SOUTH AFRICAN NATIONAL SPACE AGENCY (SANSA)
SPACE SCIENCE

Request for Information (RFI)
For

Automated All-Sky / Clamshell Dome for a Solar Telescope

RFI No.: RFI SS/01/02/2025

Request for Information Issue Date:**2 March 2026**

Request for Information Due Date**: 9 March 2026 at 16:00**

1. INTRODUCTION

The South African National Space Agency (SANSA) was established by an Act of Parliament – SANSA Act 36 of 2008. SANSA's mandate is to provide for the promotion and use of space and cooperation in space-related activities, foster research in space science, advance scientific engineering through human capital and support the creation of an environment conducive to industrial development in space technologies within a framework of national government policy.

Furthermore, SANSA has a legislative mandate to develop the space industry in South Africa.

The South African National Space Agency (SANSA) hereby invites information from established and reputable service providers for the fabrication, delivery, installation and maintenance of a fully automated all-sky / clamshell dome for its new Solar Telescope Building being constructed at the SANSA Hermanus facility. The envisaged solution should provide a suitable all-sky dome, fit for purpose, and compatible with coastal weather conditions to protect the Solar Telescope Assembly from the outside environment during inclement weather and when the Solar Telescope is not in use.

Through this Request for Information (RFI), SANSA seeks to understand available solutions that can delivered from within South Africa for a reliable, observatory-grade telescope dome, ensuring protection during inclement weather and be fully automated with remote open / closing functionality. Interested service providers are invited to submit detailed information on their capabilities, relevant experience, and potential solution offerings in response to this RFI.

This RFI is issued as a means of technical discovery and information gathering only and aims to determine work scope and indicative costing. This RFI is not an invitation to pre-qualify prospective contractors and participation is voluntary. Furthermore, all the information provided may be used for planning purposes and is none binding on either party.

2. BACKGROUND

SANSA has acquired a Solar Telescope is establishing a ground-based Solar Observatory to observe the sun in various wavelengths.

SANSA Hermanus is located near to the coast and SANSA will construct a building to host the solar telescope, which shall include an approximately 4m, all-sky / clamshell dome suitable for the local climate to protect the telescopes during inclement weather and while the telescopes are not in use.

This RFI is issued solely for information gathering and planning purposes; this RFI does not constitute a formal solicitation for proposals. Note that responses to this RFI will be kept strictly confidential and used only for topic development for future in support of the South African space engineering industry sector.

3. INFORMATION REQUESTED

All information shall be submitted in accordance with the instructions provided in this document. Classified responses will not be accepted.

SANSA request that respondents assess the requirements as stated in Annexure A of this RFI and submit proposals for solutions that they are able to provide. The proposals should address the technical solution concepts and scope, implementation plan and timeline, risk aspects, assumptions made, expected customer supplied items and interfaces, long lead items, and any relevant SHEQ aspects.

Interested service providers are requested to submit the following information:

3.1 Company Information

- Company name and registration details
- Physical and postal address
- Contact person and contact details
- BBBEE status (if applicable)
- Confirmation of local manufacturing capability or local partnerships

3.2 Technical Capability and Experience

- Description of experience in designing and manufacturing observatory domes or comparable precision structures
- Portfolio of previous projects of similar complexity
- Details of engineering, design, and manufacturing facilities
- Description of available installation and commissioning capabilities
- Maintenance and support capabilities including SLA experience

3.3 Proposed Technical Approach (High Level)

- Overview of dome solutions typically offered

- Manufacturing materials and technologies used
- Typical lead times for delivery and installation
- Compliance with harsh coastal environmental conditions
- Experience with motorised or automated dome control systems

3.4 Quality and Compliance

- Applicable certifications or quality standards
- Health and safety compliance capability
- Testing and commissioning processes typically followed

3.5 Financial and Operational Capacity

- Confirmation of ability to support a project of this scale
- Indicative project team structure

4. RFI INQUIRIES

Inquiries to this RFI must be submitted to nstrauss@sansa.org.za and jward@sansa.org.za No telephone inquiries will be accepted. SANSA will review queries and if relevant post responses on the SANSA website in the RFI site.

