

# High Precision and Large Mechanical Components

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# What does your organisation need in future tenders?

## Technical Information The Telescopes

**SKAO**

The SKA telescopes are made up of arrays of antennas – SKA-mid observing mid to high frequencies and SKA-low observing low frequencies – to be spread over long distances. The SKA is to be constructed in phases: A first phase in South Africa and Australia, with a later expansion representing a significant increase in capabilities and expanding into other African countries, with the component in Australia also being expanded.

### SKA1-Mid the SKA's mid-frequency telescope



Location: South Africa



Frequency range:  
**350 MHz**  
to  
**15.4 GHz**  
with a goal of 24 GHz



**197 dishes**  
(including 64 MeerKAT dishes)



Maximum baseline:  
**150km**

### SKA1-Low the SKA's low-frequency telescope



Location: Australia



Frequency range:  
**50 MHz**  
to  
**350 MHz**



**131,072**  
antennas spread between  
**512 stations**



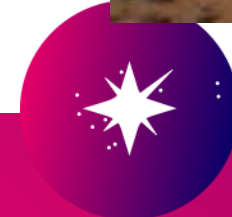
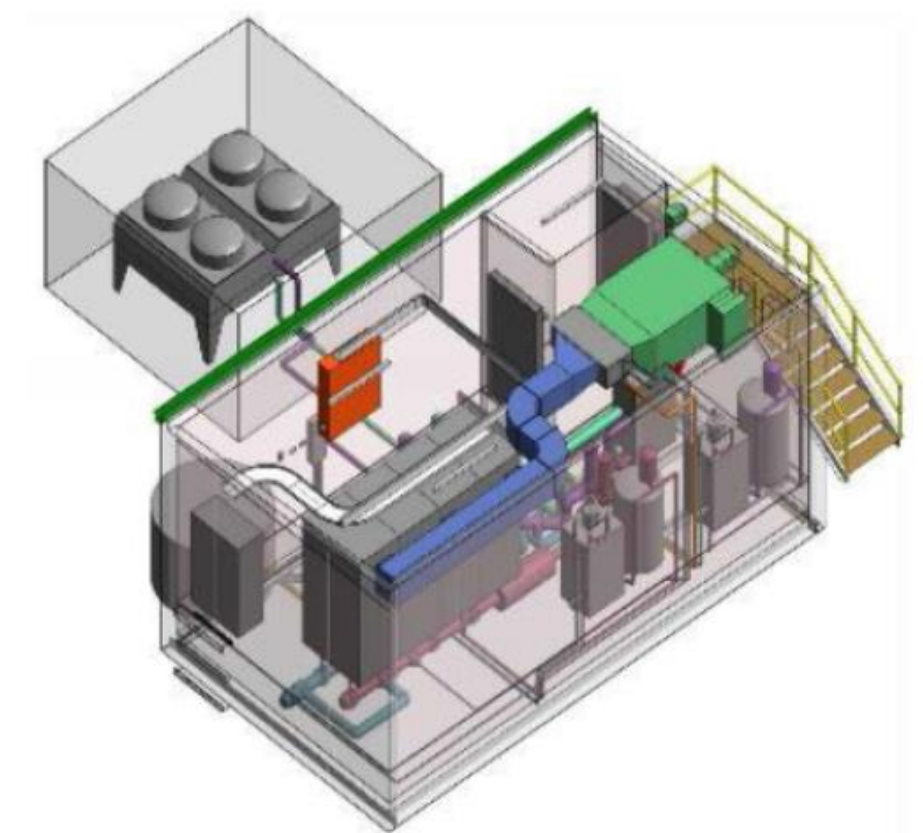
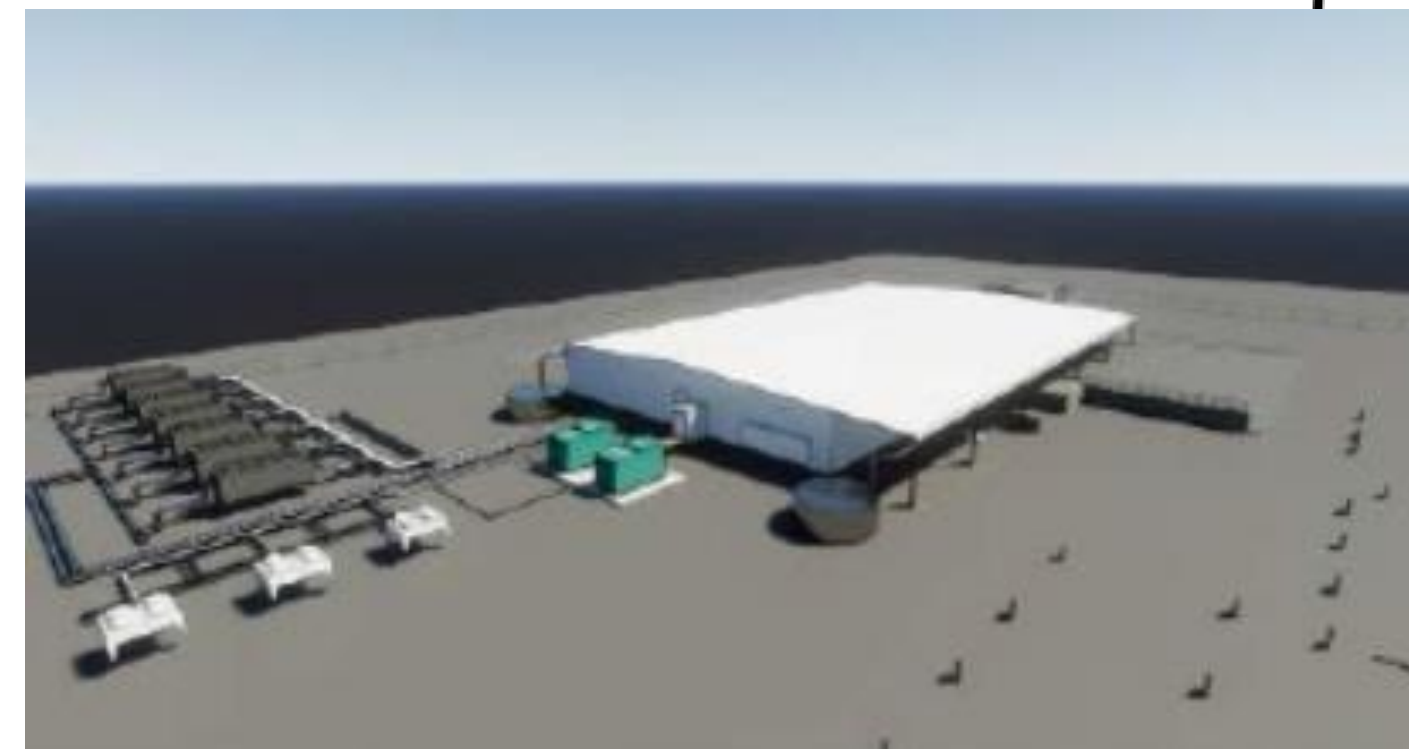
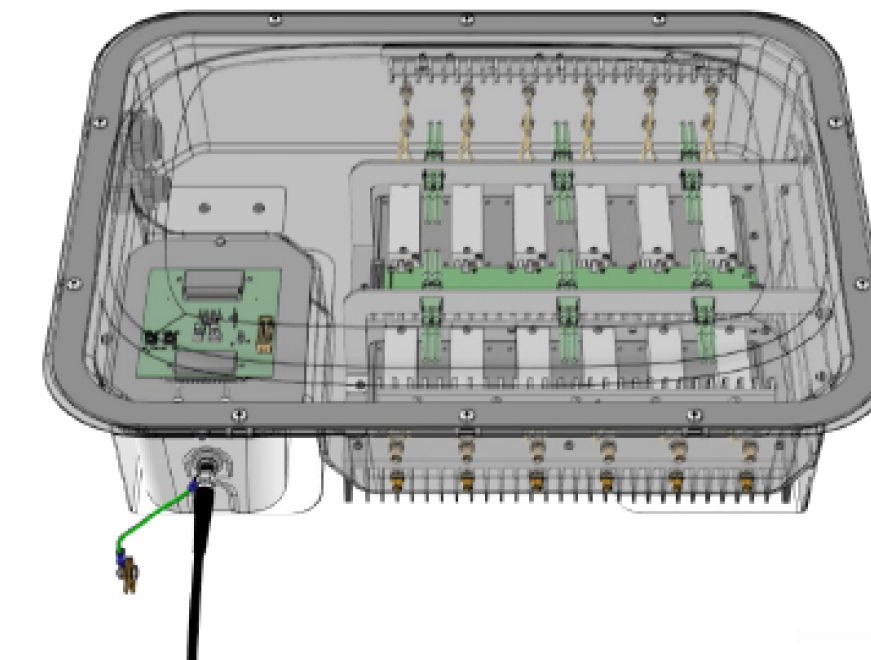
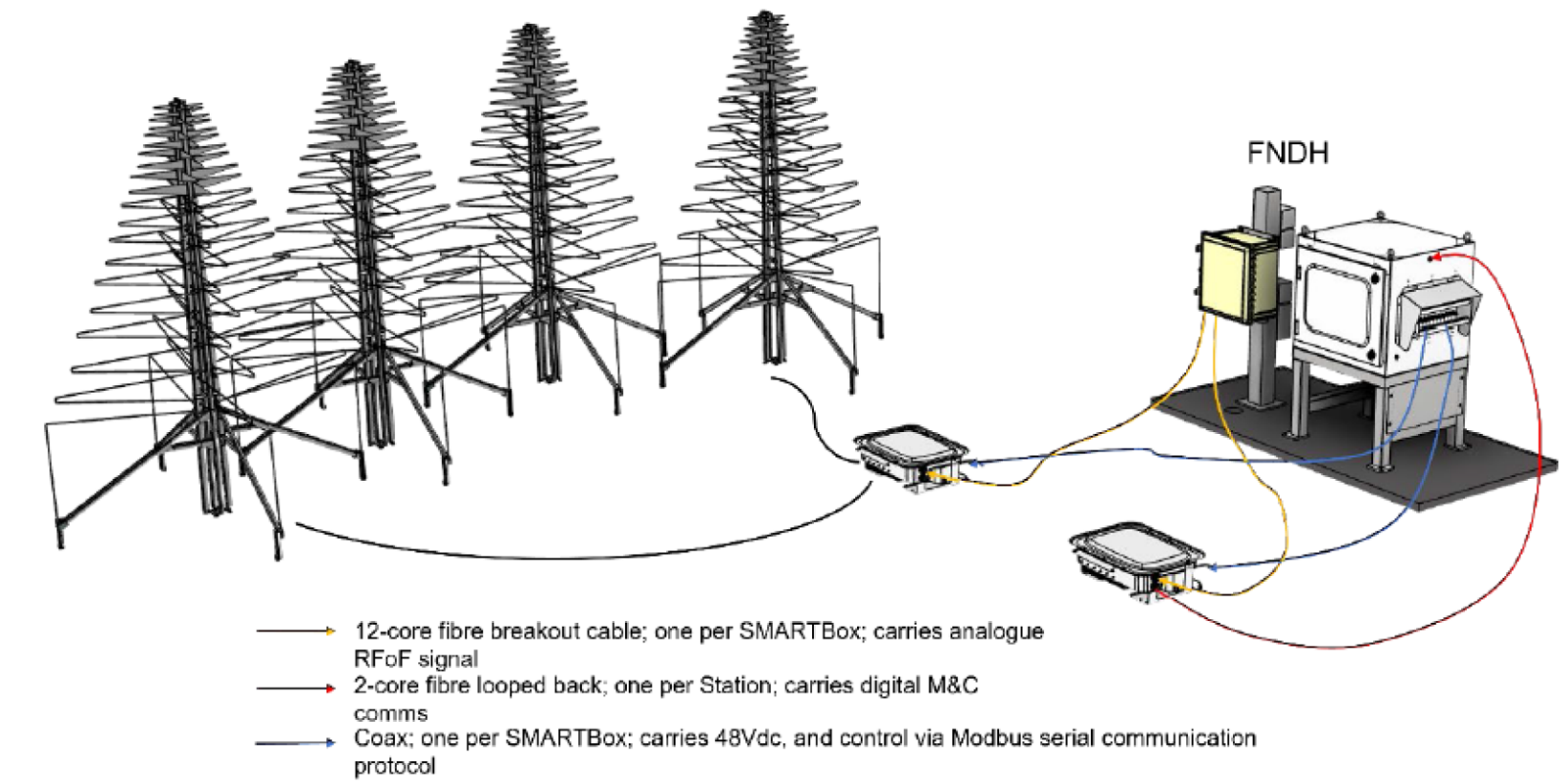
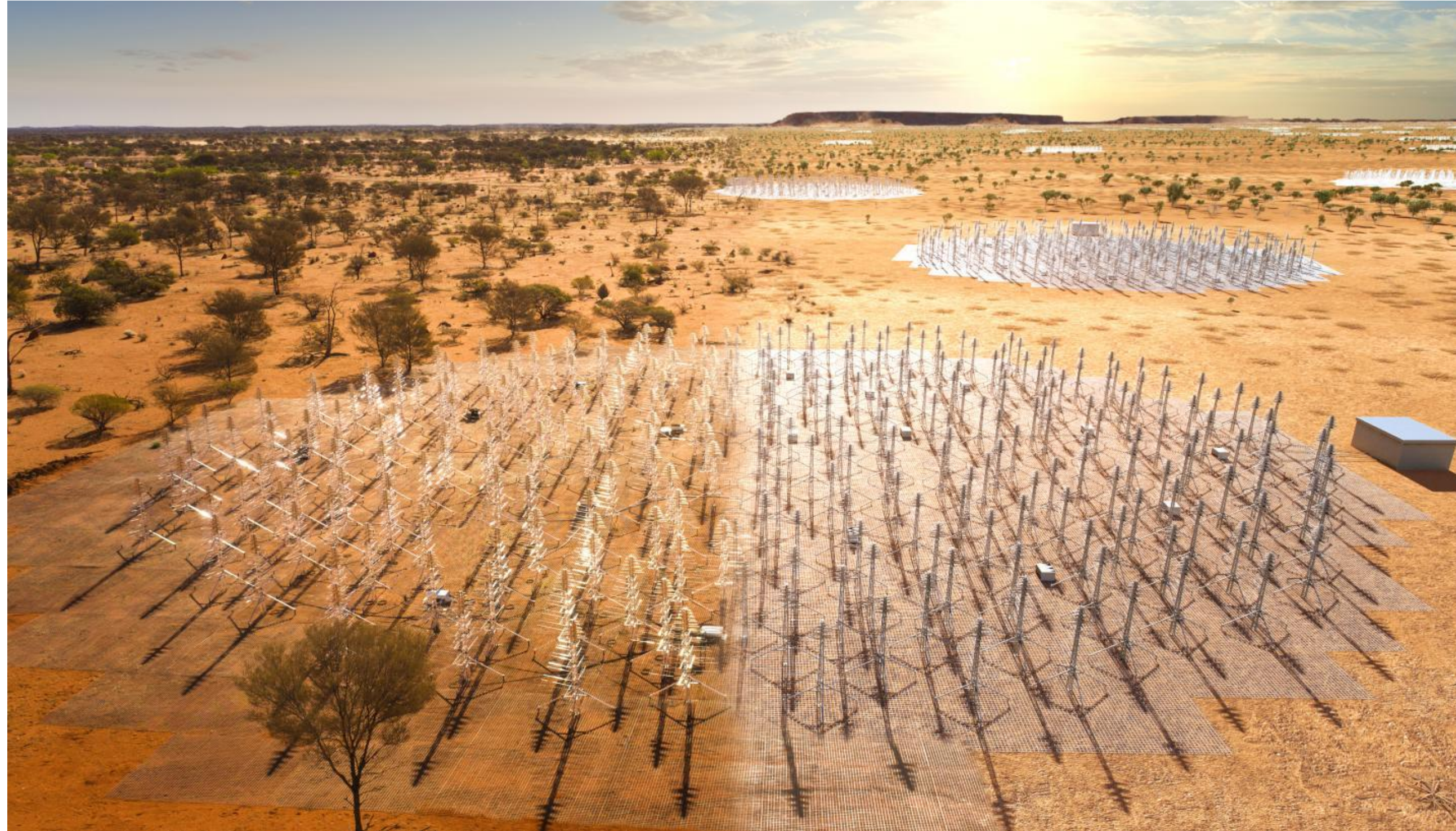
Maximum baseline:  
**~65km**

