

EXECUTIVE PROGRAMME FOR SCIENTIFIC AND TECHNOLOGICAL COOPERATION BETWEEN THE ITALIAN REPUBLIC AND THE REPUBLIC OF SOUTH AFRICA FOR THE YEARS 2018-2020

In accordance with the article V of the Agreement on Scientific and Technological Cooperation between the Government of the Republic of South Africa and the Government of the Italian Republic, signed in Pretoria, South Africa, on January 15th 1998, and entered into force on February 19th 2000, the VI Session of the Italian-South African Joint Technical Committee was held in Pretoria on 18 May 2017 to examine the present state and further development of scientific and technological cooperation between the two Countries and to define the Executive Programme for the years 2018-2020.

The Italian delegation was headed by the Deputy Head of Mission, Ms. Mirta Gentile, for the Ministry of Foreign Affairs and International Cooperation, and the South African delegation was headed by the Deputy Director General of the Department of Science and technology, Mr. Daan du Toit.

The members of the two delegations are listed in **Annex I**.

The institutions in charge of the co-ordination of the present Executive Programme, hereinafter referred as to the "Parties", are:

For the Italian Party: Ministry of Foreign Affairs and International Cooperation, Directorate General for the Country Promotion (Economy, Culture and Science),

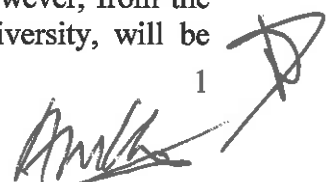
For the South Africa Party: National Research Foundation (NRF) on behalf of the Department of Science and Technology (DST).

1. Review of the Scientific and Technological Cooperation between the two Countries

The Parties have agreed to recognize the growing importance of science and technology with respect to the economic, social and cultural relations of the two Countries.

The Parties, considering the good relationships between the two Countries, stressed the need to develop and to promote bilateral cooperation in the field of science and technology.

With this phase of funding, both Italy and South Africa have agreed to make fewer awards but with increased levels of support in order to facilitate the development of sustainable institutional links between the two countries. The overall aim of this Programme, therefore, is not only to build on existing, outstanding and established research partnerships but to also foster new linkages and engagements with small cohorts of young researchers for new links between South Africa and Italy. Please note that the basis of selection from both countries will be excellence. However, from the South African side, excellent joint projects with a clear intention to address diversity, will be

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favorably considered. Likewise, environmental sustainability will be favorably considered. The specific aims of this Programme is:

- to support the advancement of basic, applied and innovative research;
- to contribute to scientific advancement in both countries through the funding of joint research activities in specified research fields;
- to provide an opportunity for young researchers in the two countries to meet and interact through the funding of researchers' mobility in the frame of joint research projects in specified research fields; and to contribute meaningfully to research capacity development.

Both sides place particular emphasis on the role of international cooperation for the further development of the S&T system in the two countries.

2. New Executive Programme

In the period between **07-07-2017** and **07-09-2017**, a joint call for proposals was launched to collect project proposals both in the "Joint Research Scheme" and in "Joint Mobility Scheme".

For the "**Joint Research Scheme**" the following priority areas were considered:

- Biotechnologies, with focus on Pharmacological Research in the field of the Transmissible Diseases and Vaccination;
- Integrated and Sustainable Water Management, promoting measures and techniques aimed to enhance the sustainability and the efficiency of the water resources;
- Blue Economy and
- Space, Astrophysics and Radio-Astronomy.

For the "**Joint Mobility Scheme**" the following priority areas were considered:

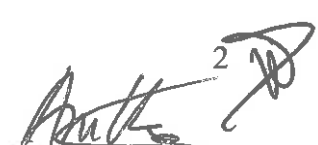
- New Technologies for Social Science;
- Aerospace;
- Blue Economy;
- Information and Communication Technology and
- Green and Renewable Energy.

2.1 Joint Research Scheme

Based upon the criteria elucidated in the call, 4 (four) projects have been selected to be funded (listed in **Annex II**).