5. SUBMISSION INSTRUCTIONS

Responses to this RFI are due **no later than 16:00, on 9 March 2026** All submissions must be electronically submitted to nstrauss@sansa.org.za ,as a PDF file attachment not to exceed 10MB. The information provided in response to this RFI will not be disclosed publicly.

The information requested through this RFI is for planning and market assessment purposes. Specifically, SANSA seeks to identify and establish a database of South African service providers that possess the technical capability and capacity to design, manufacture, install, and maintain a solar telescope dome as described in this document.

Service providers that demonstrate the required capability through their RFI submission may be considered for inclusion in a subsequent limited bidding process. Only those identified through this RFI process may be invited to participate in that phase, where detailed specifications and full bid requirements will be issued.

The release of this RFI does not constitute a commitment to issue a formal tender, nor does it obligate SANSA to proceed with any procurement process or incur any costs in relation to this market research activity.
All information provided in response to this RFI will be treated as confidential and will not be disclosed publicly, subject to applicable legislation.
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6. DISCLAIMERS AND IMPORTANT NOTES

This RFI is issued solely for information gathering and planning purposes; this RFI does not constitute a formal solicitation. Respondents are advised that SANSA is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI.

Responses to this RFI are not offers and cannot be accepted by SANSA to form a binding contract. Respondents are solely responsible for all expenses associated with responding to this RFI. SANSA will not provide reimbursement for costs incurred in responding to this RFI. It is the respondent's responsibility to ensure that the submitted information has been approved for public release by the information owner.

SANSA does not intend to award a contract on the basis of this RFI or to otherwise pay for the information solicited, nor is SANSA obligated to issue a solicitation based on responses received. Neither proprietary nor classified information should be included in the submittal.

ANNEXTURE A: AUTOMATED ALL-SKY / CLAMSHELL DOME FOR A SOLAR TELESCOPE

1. PROBLEM STATEMENT / PURPOSE

SANSA is seeking information from established service providers who can manufacture, deliver, install and maintain an all-sky / clamshell telescope dome to protect its solar telescope assembly

The telescope dome is expected to be fit for SANSA's purpose of viewing the sun with a 180 degrees field of view in elevation and in all directions in azimuth, be compatible with the coastal weather conditions of the SANSA Hermanus site, and protect the Solar Telescope Assembly from the outside environment during inclement weather or when the telescope is not in use.

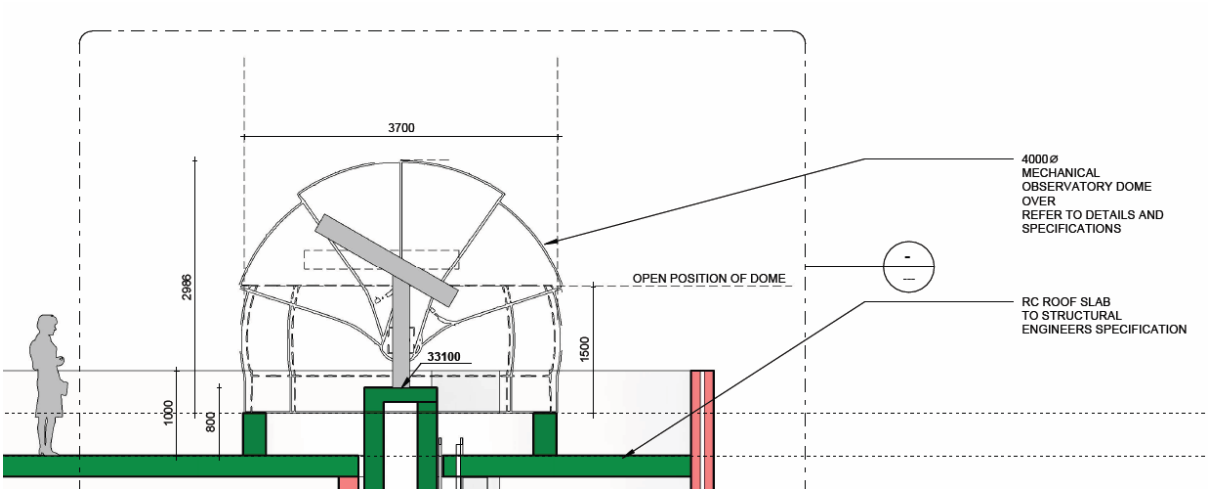
2. SCOPE OF WORK

The anticipated scope of work would involve a complete telescope dome solution. This may include planning and design, mounting and integration considerations, manufacturing, installation, commissioning and testing to confirm performance, as well as handover with relevant training and documentation.