# > 1 Billion Euros



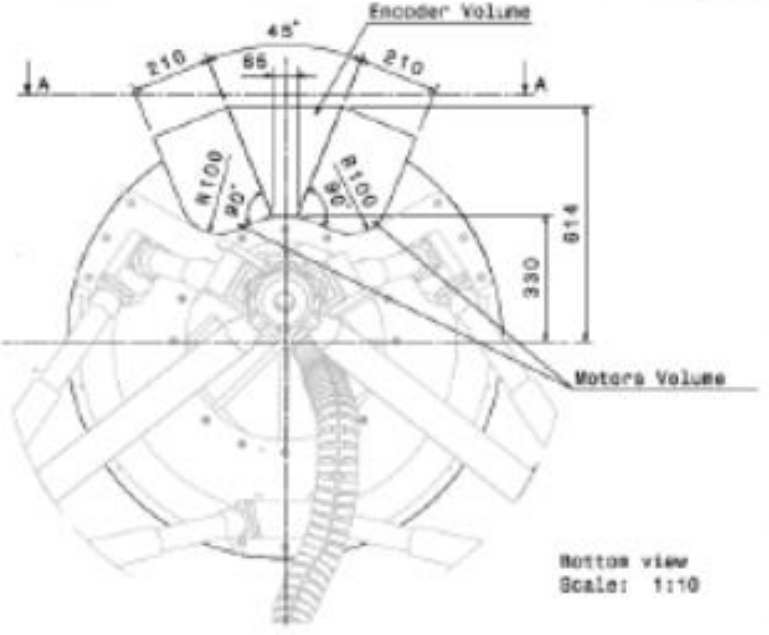