Funds for the Joint Research Scheme can be used to cover the following costs:

- Research-related costs - activities to be supported may include expenses relating to field work such as conducting interviews, research-related trips, and research equipment (small equipment). The funds can also be used for consumables, accessories, publication related costs, and any others expenses listed in the specific calls for each Countries;
- Exchange programmes - short term mobility or travel expenses (i.e. transport and accommodation costs) of the research teams between the two partnering countries.



- Doctoral and Post-doctoral Research Placements - The placements should enable young researchers to (1) learn valuable new skills or techniques; (2) access facilities or resources not readily available at home; (3) build relationships with potential new collaborators; and (4) advance complementary collaborative research. The duration of each placement is expected to be 3-6 months; with flexibility to split the placement into several shorter visits. Longer placements may be undertaken where this would add value and these should be justified within the application. Placements must enhance, not replace, the standard training and study support that both the doctoral and postdoctoral researchers receive.
- Knowledge sharing costs – Only for the South African applicants, in support of activities organised by the consortium, such as joint workshops, seminars, conferences, symposia, lecture presentations, capacity building sessions, meetings, local/regional dissemination of results aimed at involving stakeholders, and/or end users from outside the consortium with a minimum of 10% of the grant budget.

2.2 Projects for the Joint Mobility Scheme

Based upon the above mentioned criteria, eight (8) projects for the exchange of researchers have been selected.

The general administrative and financial provisions for the implementation of the Programme are given in **Annex III**.

The list of the selected projects is given in **Annex IV**.

3. Final provisions

This Executive Programme for the period January 1st, 2018 - December 31st 2020 will remain valid until the coming into force of the next Executive Programme, but no longer than one year after its expiration.

Any amendment to the text of this Executive Programme has to be authorised by the competent Ministries in both Countries and has to be carried out through diplomatic channels.

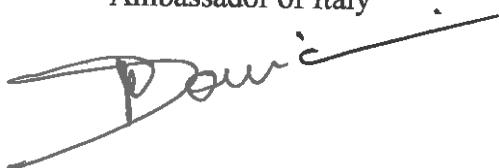
All initiatives foreseen in this Executive Programme will be carried out within the limits of the respective annual budgets and according to the rules prevailing in each Country.

Annexes I, II, III and IV are attached hereto and are integral parts of the present document.

Signed in Pretoria on 20 December 2017, in two originals in the English language, each text being equally authoritative.

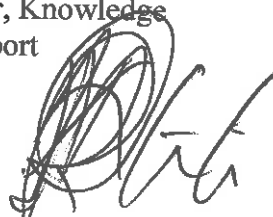
For the Italian Party

H.E. Mr. Pietro Giovanni Donnici
Ambassador of Italy



For the South African Party (NRF)

Dr Andrew Kaniki
Executive Director, Knowledge
Advancement Support



Annex I

Members of the two delegations

ITALIAN DELEGATION

**MS. MIRTA GENTILE – DEPUTY
HEAD OF MISSION OF ITALY**

**DR. PIERGUIDO SARTI – SCIENCE
AND TECHNOLOGY ATTACHÉ,
ITALIAN EMBASSY**

SOUTH AFRICAN DELEGATION

**MR. DAAN DU TOIT – DEPUTY
DIRECTOR GENERAL:
INTERNATIONAL COOPERATION AND
RESOURCES, DST**

**DR. ALDO STROEBEL – EXECUTIVE
DIRECTOR: STRATEGIC
PARTNERSHIPS STRATEGY,
PLANNING AND PARTNERSHIPS,
NATIONAL RESEARCH FOUNDATION**

**MS. PRUDENCE MAKHURA –
DIRECTOR: OVERSEAS
COLLABORATIVE GRANTS AND
INITIATIVES KNOWLEDGE
ADVANCEMENT AND SUPPORT,
NATIONAL RESEARCH FOUNDATION**

**MR. KHAYA SISHUBA – DIRECTOR:
BILATERAL COOPERATION - EUROPE
AND MIDDLE EAST, DST**

**MR. MORATABATHO SEFORA –
DEPUTY DIRECTOR: BILATERAL
COOPERATION – EUROPE AND
MIDDLE EAST, DST**

**MR. TEUNS PHAHLAMOHLAKA -
PROFESSIONAL OFFICER
KNOWLEDGE ADVANCEMENT AND
SUPPORT, NATIONAL RESEARCH
FOUNDATION**



Annex II

**SIGNIFICANT RESEARCH PROJECTS SELECTED WITHIN THE FRAME OF THE EXECUTIVE PROGRAMME
OF SCIENTIFIC AND TECHNOLOGICAL COOPERATION
BETWEEN THE ITALIAN REPUBLIC AND THE REPUBLIC OF SOUTH AFRICA
FOR THE YEARS 2018-2020**

