety Authority (SAMSA), Transnet, Department of Transport (DOT), TETA and other players in the maritime industry. There is, however, still a need to invest further in skills development to ensure that the relevant skills are available to service the ocean economy and ensure maximum growth of the sector. The Department of Environmental Affairs (DEA) conducted a study in 2013 on the economic potential of South Africa's oceans, which found that jobs linked to the ocean economy could increase to between 800 000 and 1 000 000 by 2033, more than double the level recorded in 2010 (316 000). The findings led to the launch of the ocean economy leg of Operation Phakisa aimed at unlocking growth and delivery in the ocean economy. Operation Phakisa is aimed at fast-tracking the delivery of the priorities that have been outlined in the National Development Plan and is based on the Big Fast Results methodology adopted by the Malaysian government. In respect of skills development, the Operation Phakisa ocean economy discussions labs held in July 2014 agreed on a number of initiatives aimed at capacity building for the sector.

# 3. REGULATORY BODIES WITH MARITIME CONTEXT

Maritime training standards in SA are regulated in terms of the International Maritime Organisation (IMO) Convention – Standards for Training Certification and Watchkeeping (STCW) 95 as amended – and SA is a signatory to that Convention. There are, however, other operational categories within the maritime sector that fall outside the STCW framework and these include all the management, professional and other operational support

occupations in the maritime industry which are generated and regulated in terms of normal education and training system.

There are a number of institutions that provide maritime related training in SA, at basic education level and at tertiary education level. One of those institutions is the Transnet Maritime School of Excellence (MSoE) which is based in Durban. The School supplies maritime skills for Transnet and the broader industry, the country and the Southern African region through collaboration with various local and international players. The MSoE offers training in Marine Operations, Terminal Operations, Port Management, Port Engineering and seafaring programmes such as the Marine Cadet Programme (Deck), Marine Cadet Programme (Engineering), Cargo Coordinators programme, and the Lifting Operators programme.

TETA has a statutory responsibility for monitoring education and training in the Transport Sector in terms of section 10 (1)(b) of the Skills Development Act No 97 of 1998.TETA also functions as an Education and Training Quality Assurance Body (ETQA) in the Transport Sector.

In addition to the skills development initiatives in the sector, a regional maritime institute, the SA International Maritime Institute (SAIMI), was launched in 2014 to coordinate maritime education and training in SA (and Southern Africa). SAIMI is based at the Nelson Mandela Metropolitan University (NMMU) and is expected to become the knowledge base for the maritime sector with the expertise of specialists located in participating institutions.

### 4. CONCEPT OBJECTIVE

The overall objective of this initiative would be to establish partnerships and collaborations within the maritime context for course content development, research and benchmarking process.

#### 5. PROPOSED INITIATIVE

The tracer study highlighted a number of lessons gathered from previous interventions under the BTC – TETA – APEC partnership umbrella. Overall the candidates were satisfied with the mode of delivery, that is, the mixture of theory and practical as this provided them with insights into the Belgium processes. The APEC course offering is viewed as valuable as it exposes people from different countries to the way international port systems work with specific reference to the Belgium system. It also allows for benchmarking between systems at the country of origin and that of Belgium. One of the main concerns of this intervention was related to the lack of formal qualifications that could contribute to candidates' career progression.

The Maritime School of Excellence (MSoE) has the capability to offer customised training programmes in line with the APEC seminar topics for SA. The programme could be linked to the NQF, meaning that candidates that complete the programme would obtain some form of qualification. The MSoE offers training in marine and port training programmes and is accredited with the South Africa Maritime Safety Authority (SAMSA) and TETA. It also offers research and development services to the maritime industry.

