

**COOPERATION
BETWEEN
THE EUROPEAN UNION
AND SOUTH AFRICA**

The Cooperation Council

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NOTE

Subject: Space report

Conclusions of the fourth meeting of the South African Department of Science and Technology, the South African National Space Agency, the European Commission and the European Space Agency under the EU-South Africa Space Dialogue, July 2012

The fourth meeting of the EU-South Africa Space Dialogue took place in Brussels on 10 July 2012. Dr. Phil Mjwara, Director-General of the Department of Science and Technology of the Republic of South Africa and Dr. Sandile Malinga, Chief Executive Officer of the South African National Space Agency (SANSA), represented the Republic of South Africa. The European Commission was represented by Deputy Director General Dr. Paul Weissenberg. The European Space Agency ('ESA') was represented by Micheline Tabache.

The European Commission first conveyed its congratulations to South Africa for having been selected as the main site for the Square Kilometer Array telescope, one of the largest scientific infrastructures in the world. Then the European Commission presented the state of play of the European GALILEO and GMES programmes, the outcome of the 8th European Space Council meeting of December 2011 and other developments of the European Space policy. It was noted that the GALILEO programme is on track to deliver first services in 2014 and that EGNOS was certified for safety of life for aviation purposes in March 2011. The EU's GMES Earth Observation service including its emergency service and global land component is entering its operational phase with the objective to become fully operational from 2014.

The South African delegation reported on space policy and space science developments in South Africa, notably the progress of programmes of the SANSA, for example the development of a comprehensive National Space Programme plan and the further implementation of the South African Earth Observation Strategy (SAEOS). In terms of the former the South African delegation reported that SANSA has over the past 5 months engaged the South African space science community to develop a long term program that would enable it to deliver on its mission. In terms of the latter, South Africa has established a National Earth Observation and Space Secretariat (NEOSS) in order to coordinate the development of integrated earth observation user needs across a number of societal benefit areas. The NEOSS will also identify and coordinate South Africa's contribution to the GEO workplan.

Both sides welcomed progress in extending EGNOS coverage in South Africa (through EGSA). Further to the Joint Statement signed by EC Vice-President Tajani and Minister Naledi Pandor on 21 March 2012, the RSA is willing to start implementation and to spell out in details with the European Commission, ESA and the GSA, the areas of cooperation related to EGNOS extension in which Europe and South Africa are engaging. In this respect, the EC welcomes the earmarking of appropriate resources by South Africa (confirmed by Dr Mjwara's letter dated 16 June 2012). Both sides agreed to launch the preliminary architecture definition study and to ensure the link with the overall EGNOS evolution. The co-chairs requested the establishment of a task force involving the South African and European key relevant players including ESA and the GSA, for the definition of the terms of references of such study, the programme of work, and for the clarification of other programmatic issues including future system certification, functioning mechanism and financing resources for the cooperation. Both sides reaffirmed that it is their objective to continue working together so that EGSA will also be coordinated with the wider SBAS initiative in Africa, in particular with respect to the coverage of the southern region, in line with the decision of the EU-Africa Summit in Tripoli in November 2010. The RSA recall its commitment to take a leading role in interacting with the SADC.

The South African and European participants reviewed progress made in the field of Earth Observation which is identified as one of the priority areas for EU-South Africa cooperation. Achievements of projects under the Framework Programme for Research and Development (FP7) with a continental focus (EAMNET and GARNET-E) and the good progress made and promising results of regionally focused FP7 projects (MALAREO and WATPLAN) as well as the user involvement were noted. Moreover, opportunities for the uptake of future GMES Global Land component products were also highlighted. The European Commission presented the results of the most recent call for proposals under the FP7 Space Theme. Under the 4th call, two proposals with South African participation were selected, one to support **GMES in Africa** and the other on space technologies. Under the 5th call no Specific International Coordination Actions were foreseen. The main topics of the upcoming FP7 Space Theme (6th) call for proposals which are open to international cooperation were also presented. The call is expected to be published in July 2012.