	THEMATIC AREA	TITLE	ITALIAN PI	SOUTH AFRICAN PI
1	Biotechnologies & Pharma	New generation drugs against Plasmodium falciparum transmission for malaria eradication	Dr. P. ALANO (ISS, Roma)	Prof. LM. BIRKOHLTZ University of Pretoria
2	Water Management	Integration of High Power Energy Storage Systems for Sustainable Water and Renewable Sources Management	Dr. F. SOAVI (Unibo)	Dr. N. MANYALA University of Pretoria
3	Blue Economy	Genomics for a Blue Economy	Dr. L. ROMANO Stazione Zoologica Anton Dohrn	Prof. M. TRINDADE University of Western Cape
4	Space	RADIO SKY 2020 - Fostering cooperation between Italy and South Africa through radio astronomy	Dr. T. VENTURI INAF	Dr. M. VACCARI University of Western Cape

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Annex III

GENERAL ADMINISTRATIVE AND FINANCIAL PROVISIONS

The bilateral projects to be financed for the exchange of researchers within the present Programme are exclusively those mentioned in **Annex IV**.

For each project listed in Annex IV, 1 short-term stay (up to 10 days) and 1 long-term stay (30 days) in Italy and 1 short-term stay (up to 10 days) and long-term stay (30 days) in South Africa may be financed yearly within the limits of the available annual resources of each Party.

The researchers will be entitled to the exchange only if they hold the Italian nationality (or any EU nationality and resident in Italy) for those who travel to South Africa, and the South African PI should be employed by the Higher Education Institution such as University or Science Council for those who travel to Italy. The costs of accommodation and living shall be covered by the receiving Party, while the costs of international travel up to the host institution shall be covered by the sending Party.

The receiving Party shall provide medical insurance coverage, on the basis of the rules in force in each Country, against work accidents and illnesses, excluding already existing and chronic diseases. At the end of each year, the Italian researchers and the South African researchers have to submit to the Italian Ministry for Foreign Affairs and International Cooperation a final report on the activities carried out. The South African researchers have to submit their reports to the NRF. The Italian scientific reports must be signed by both the Italian and the South African project coordinators involved in the joint research project.

N.B Funding for the next year will not be granted if the coordinators fail to submit their progress reports.

VISIT OF SOUTH AFRICAN RESEARCHERS TRAVELLING TO ITALY

The South African PI will use their grants to pay for their international travel expenses. The supplied tickets will be the most economical ones available for the trip, economy class (2nd class) flight/train/ride. Any additional cost shall be borne by the researchers.

STAY OF SOUTH AFRICAN RESEARCHERS IN ITALY

The date of the visit (both for long and short terms) should be agreed between the visiting researchers and the host Italian coordinator.

South African researchers may obtain the authorization for the visit from the Italian Ministry of Foreign Affairs and International Cooperation (MAECI) only by submitting application form online at the following link:

http://www.esteri.it/MAE/IT/Politica_Estera/Cultura/CooperScientificaTecnologica/ProgrammiEsecuti vi/MobilitaRicercatori/MobilitRicercatoriStranieri.htm

An invitation letter from the host Italian Institution, signed by the Italian Co-ordinator, must be uploaded to the online application. The Italian Ministry for Foreign Affairs and International Cooperation, after checking the application for accuracy, if covering funds are available, will authorize the visit and pay for the visit allowance; the Italian Ministry for Foreign Affairs and International Cooperation will inform the Italian Embassy in Pretoria, the South African researcher



and the Italian project co-ordinator. The application must be submitted at least two months before the scheduled visit.

Any cancellation of the visit by the researcher, unless due to serious and valid reasons, might prevent the hosting Party from accepting further applications for subsequent missions.