A partnership between MSoE, SAIMI, TETA, BTC, NNMU and relevant Belgian Institutions is proposed to ensure a customization of the current programmes and possible inclusion within the scope of current qualifications delivered by MSoE. This would entail development of course content, utilising local infrastructure to expose the candidates to the practical aspects, and getting relevant expertise both locally and internationally to provide lectures. The following results are being proposed:

# Result 1: Partnership between all relevant players established

- a. Relevant stakeholders are approached and engaged into the process.
- b. Select/nominate targeted group to partake in the initiative. This can consist of: previous participants to Belgian seminars that showed high level of commitment to the process and provided substantial input through the tracer study; decision makers from MSoE, SAIMI, NNMU, TETA, DOT, DHET and other relevant stakeholders; curriculum development specialists from QCTO and other relevant potential partners; training providers (such as APEC and local Universities).

### Result 2: Needs analysis for curriculum development conducted

The needs analysis to be conducted to identify the current topics being presented and the add-ons to the curriculum based on international best practices. Besides port management, these areas could include seafarer and fishing training, maritime rescue co-ordination, marine aids to navigation, dry-docking and commercial diving. This could be done through:

- a. Benchmarking exercise with the international port system aimed for exposure to global practices and new ideas as well as policy development adapted into the maritime environment from all perspectives. Knowledge gained could determine risk assessments, process flow, stakeholder engagements, curriculum development, policy development and environmental impact.
- b. Participation to seminars and practical exposure to port related systems and processes from all operational perspectives in Belgium.
- c. Feedback sessions, presentations, group discussions, workshops, website and other systems could be used to analyse and define the needs for topic inclusion into the current curriculum.

# Result 3: Research topics and further initiatives developed

a. A partnership between MSoE, SAIMI, relevant DHET institutions, relevant authority bodies, relevant Belgian Institutions and other potential relevant partners could be established to produce research and development initiatives (such as joint publishing of

research / articles) consequent to testing and implementation of training initiatives customised to the South African context.

# 6. BUDGET

RESULTS	BUDGET
Partnership between all relevant players established	€ 15 000
2. Needs analysis for curriculum development conducted	€ 155 000
3. Research topics and further initiatives developed	€ 80 000
TOTAL BUDGET	€ 250 000

# 7. DURATION

RESULTS	TIME FRAME	
	Start	End
Partnership between all relevant players established	April 2017	June 2017
2. Needs analysis for curriculum development conducted	July 2017	June 2018
3. Research topics and further initiatives developed	July 2018	December 2018
Total expected duration	21 Months	

## 8. WAY FORWARD

A new model of delivering Maritime content related training interventions is proposed to be developed through partnerships and international engagements.

It is proposed to assess the current content of existing qualifications and determine which aspects can be integrated into the MSoE current training programmes.

# 7.6.5 Transnet

### **CONCEPT NOTE - MARITIME RELATED SCHOLARSHIP**

#### 1. Background

As per the communique date 13 April 2016, the Embassy of Belgium has confirmed that in respect of the framework of existing bilateral cooperation between South Africa and Belgium, an amount of 1,500,000.00 Euro is made available for scholarships and training exchange between South Africa and Belgium. It was further noted that the bilateral cooperation between the two countries is in the process of being phased out, and it was expressed that the limited amount available for these scholarships must be used optimally.

An expertise mission undertaken by the Embassy of Belgium has resulted in an exploratory meeting held on 16 May 2016, between Transnet Group Human Resources, represented by Liza Govender and the Maritime School of Excellence (MSOE), represented by Erlene Olivier, Pravina Pillay and Thami Basi and the appointed consultants, Ms Marleen Bosmans and Mr Joel Meersman, tasked to formulate the scholarship programme.

Ms Marleen Bosmans confirmed their discussions held with other stakeholders including National Treasury and exchanged ideas on potential scholarship programmes. It was noted that as the funding is only available for approx. 2 years, and therefore the possibility for funding formal studies for Masters or Doctorate studies with institutions like Antwerp Maritime Academy is not possible. Furthermore the approximate amount of funding which could be made available in support of Transnet programmes is approximately 200,000-300,000 Euros.