SANSA also envisages that the solution would include ongoing maintenance and support services to ensure long-term reliability and availability, potentially through a service level agreement of approximately five years.

DOME REQUIREMENTS

The dome is intended to be installed on top of the Solar Telescope building currently under development at SANSA's Hermanus site. The architectural design and building plans have already been completed and are not expected to undergo substantial changes.



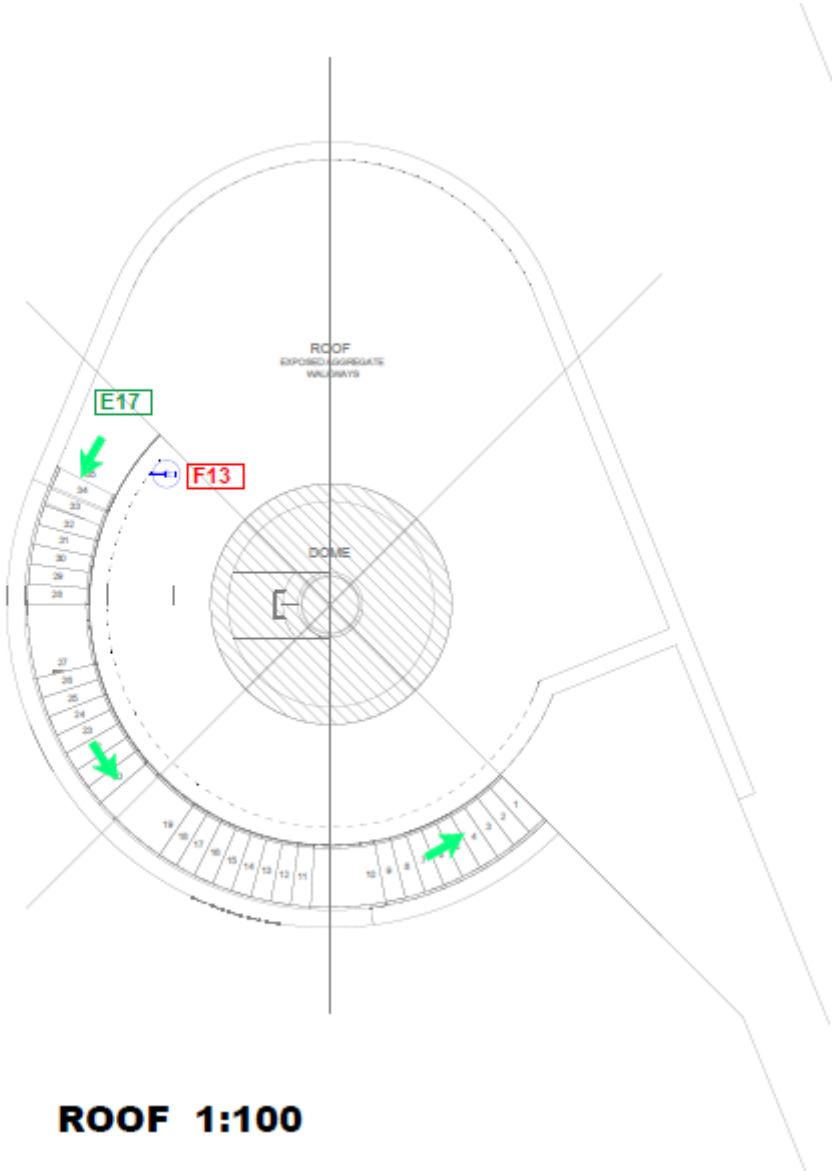


Figure 1: Side and Top views of the Building Plans showing the placement and size considerations of the dome.

The dome should be motorised with a remote control and fitted with fast motors and an outdoor, weatherproof motor control box so that the dome can be opened and closed remotely from any location.

The dome specifications below already take into account the size of the solar telescope assembly and the architectural requirements of the building.

Dome colour: White

Dome material: Glass-fiber Reinforced Plastic (GRP/Fiberglass)

All-Sky Dome: The dome should be able to open partially (user controllable) and up to the whole sky view at 180° at maximum opening, with at least four (4) segments as shown in the example images.