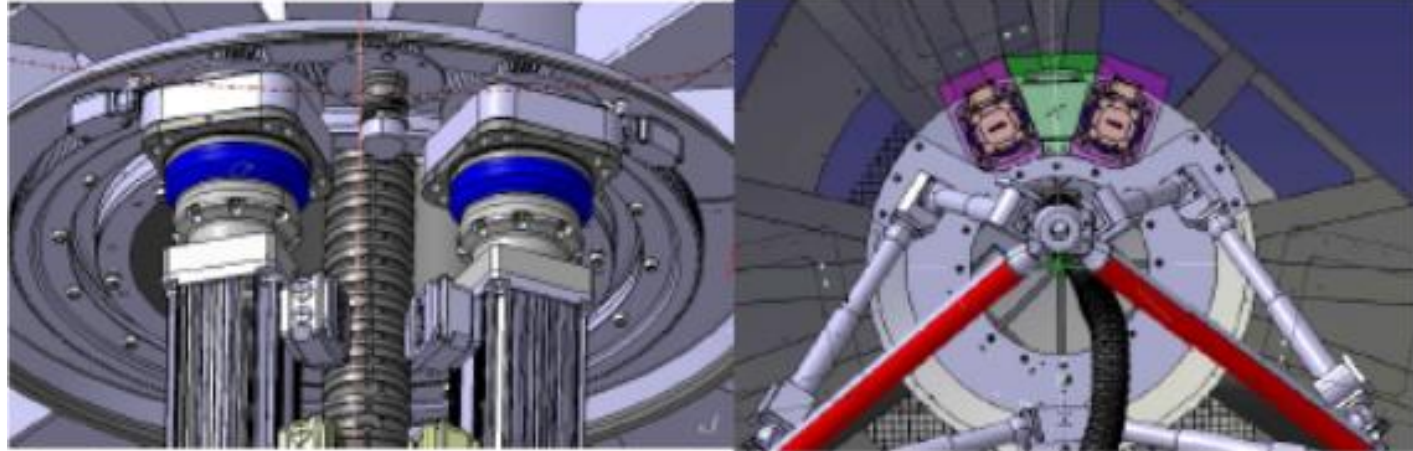
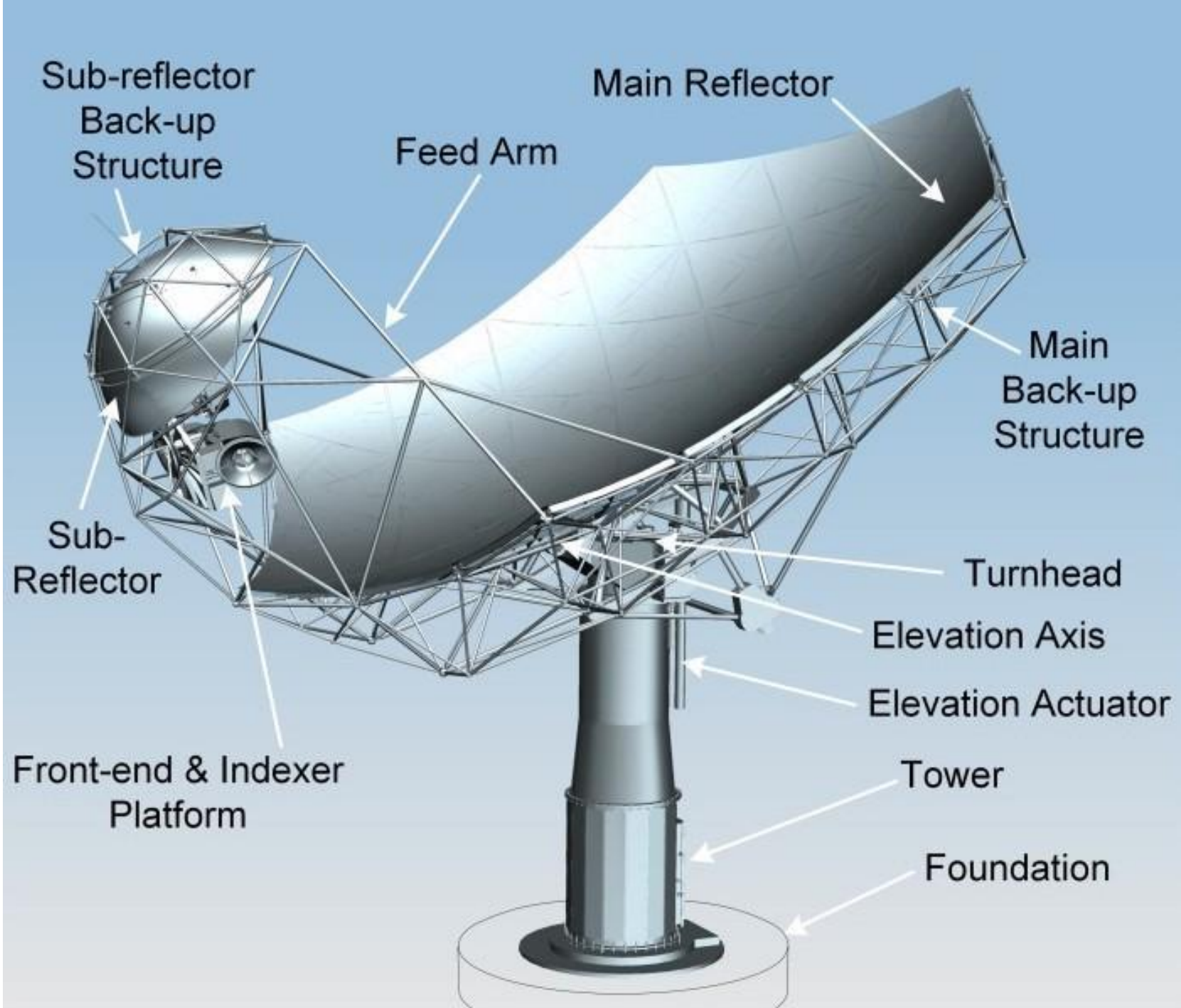