### 2. Past successes

During the past few years, Transnet has been collaborating with the Embassy of Belgium and BTC, as well as the **Transport Education and Training Authority (TETA)** to participate in some of the following APEC programmes:

- Port Management
- Port Security
- IT and EDI in Port Business
- Legal aspects in Port Operations and Trade (LAPOT)
- Port Engineering
- Port Logistics
- Container Terminal Management
- Dredging Technologies
- Bulk Break Cargo
- Port Environmental Policy and Technology (PEPT)
- Tasks and Responsibilities of Forwarders, Agencies & Shipping Lines (TROFAS)

In the recent past, Transnet National Ports Authority embarked on a project of drafting a Concession Procedure Manual. As part of the project we looked at best practice and benchmarking against other countries that follow this process. A custom programme was undertaken in collaboration with stakeholders from Belgium in 2015 which dealt purely with concession. Transnet National Ports Authority successfully undertook the benchmarking visit at the time, and dealt with the critical business issues relating to concessions which included inter alia:

- Calculation of duration of concession
- Determination of selling price
- Conditions of concession
- Terminal Operator Agreement
- Financial implication of agreement
- Critical legalities

- Financial Modelling Types of packages that can be offered depending on sector etc.
- Various PPP Models
- How does the Port Authority partner legally with city/municipalities
- The role of the Port Authority in joint Capital investment
- The role of the Port Authority in tariff models/financial structures
- Best Practices Bid process
- Evaluation teams Best Practices
- Standardisation of processes

# 3. Proposed Sponsorship programme

During the meeting options were explored regarding the use of the funding to support expertise exchange between Belgium and Transnet MSOE for the benefit of Transnet and its Operating Divisions, with specific focus on Transnet Port Terminals (TPT) and Transnet National Port Authority (TNPA) in the priority skills area of Maritime.

Transnet National Ports Authority (TNPA) operates as a landlord port authority which manages controls and administers the South African port system on behalf of the State. TNPA operates within a legislative and regulatory environment created by the National Ports Act (the Act).

Transnet Port Terminals (TPT), an Operating Division of Transnet is responsible for commercial handling services of sea-route freight across imports, exports and transhipments in containers, bulk, break-bulk and automotive. TPT operates terminals in seven South African commercial ports namely Richards Bay, Durban, East London, Port Elizabeth, Ngqura, Cape Town and Saldanha. Operations cover import and export operations across the following cargo sectors: Containers, Mineral Bulk and the Agricultural Bulk and Ro-Ro (roll on/roll off).

Transnet want to make use of the scholarship programme support in view of strengthening the South African capacity and competences in education, training and research in the maritime sector with a focus on building partnerships among South African institutions and between South African and Belgium institutions.

The opportunity to strengthening the Maritime capacity in South African universities could be explored through existing Memorandum of Understanding (MOU) between Transnet and other education and training institutions, for example the Nelson Mandela Metropolitan University (NMMU). Depending on the nature of engagement this can be extended to include other South African Institutions within the Maritime industry i.e. the Durban University of Technology, Cape Peninsula University of Technology and the South African Maritime Safety Authority (SAMSA).

The core objectives would be to ensure we use this opportunity to contribute to the efficiency of Transnet and its Operating Divisions, specifically within the maritime sector in TNPA and TPT through the advancement of collaboration opportunities, as well as advanced learning and benchmarking. Furthermore it is suggested that a programme of this nature must contribute to the development of sustainable relations on a win-win basis between Belgium, South Africa and Transnet.

Some of the international academic partnerships which could form part of the programme include:

- Collaborative teaching
- MSOE Faculty exchange
- Transnet and Faculty led study abroad programmes

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#### **ANNEXURES**

### The Maritime sector

The maritime sector includes all enterprises engaged in the business of designing, constructing, manufacturing, acquiring, operating, supplying, repairing and/or maintaining vessels, or component parts thereof; the management and/or operating of shipping lines; stevedoring, arrastre and customs brokerage services; the management and operation of shippards, dry docks, harbours, marinas, slipways and marine repair shops; shipping and freight forwarding services and similar enterprises. In addition to shipping transport and ports services, maritime related enterprises and activities are also concerned with resource exploitation at sea, the leisure and tourism industries, professional business services and the public service.

