

## ***Instruments for cooperation:***

**19 November 2013  
South Africa**

# **Status of the ESA – SANSA cooperation**

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# ESA cooperation programmes with SANSA



- On 12 September 2013, in ESA/HQ, there was the first meeting between Chief Executive Officer of SANSA, Sandile Malinga, and Director General of ESA, Jean-Jacques Dordain.
- This meeting was an opportunity to review the state of current ESA - SANSA collaboration and to identify avenues for future concrete cooperation with an objective to establish formal cooperation between the two agencies once these new concrete areas of cooperation have been identified in details.
- The main areas of joint interest, which were discussed and identified during this meeting were as follows:
  - Earth observation
  - Ground segment operations
  - Space weather and magnetometry
  - Education
  - Other areas

- Both agencies expressed an interest to reinforce and explore new cooperation in the following areas:
  - Training and exchange of staff;
  - Continuation of the TIGER and TIGERNET initiatives with a focus on capacity building;
  - Access to SMOS data in particular regarding acidification of ocean;
  - Projects related to precision farming and food security;
  - Urban and rural settlements;
  - Continuation of activities related to disaster management and the Charter on Space and Major Disasters;
  - Exchange of Earth observation data;
  - Processing of ERS/ENVISAT data archives;
  - Exploration of a possible establishment of a Sentinel data mirror archive with SANSa in cooperation with the EU;
  - Cooperation in the context of World Bank and other development banks actions.

# Ground Segment



- SANSA is managing and operating ground stations resources.
- Both agencies expressed interest in exploring possible cross-support cooperation opportunities in this area.



- SANSA is the host of a space weather centre near Cape Town providing early warning and forecast services.
- ESA confirmed that solar physics is under the responsibility of the ESA Directorate of Science and Robotic Exploration (D/SRE) while space weather operations are under the responsibility of the ESA Directorate of Human Spaceflight and Operations (D/HSO).
- SANSA wished to explore collaboration on modeling, simulation, forecasting and operations.
- Regarding magnetometry, SANSA expressed interest in SWARM. ESA will consider SANSA specific interest in SWARM data beyond the status of registered user for the mission and will also consider collaboration on calibration/validation activities for SWARM and other missions in the future.

- ESA and SANSa have identified a training cooperation scheme to address different corporate and technical areas in the field of:
  - training,
  - education,
  - capacity building,
  - participation in short courses,
  - host experts from SANSa at ESA.

- The list of potential cooperation between the two agencies discussed during this meeting is not limitative.
- Other domains of interest may be identified in the coming months.
- ESA expressed interest in any scientific potential synergies to be built between the ESA space science programme (Euclid scientific mission) and the Square Kilometer Array (SKA) project in South Africa.
- SANSa indicated that it was not responsible for SKA activities in South Africa but will provide relevant South African contacts to ESA.