The Italian Party will finance, yearly, for each project listed in Annex IV, 1 short-term stay (up to 10 days) and 1 long-term stay (30 days).

The Italian Party shall provide 1300, 00 Euro per month for long-term stays (30 days) and 93, 00 Euro per day for short-term stays (up to 10 days). The above-mentioned amounts shall be paid to the South African researchers entirely in one instalment at their arrival in Italy.

South African researchers will receive their grants from the NRF.

VISIT OF ITALIAN RESEARCHERS TRAVELLING TO SOUTH AFRICA

Italian researchers travelling to South Africa for a research stay are required to submit the online application to the Unit IX – Directorate General for Country Promotion (Economy, Culture and Science) of the Italian Ministry of Foreign Affairs and International Cooperation at: <http://web.esteri.it/ricercatori/ricercatoriItaliani/Start.asp>.

Applications must be submitted to the Italian Ministry of Foreign Affairs and International Cooperation no later than two months prior to the foreseen date of departure. Details of the above mentioned rules and the online application are available on the web site of the Ministry of Foreign Affairs and International Cooperation at:

http://www.esteri.it/MAE/IT/Politica_Estera/CooperScientificaTecnologica/ProgrammiEsecutivi/MobilitaRicercatori/MobilitaRicercatoriItaliani.htm.

The Italian Party will pay the international travel expenses to researchers holding Italian nationality (or any EU nationality and resident in Italy).

The supplied tickets will be the most economical ones available for the trip. Any additional cost shall be borne by the researcher.

STAY OF ITALIAN RESEARCHERS IN SOUTH AFRICA

The NRF will finance, yearly, for each project listed in Annex IV, 1 short-term stay (up to 10 days) and 1 long-term stay (30 days).

REPORTS ON THE PROJECT

At the end of each year the Italian and the South African co-ordinators will jointly report on the progress of their projects. Funding for the next year will not be granted if the coordinators fail to submit their progress reports.

The Italian co-ordinators have to submit the reports to the Italian Ministry for Foreign Affairs and International Cooperation (*DGSP – Ufficio IX, Piazzale della Farnesina 1 - 00135 Roma Italia*).



Annex IV

**PROJECTS FOR EXCHANGE OF RESEARCHERS SELECTED WITHIN THE FRAME OF THE EXECUTIVE
PROGRAMME OF SCIENTIFIC AND TECHNOLOGICAL COOPERATION BETWEEN THE
ITALIAN REPUBLIC AND THE REPUBLIC OF SOUTH AFRICA
FOR THE YEARS 2018-2020**

	THEMATIC AREA	TITLE	ITALIAN PI	SOUTH AFRICAN PI
1	New Technologies for Social Science	A spatial and social investigation at the Moxomatsi village, Mpumalanga (SSIMM)	Dr. S. BARBA UniSA	Dr. E. NKAMBULE Tshwane University of Technology, Pretoria
2	Green Energy	Optimal power distribution from renewable energy resources	Dr. S. RUGGERI UniCA	Dr. D. OYEDOKUN University of Cape Town
3	Green Energy	Synthesis and characterization of innovative materials with both multiferroic and photovoltaic properties	Dr. D. DEL MONTE CNR	Dr. VV. SRINIVASU University Johannesburg
4	Green Energy	BIO-waste-to-ENERGY	Dr. FAVARO UniPD	Dr. R. CRIPWELL Stellenbosch University
5	Green Energy	Evaluation of novel metal-organic framework composites for biogas purification	Dr. A. LANZINI PoliTO	Dr. R. OBOIRIEN CSIR - Materials Science and Manufacturing, Pretoria
6	Green Energy	Carbon emissions reduction and climate change protection through zero waste.	Dr. D. SPIGA UniCA	Prof. C. TROIS University of KwaZulu-Natal
7	Green Energy	Novel High Temperature Zr based nano-structured coatings for selective solar absorbers for Concentration Solar Power applications	Dr. B. SOTILLO BUZARRA CNR	Dr. L. KOTSEDI (NANOAFNET), iThemba LABS, National Research Foundation, Western Cape
8	ICT	Algebraic Graph Theory and Complex Networks	Dr. BELARDO UniNA	Dr. F. RUSSO University of Cape Town