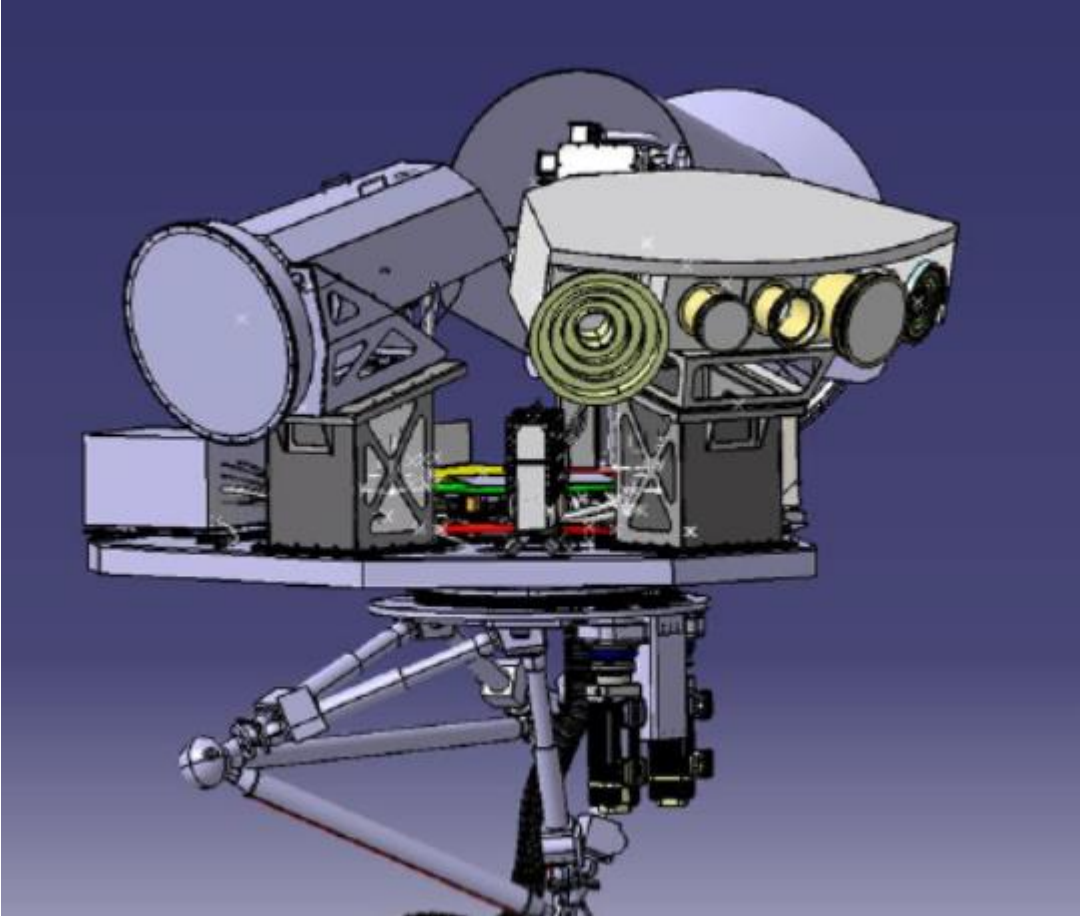
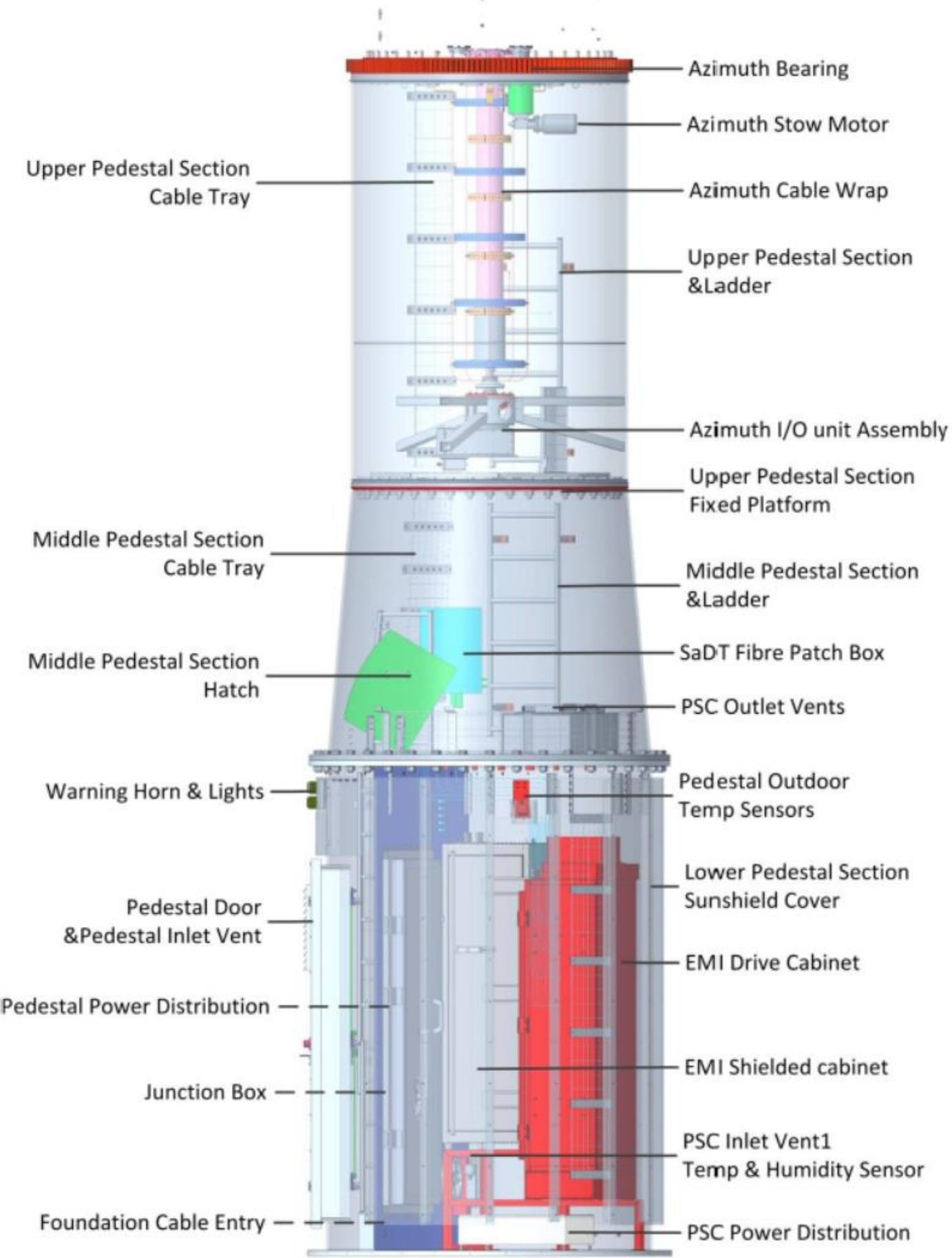