The Maritime industry is associated with activities on all vessels used at sea and associated land-based services. Routes include oceans, coasts, seas, lakes, rivers and channels.

#### Careers within the Maritime sector

The Maritime field offers a wide choice of career opportunities, many of which are international by nature. The following is an indication of maritime careers but not limited to:

- Marine and Ship Engineers involved with the maintenance of the engine of a ship; responsible
  for all engineering related needs of a ship. The Cape Peninsula University of Technology and The
  Durban Institute of Technology offer all required marine engineering subjects at a tertiary level.
- Crewmember career can lead from a deck officer to Captain.
- Deck officers required to navigate the ship safely and efficiently.
- Maritime Law Maritime and fisheries lawyers are concerned with the branch of law that
  governs international maritime zones and maritime resources. The international law of the sea
  and the network of conventions that governs navigation, fishing, seabed mining, naval warfare
  and marine pollution are within the sphere of interest of maritime lawyers.
- Tug Masters Captains of tugs are responsible for ships towing other vessels/barges when they are in trouble at sea. They also give guidance to salvage (rescue) work.
- Marine Pilots guide ships when entering the harbour/port, as the Master of the ship may not be well versed with the geography of the port.
- Harbour Masters responsible for the overall control of the Port all activities including lighthouses. Vessel trafficking systems, etc.
- Ship surveyors conduct inspections and surveys of vessels; checking safety standards and condition of equipment. They carry out these surveys for government, e.g. SAMSA, DoT Agency, for classification societies, cargo owners or underwriters (insurance companies).
- Maritime Environmentalist (Sea Pollution) are involved in Management of the environment. Marine biologist and oceanographers look at the prevention of oil spills from ships, check for engine leaks, and how it can be prevented. They endeavour to combat pollution, clean-ups and decide what dispersants could be used and which species are highly vulnerable. They also do risk assessments especially for blast water management in addition they could also do testing and approval of treatment systems and ensure the availability of reception facilities.

### **Transnet National Ports Authority (TNPA)**

The national ports authority is responsible for the safe, effective and efficient economic functioning of the national port system, which it manages in a landlord capacity.

The national ports authority provides port infrastructure and marine services at the eight commercial seaports in South Africa. It operates within a legislative and regulatory environment created by the National Ports Act 2005 (Act No. 12 of 2005). In line with the provisions of the National Ports Act, the core functions of the national ports authority are as follows:

- To plan, provide, maintain and improve port infrastructure;
- to provide or arrange marine-related services;
- to ensure the provision of port services, including the management of port activities and the port regulatory function at all south African ports; and
- to provide aids to navigation and assistance to the manoeuvring of vessels within port limits and along the coast.

The National Ports Act creates a dual role for the National Ports Authority whereby it is responsible for the port regulatory function at the ports - i.e. controlling the provision of port services through licensing or entering into agreements with port operators to ensure that efficient port services are provided.

The National Ports Act also establishes the Ports Regulator of South Africa who is charged with the responsibility of –

- exercising economic regulation of the ports system in line with government's strategic objectives;
- promoting equity of access to the south African commercial seaports and to the facilities and services provided by these ports;
- monitoring the activities of Transnet National Ports Authority to ensure that it performs it functions in accordance with this Act; and
- hear complaints and appeals under the National Ports Act.

The national ports authority's service offering is targeted at mainly port users (which include terminal operators, shipping lines, ship agents, cargo owners and clearing & forwarding agents). As such, it manages the eight commercial seaports along South Africa's 2 954-km coastline. These ports are Richards Bay, Durban, East London, Ngqura, Port Elizabeth, Mossel Bay, Cape Town and Saldanha.

Eight of the country's major seaports are controlled and managed by NPA

- Richards Bay
- Durban
- Saldanha
- Cape Town
- Port Elizabeth
- East London
- Mossel Bay
- Nggura (Coega) in the Eastern Cape.