Fully motorised / remote controlled (a manual crankshaft would be a value added feature)

Minimum Diameter of base: 3700mm (preferred and as per the architectural drawings)

Largest Diameter of base: 4000mm

Minimum height (base to top): 3000mm (preferred and as per the architectural drawings)

Maximum height (base to top): 4000mm

Largest dome outer diameter: 4500mm

Tolerate windspeeds of up to 200km/h

Power: Single phase 230VAC/50Hz

Solutions that incorporate an automatic closing function in response to adverse weather or cloud conditions would be viewed favourably

Figure 2: Example of observatory-grade, all-sky dome required.

Figure 3: Example of observatory-grade, all-sky dome required

ANTICIPATED BILL OF QUANTITIES OF SCOPE OF SERVICES

	SERVICE ACTIVITY	QUANTITY/DURATION
1.	Planning and Design Documentation	1 Lot
2.	Installation, commissioning and testing	1 Lot
3.	Training of SANSA Technical Staff	2 Sessions (Operations and Maintenance)
4.	Preventative & corrective Maintenance (5 years SLA)	As and when required Visit to SANSA Hermanus
5.	Others:	

ANTICIPATED BILL OF QUANTITIES OF MATERIAL

	ITEM DESCTIPTION	QUANTITY
1.	Dome materials	1 dome set
2.	Motors	1 set
3.	Motor controller	1 set
4.	Critical spares	1 set
5.	Delivery of dome to SANSA (including insurance)	
6.	Others:	

Respondents are requested to indicate whether their typical dome solution includes the supply and delivery of all accessories, cable assemblies, mounting hardware and related components required to provide a fully operational all-sky dome system.

Service providers should also outline the training typically provided to client technical staff for the operation and maintenance of the dome system.

Where different warranty options are available, respondents are encouraged to describe the available warranty structures and coverage periods.

PREMISES WHERE SERVICES ARE TO BE RENDERED

SANSA Hermanus
Hospital Street,
Hermanus,
Western Cape,
7200
South Africa

GPS 34°25'26.3"S 19°13'28.6"E

COMPLIANCE WITH PROTECTION OF PERSONAL INFORMATION ACT, 2013 (ACT NO. 4 OF 2013) ("POPIA")

1. The Constitution guarantees citizens the right to privacy, including the right not to have the privacy of their communications infringed.

2. POPIA aims to promote the protection of privacy through the application of its guiding principles for the processing of personal information in a context-sensitive manner.

Committed to your Privacy

3. SANSA fully comprehends that your personal and company information is valuable to you; your privacy is important to SANSA. SANSA commits to safeguarding and lawfully processing your personal information.

Purpose for Processing your Personal Information

4. SANSA collects, holds, uses and discloses your personal information mainly to provide you with access to its services. SANSA will only process your personal information for a purpose you would reasonably expect, including:

- Complying with any legal and regulatory requirements such as contract agreements, etc.
- Confirming, verifying and updating your details.
- Invoicing or paying you to ensure payment and tax compliance.

5. SANSA may collect your personal information which may include your first name and last name, company name and its registration number, identity numbers, email address, physical or postal address, other contact information, banking details, etc.

Consent to Disclose and Share your Personal Information

6. SANSA may need to share your personal information, with third parties, to provide advice, and/or services. Where SANSA shares your personal information, it will take all reasonable precautions to ensure that the third party will treat your personal information with the same level of protection as required by SANSA.

Request and Access to your Personal Information

7. Should you require further information on this or have any concerns about how your personal information is processed or used, you can

contact SANSA's Information Officer on popi_paia@sansa.org.za.

8. You can request access to the personal information SANSA has on you at any time. If you think that SANSA has outdated information, you may request to update or correct it. You can also opt-out and request the removal of your personal information at any time. If there are any lawful reasons for requiring SANSA to retain any information, SANSA will advise so.

9. **PLEASE TAKE NOTE** that your personal information is securely hosted on infrastructure / system managed by SANSA. SANSA assures you that your information will not be shared for any marketing or promotional purposes without your consent.

10. SANSA will continue to manage, monitor, refine and develop policies, processes and systems. This will ensure that SANSA takes every practical and reasonable step(s) to ensure data protection, is in line with POPIA.