# Low Telescope





# Mid Telescope





# Reference Design

## SKA Passes Overall Design Review

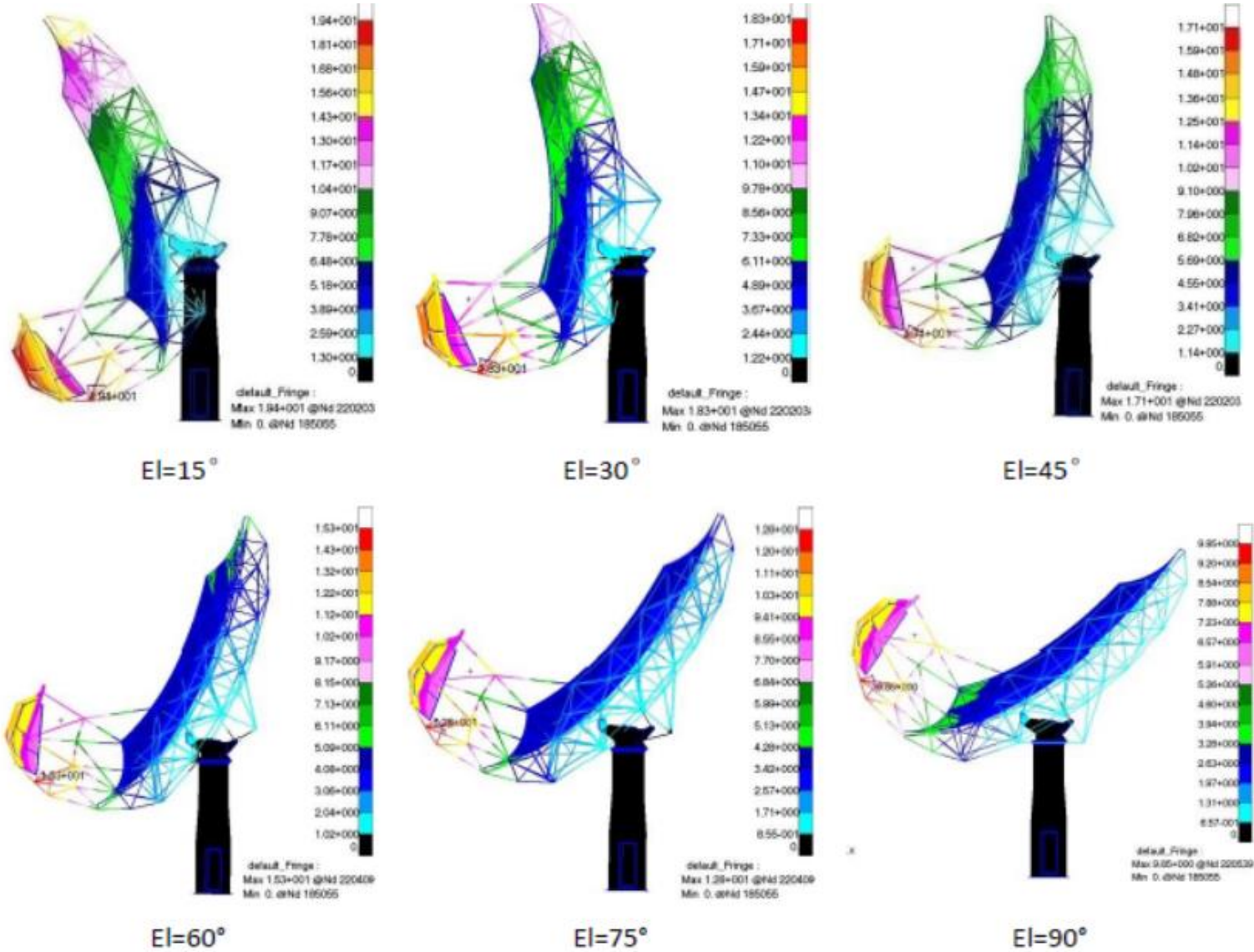


SKA Global Headquarters, Friday 19 December 2019 – An independent panel of external reviewers from major astronomy projects has given the SKA’s overall design, costing & planning the nod, clearing the way for the preparation of the SKA construction proposal.



### SKA1 Design Baseline Description

SKA-TEL-SKO-0001075      Revision 02  
 Classification:            Unrestricted  
 Document type:            DDR  
 Date:                         2022-01-24  
 Status:                        Released

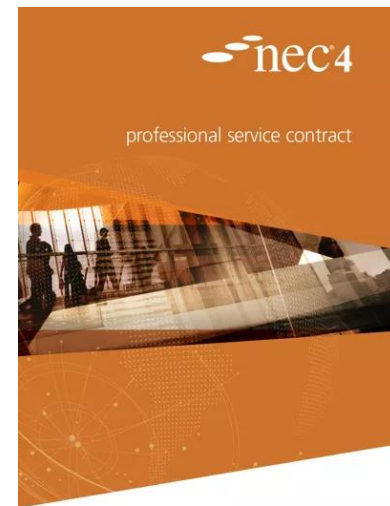


Role	Name	Designation	Affiliation	Signature	Date
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Author	M. G. Labate	SKA LOW Telescope Engineer	SKAO	<i>Maria Grazia Labate</i>	Feb 1, 2022