Its service offering is divided mainly in two categories: (1) the provision of port infrastructure; and (2) the provision of maritime services. Maritime services include dredging, aids to navigation, ship repairs and marine operations. Port infrastructure is provided in five commodity sectors:

- Containers / TEUs
- Dry bulk [such as coal, iron ore, manganese, sugar, chrome ore, copper, lead, woodchips]
- Liquid bulk [such as petroleum products, chemicals, vegetable oils]
- Break-bulk [such as fruit, steel, scrap steel, Ferro alloys, pig iron, fish & fish products]; and
- The automotive sector.

In view of evolving developments in the maritime industry, the National Ports Authority seeks to continue to enhance its role in facilitating trade, influencing growth through the provision of port infrastructure capacity ahead of demand; and aligning its core activities to changing market dynamics.

The National Ports Authority has developed a three-tier strategy aligned with TRANSNET's Four-point Growth Strategy, with an emphasis on providing port infrastructure capacity; efficient port and port

operations management; and enhancing the ports' geographical positioning as a leading gateway for trade emanating from the eastern and western seaboards.

The strategy aims to meet the growth demands of the South African port system and focus on delivery in three main areas:

- Timely delivery of capital investment projects to sustain and increase existing port infrastructure and marine capacity;
- Improved efficiency in port services to promote productivity; and
- Revenue growth and cost-effectiveness.

Transnet national ports authority handled 188 million tonnes of cargo and 13 000 vessels called at the eight South African commercial seaports for the period April 2009 to March 2010.

Business facilities and resources

Key basic infrastructure facilities-Berths and Channels

- 19 container berths;
- 36 dry-bulk berths;
- 29 break-bulk berths;
- 13 liquid-bulk berths; and
- 8 entrance channels with supporting breakwaters, turning basins, networks and utilities.

Key Maritime resources - craft

- 26 tugs;
- 9 pilot boats;
- 2 pilot helicopters;
- 7 work boats;
- 4 dredgers; and 3 survey boats.

# **Transnet Port Terminals**

Transnet Port Terminals (TPT) is one of five operating divisions of Transnet SOC Limited, South Africa's state-owned freight transport and handling company.

We are responsible for commercial handling services of sea-route freight across imports, exports and transhipments in containers, bulk, break-bulk and automotive. TPT operates terminals in seven South African commercial ports namely Richards Bay, Durban, East London, Port Elizabeth, Ngqura, Cape Town and Saldanha. Operations cover import and export operations across the following cargo sectors: Containers, Mineral Bulk and the Agricultural Bulk and Ro-Ro (roll on/roll off). The operational model divides the country into three geographical regions namely Eastern Cape, Western Cape and KwaZulu Natal.

We service customers across a broad spectrum of the economy, including shipping lines, the container industry, the general shipping industry, vehicle manufacturers, agriculture, steel and the mining industry, freight forwarders, cargo agents and are guided by legal entities such as customs.

Karl Socikwa is the Chief Executive at the helm of the TPT business. The company has a staff complement of over 7000. Some of Transnet's R300 billion Market Demand Strategy (MDS) investment has been allocated to TPT and its 16 terminals. This investment will see TPT boost its cargo handling equipment base, create terminal capacity, develop infrastructure and reduce the cost of doing business in Southern Africa.

Transnet Port Terminals services customers across a broad spectrum of the economy, including shipping lines, container industry, the general shipping industry, vehicle manufacturers, agriculture, steel and the mining industry, freight forwarders, cargo agents and legal entities (e.g. customs). Our mandate is delivering freight reliably.

Transnet Port Terminals achieves level two BBBEE status for 2015.

The company's recent achievements include level 2 to BBBEE status with a score point of 87.03 missing marginally to achieve level 1. The company scored well on Preferential Procurement, Enterprise Development and Socio-Economic Development.

BBBEE is a national transformation programme launched by the Government to give previously disadvantaged groups including white women economic opportunities that were previously unavailable to them. These include Ownership, Management, Employment Equity, Skills Development, Preferential Procurement, Enterprise Development and Socio Economic Development.