The European Commission, the Department of Science and Technology, ESA, EUMETSAT and SANSa reaffirmed their strong commitment to continuing cooperation within multilateral frameworks such as the **GEO** (Group on Earth Observations) and the **CEOS** (Committee on Earth Observation Satellites). The participants expressed their ongoing support for the *GMES and Africa* initiative and specifically for the further development and alignment of the *GMES and Africa* Action Plan to user needs through the three thematic user workshops, the first one to be held in 2012. Both sides recognized the importance of broad consultation of African experts and institutions in the development of the plan. In this context RSA is proposing to organize a fourth workshop in early 2013. Both sides resolved to develop synergies, wherever possible, between the GMES and Africa initiative and other initiatives relevant to sustainable development in Africa. It was also agreed that the partners will work together to support the AfriGEOSS initiative aimed at building Earth Observation capacity in Africa. The development of GEO's AfriGEOSS initiative and the development of Climate Services in line with the Global Framework for Climate Services process resulting from the 3rd World Climate Conference were identified as items to be considered in this area.

The Dialogue took note of SANSa and ESA's plans to develop institutional cooperation. SANSa presented its first proposals in this regard to be further developed through bilateral discussions between the two agencies. Areas considered as offering potential for cooperation include Earth Observation research and applications in line with the EU's GMES Programme (including sharing of satellite data), ground support to space missions, space science research projects, space weather, science advancement and outreach programmes. Both sides acknowledged the importance of support for African continental and regional initiatives in space. South Africa highlighted the African Resource Management Constellation (ARMC) programme. The parties agreed to continue to liaise on the progress of initiatives such as the proposed African Space Agency and Space Science Institute of Pan-African University both in the context of the SA-EU space dialogue and more broadly within Africa.

Both sides welcomed the progress already made and further plans for research cooperation between the European Commission's Joint Research Centre (JRC) and South African institutions on specific topics including desertification, soil mapping, water management, crop monitoring and agriculture statistics, land-cover changes, biodiversity, and production and validation of remote sensing parameters. The parties also noted the specific plans for institutional cooperation between the JRC and SANSA. Furthermore, the European Commission and South African institutions welcomed the reinforced synergies with the **MESA** (Monitoring of the Environment and Security in Africa) project under which a climate change activity is under preparation.

Moreover, the participants welcomed the RSA involvement in the EU-funded **AMESD** (African Monitoring of the Environment for Sustainable Development) project and recognized that it fully supports the *GMES and Africa* initiative. In support to the implementation of the MESA project and the GMES and Africa initiative, it was agreed that the European Commission and South Africa will respectively motivate for enhanced coordination between the two initiatives as well as other complementary continental and regional (SADC) initiatives. Further, EUMETSAT and SANSA would study the possible implementation of the EUMETSAT Advanced Retransmission Service (EARS) over Africa. Both sides recognized the importance of the follow-up to the ARMC initiative in line with the development of the SENTINEL satellites.

Both sides acknowledged the fruitful results of a 6-months visit in 2011 of a JRC senior staff member to the Council for Scientific and Industrial Research (CSIR) in the framework of an on-going collaboration agreement between the CSIR and JRC. Moreover, initial contacts and cooperation on the exploitation of satellite remote sensing data acquired by NASA's Multi-angle Imaging SpectroRadiometer (MISR) instrument over the last 12 years are expected to lead to a more formal multi-year collaboration agreement between SANSA and the JRC in 2012. It was also noted that the Africa Soil Atlas (JRC coordinating, with the University of Free State in Bloemfontein as key South African partner) will be released at the end of 2012.

The Commission and RSA saluted the successful activation of the Trade and Development Cooperation Agreement (TDCA) "dialogue facility" for EGSA. They called for a prompt use of the funds and for the identification of other space cooperation initiatives, which could be supported by the facility. The establishment of an exchange programme for young engineers and entrepreneurs of the space sector could be explored. Recalling the results of the second Space Exploration Conference and the High Level Space Exploration Platform meeting held on 10 November 2011 in Lucca, Italy, the EC and ESA invited SANSA, alongside other African space agencies, to continue participating in this process. The participants agreed to explore the use of European launchers for launch of future South African satellites.

The participants noted the longstanding cooperation in astronomy and in particular in radio astronomy, in the area of research infrastructures and foresee continued cooperation in this field as a means of strengthening innovation and capacity building both in the European Research Area and in Africa. Whenever feasible, the European Commission will continue to assist the members of the SKA Organisation in the implementation of the facility. The parties agreed to explore possibly synergy between investments in radio astronomy and navigation as well geodesy infrastructures. It was agreed to update the Action Plan and Roadmap setting out concrete steps to be taken prior to the next South Africa-EU Space Dialogue meeting which will take place in mid-2013 in South Africa.