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Owner	P. Dewdney	SKA Architect	SKAO	<i>Peter Dewdney</i>	Feb 1, 2022
Approver	L. Stringhetti	SKA Project Engineer	SKAO	<i>Luca Stringhetti</i>	Feb 1, 2022
Released by	J. McMullin	SKA Programme Director	SKAO	<i>J. McMullin</i>	Feb 1, 2022

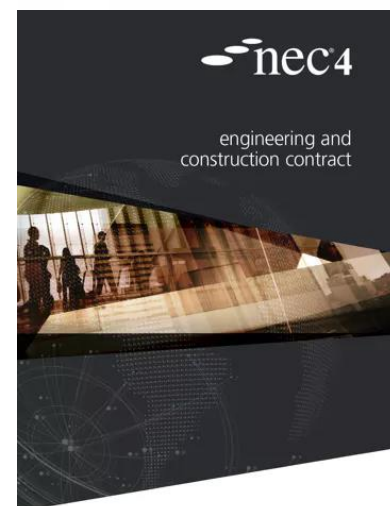




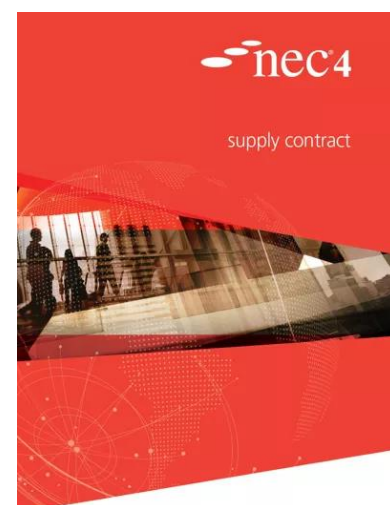
# NEC4 Suite of Contracts



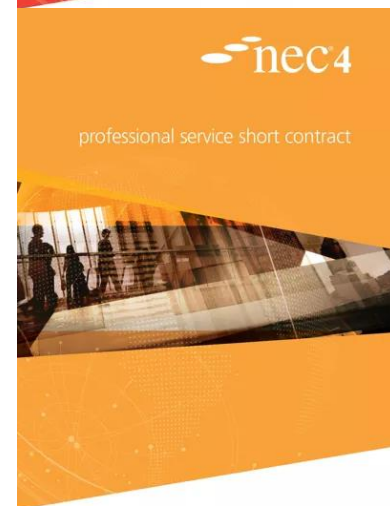
- PSC: Professional Services Contract



- ECC: Engineering and Construction Contract



- SC: Supply Contract



- PSSC Professional Service Contract Short

***" The Parties shall act in the spirit of mutual trust and co-operation"***



# How can you engage with us?

<https://www.skatelescope.org/procurement/>



# Thank you

*We recognise and acknowledge the  
Indigenous peoples and cultures that have  
traditionally lived on the lands on which  
our facilities are located.*

**SKAO**

[www.skao.int](http://www.skao.int)