# Ports with TPT Operated Terminals



# The Transnet Maritime School of Excellence (MSOE)

Well-trained and competent Port and Terminal personnel are not just critical to the efficient, economic performance of our company, but to commerce, industry and the country, in general. Transnet's MSOE prepares learners for these important roles in Southern African ports.

Ports, especially well-run and efficient ports, are an absolute necessity to the maritime industry, and the transport economy, as a whole. The MSoE was established, specifically, to provide the necessary skills for Transnet Port Terminals (TPT) and Transnet National Ports Authority (TNPA), within the Transnet Academy.

In addition to TPT and TNPA, the Maritime School of Excellence supplies maritime skills for the broader industry, the country and the Southern African region through various local and international collaborations.

Strategically located in Durban (the biggest port in Africa) and with satellite campuses in Richards Bay, Cape Town and Port Elizabeth, the MSoE is carving out a position as the premier provider for marine training programmes. Plans are afoot to establish itself as Africa's leading training provider in Marine Operations, Terminal Operations, Port Management, Port Engineering and supplying high quality seafarers to the market.

The vast experience and expertise accumulated over the years within the Maritime industry, enables the MSoE to facilitate knowledge transfer in port related training and business solutions specific to customers' needs.

The MSoE philosophy is to develop a partnership with the customer. This serves as a platform for expert advice, on the best learning and/or tailor-made learning interventions that the client's business requires. Strategic partnerships with other training providers; technical suppliers and technology specialists' reinforce our capacity to deliver comprehensive business solutions.

We ensure that all our service offerings remain on par with international best practice by offering globally competitive and accredited training courses. Qualifications and courses are nationally and internationally aligned and further alignment with internationally recognized and accreditation bodies, continues.

The Maritime School of Excellence is an accredited training institution of the South African Maritime Safety Authority (SAMSA); Transport Education and Training Authority; and the leading provider of highend training in the Port and Maritime sector. Here you can receive training from experienced and qualified facilitators that provide some of the best training available on the African continent in Marine and Terminal Operations, Port Management and Port Engineering.

The school has been successfully offering certification in marine careers since 1991, helping to fulfil the dreams of thousands of students, with over 40 courses and ample lecture rooms that can accommodate up to 60 000 students per year.

MSoE, are in the hands of experienced mentors and training staff such as Harbour Masters, Marine Pilots, Tug Masters and Port Engineers, and Terminal Operators. Learners will be taught using advanced training aids, with the use of state-of-the-art full mission simulators as they learn how to manoeuvre ships, tugboats and terminal related equipment and machinery.

Maritime School of Excellence has attracted the attention of marine entities seeking training interventions from across the continent including Mozambique, Tanzania, Kenya, Namibia and Cameroon.

Whilst the internal Transnet skills demands from the school have increased over recent years, the institution is also respected among customers and academic institutions for external training, as well as research and development services to the broader maritime industry.

Continuous research and development take place alongside benchmarking exercises with other maritime organisations around the world.

The MSoE works closely with these partners and fellow associations include

- Belgian Technical Cooperation Program with APEC in Antwerp
- South African Maritime Safety Authority (SAMSA)
- STC Group in Rotterdam
- Department of Transport

- Department of Public Enterprises
- Various academic institutions
- South African Police Services
- South African Customs
- Ethekweni Maritime Cluster
- Maritime Chamber of Commerce
- Transport Education and Training Authority (TETA)
- International universities
- DUT
- CPUT

With learners already enrolled for the Marine Pilot Qualification, Tug Master training, Skipper Port Operations, Motorman Grade II and Operator Lifting Equipment courses, the school comprises a Main Campus at the site of the Old Durban International Airport, with satellite campuses on Bayhead in Durban; in the Ports of Cape Town, Richards Bay and Port Elizabeth/Nggura.

To meet the on-going needs of our company, more learners from within and outside Transnet are to be enrolled and, where requested, learners from other countries in the sub-Saharan Africa region will be accommodated.

Transnet needs to grow the work force of qualified and dedicated people to help ensure that our ports and marine services continue to keep pace and run efficiently. The Maritime School of Excellence is a distinguished training enterprise in South Africa where all the necessary training takes place and all the essential skills can be learnt, to join the growing pool of quality human resources for the international maritime and port sector.

MSoE is about delivery, about productivity and about discipline.

Just like any other institution of further and higher learning, the MSoE has a calendar of courses on offer for both local and foreign learners. There are currently 17 Marine Training programmes on offer at the Maritime School of Excellence and the School plans to increase these to 20 programmes. They are:

- Marine Pilot training programme
- Tug master training programme
- Skipper Port operations
- Vessel traffic service (VTS)
- Motorman grade II
- 2nd Engineer port operations
- Chief Engineer port operations
- Dredging training programme
- Coxswain
- Shore hands
- Steering and lookout
- Ordinary Seaman Deck
- Ordinary Seaman Engine
- Able Seaman Deck
- Able Seaman Engine
- Marine Resource Management
- Master Port Operations
- General Purpose Rating

- Berthing master
- Terminal port operations and management offers:
- Cargo Coordinator- Containers
- Cargo Coordinator- Break Bulk
- Cargo Coordinator- Roro
- Rubber tyred Gantry Crane
- Container reach stacker
- Rail mounted Gantry
- Container Straddle Carrier
- Ship to Shore cranes
- Empty container handler
- Container High reach Stacker
- Mobile Harbour Crane
- Counterbalance Lift truck (F1-F4)
- Wharf side Jib Crane
- Driver Articulated Vehicle
- Planner Training- containers
- Bulk ship Loader
- Woodchip Loader
- Triple Charger
- Bottom Discharger
- Hopper
- Reclaimer
- Bulk Stacker
- Tripper Car
- Scrapper Reclaimer
- Truck Loading Station
- Conveyors and Moving heads
- Tractor-trailer combination- overhead electrical traveling crane: Pendant controlled/remote
- Overhead electrical traveling crane: Cabin controlled
- Mobile elevating work platform (Mewp)
- Supervisory Development Programme
- Port worker Development programme

# 7.6.6 The Belgium Campus





Ms Marleen Bosmans Belgian Technical Cooperation Marleen.bosmans@btcctb.org

16 May 2016

Dear Ms Bosmans.

RE: Belgium Campus request for support

First of all I'd like to thank you and Mr Meersseman for having visited Belgium Campus last week Thursday, and for allowing us to put this proposal forward. I would also like to thank the agency and the Belgian Government for the continued support and for the bursaries given to our students.

Belgium Campus delivers 10% of IT graduates in South Africa. These graduates receive up to 5 job offers each upon graduation. Belgium Campus's success stems from the proactive approach of its Participative Development Model of Education that takes the needs of all stakeholders (students, industry, academia, government and society) into account, resulting in demand-driven, student-centred and business-focused higher learning.

We have throughout the years recognised the strength in collaborating with topranked universities worldwide, including Belgium. Our strong ties with KU Leuven and UCLL in particular are evident for the many exchange programmes (students and academics), curriculum design programmes (Master of ICT Innovation), and joint innovation projects our students and staff are taking part in.

Belgium Campus has also strong ties with local Universities and Research Centres, such as UNIVEN, TUT, CPUT, and the CSIR, with whom we run different bursary programmes, curriculum benchmarking programmes, and research programmes.

South Africa is in need for greater coordinated skills building<sup>1</sup>. The National e-Skills Plan of Action 2013 stresses the lack of appropriate skills, while underscoring the need for a community-aligned education environment and new vehicles for embedding ICT that involve government, education, business and civil society<sup>2</sup>. Furthermore, the need for skills development has repeatedly been emphasised. In order to overcome the skills gap in the ICT sector, education is key<sup>3</sup>.

Additionally, South Africa has a legislative framework to transform the economy and to redress inequalities of the past. Companies have to comply with the Broad-Based Black

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BBBEE level 2 contributor 01/B-BBEE/2014/00531QSE

Belgium Campus 1 NPC 2001/017971/08

<sup>&</sup>lt;sup>1</sup> National e-Skills Plan of Action 2013, Executive Summary, <a href="http://esi-sa.org/research-and-policy/pdfs/nespa2013execsummary.pdf">http://esi-sa.org/research-and-policy/pdfs/nespa2013execsummary.pdf</a>, pp. 1

<sup>&</sup>lt;sup>2</sup> Ibidem, pp. 1,3

<sup>&</sup>lt;sup>3</sup> National Integrated ICT Policy "Green Paper", December 2013, <u>www.gpwonline.co.za</u> pp.80,83





Economic Empowerment (B-BBEE) Codes of Good Practice<sup>4</sup>. Training and employment of the previously disadvantaged (especially black females and disabled persons) is key, but remains a problem.

To address this problem, Belgium Campus is currently embarking on a new initiative or seed project. This initiative will widen access to higher education, more specifically into the Science Technology Engineering and Mathematical (STEM) programmes (Bachelor Degree of IT), for students of dedicated groups and communities. These students come out of disadvantaged communities, who in given circumstances would not have had the chance to pursue higher education. They include:

- Deaf students;
- Black female students.

Belgium Campus is the first University in the country to organise a dedicated Bachelor Degree of IT for Deaf Students. This initiative started in 2015 in collaboration with the National Institution for the Deaf (NID).

With only between 1400 to 1600 ICT students graduating annually in South Africa, Belgium Campus wants to assist companies not only meeting their BBBEE targets through this seed project, but also to raise an awareness and responsibility with these companies to fund these projects in the future.

To widen access to higher education even further, Belgium Campus is setting up an Open Learning University, which will allow for blended learning and research. Students, staff members, employees would enjoy a formal education programme in a learning environment where content and instruction would be delivered via a digital and online environment, including face-to-face learning sessions through web streaming. Learners are connected with staff and each other, providing an integrated learning experience, and promoting Long Life Learning.

Learners will be able to choose certain courses or subjects, short master classes, or register for full programmes like for example a Bachelor Degree of Computing, or a Master Degree of ICT (Innovation).

To strengthen our collaboration with disadvantaged Universities, more in particular UNIVEN, Belgium Campus would like to give bursaries to 5 staff members of these Universities, to register for the 2 year Master of ICT (Innovation) through the Open Learning University.

Belgium Campus request is two-fold:

We would like to request the Belgian Development Cooperation to assist with bursaries for the first group of students. 2 years funding is requested, the 3<sup>rd</sup> year is paid for by the industry. Additionally we would like to request the assistance with the setup of the Open Learning University and the 5 bursaries for staff members of Universities to attend the Master of ICT (innovation).

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<sup>&</sup>lt;sup>4</sup> Broad-Based Black Economic Empowerment (B-BBEE) Codes of Good Practice, the dti





The budget is as follows:

20 black females @R 112 950/student/year (R 68 000 academic + R 44 950 residence)
This includes all tuition, books, exam fees for the Bachelor of IT + accommodation and 3 meals/day.

8 deaf students @R 159 000/student/year (class is limited to 8 students only and make use of a SA Sign Language Interpreter).

This includes all adapted tuition, books, exam fees for the Bachelor of IT + adapted accommodation and 3 meals/day.

The setup of the Open Learning University; this includes

- . Development of Open Learning Platform in the cloud R 845 000
- Redesign of course materials R 665 000
- Streaming equipment R 265 000
- Streaming service R 240 000

Total: R 2 015 000

5 University staff members @ R 110 000/student/year
This includes access to platform, all tuition, materials, and dissertation fee for the
Master of ICT (Innovation)(2 year programme) through the Open Learning University

The Belgium Campus is convinced that this project will contribute positive valuable results. The support required will ensure the success of this initiative.

Looking forward to a continued partnership and support.

Sincerely,

Enricó Jacobs Vice Chancellor

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