

SKAO

Dish

MASUM 2022

Mark Harman

5 / 5 / 22



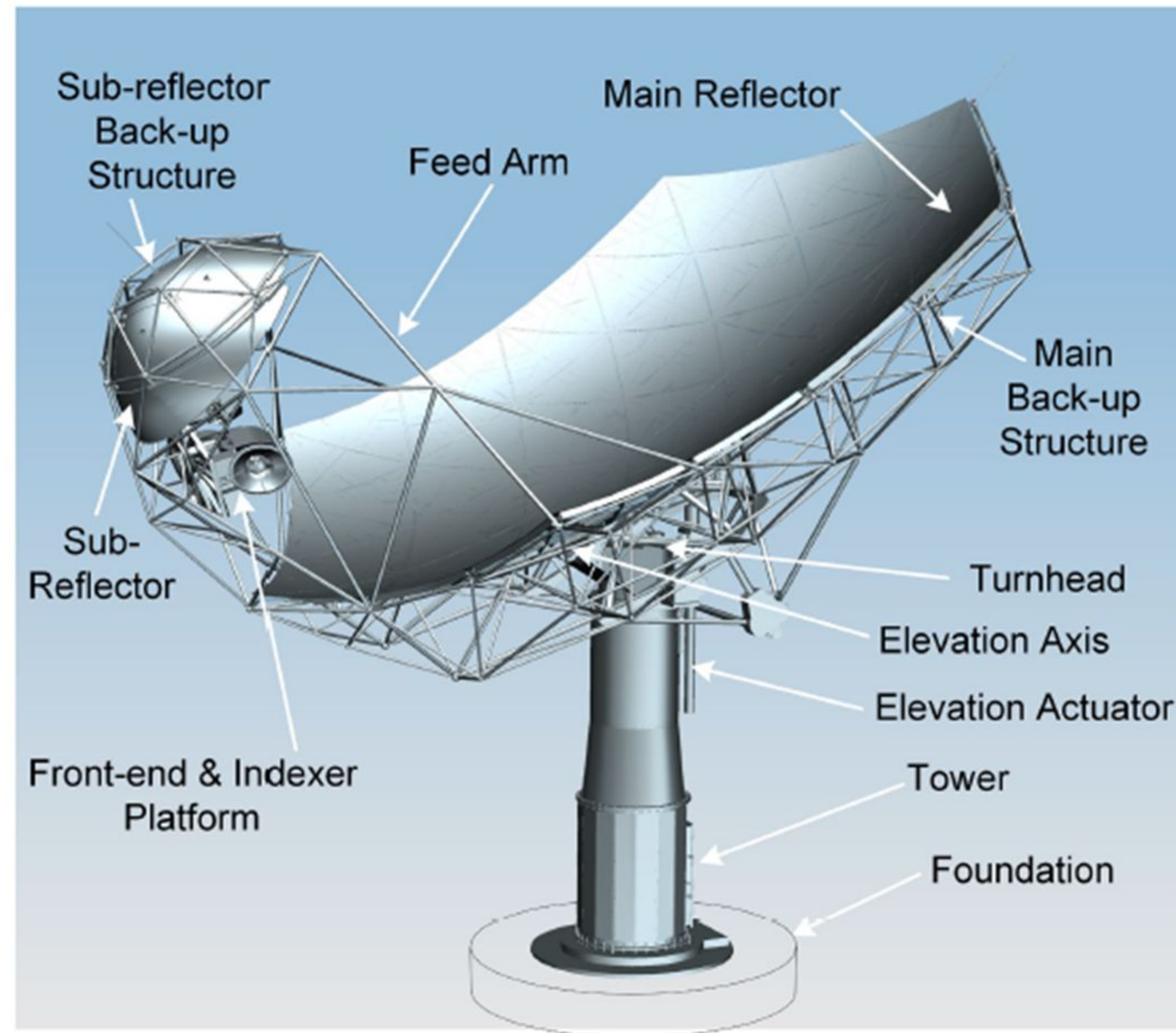
SKA Dish

15m Offset gregorian Dish
Aluminium Panel main reflector
5m Composite Sub reflector
58 tonnes

SPF Band Configurations

Band 1: 350 -1050 MHz
Band 2: 950 -1760 MHz
Band 3: 1.65 -3.05 GHz
Band 4: 2.8 -5.2 GHz
Band 5a: 4.6 - 8.5 GHz
Band 5b: 8.3 – 15.4 Ghz

SARAO will be the Dish AIV Contractor
Contracting 2022



Dish Development Status

	Construction location	CDR Date
Dish AIV	South Africa	Late 2022
Dish Structure	China/ Italy/ South Africa	July 2022
Band 1	Sweden/ India/ Spain	Completed
Band 2	South Africa/ Canada	Completed
Band 5	UK / Spain/ Sweden	September 2022
Cryo	UK	June 2022
SPF Services	South Africa	Completed



Dish Structure

CETC 54 - Lead Main Contractor

SAM - Feed Indexer

Spain - Sub Reflector

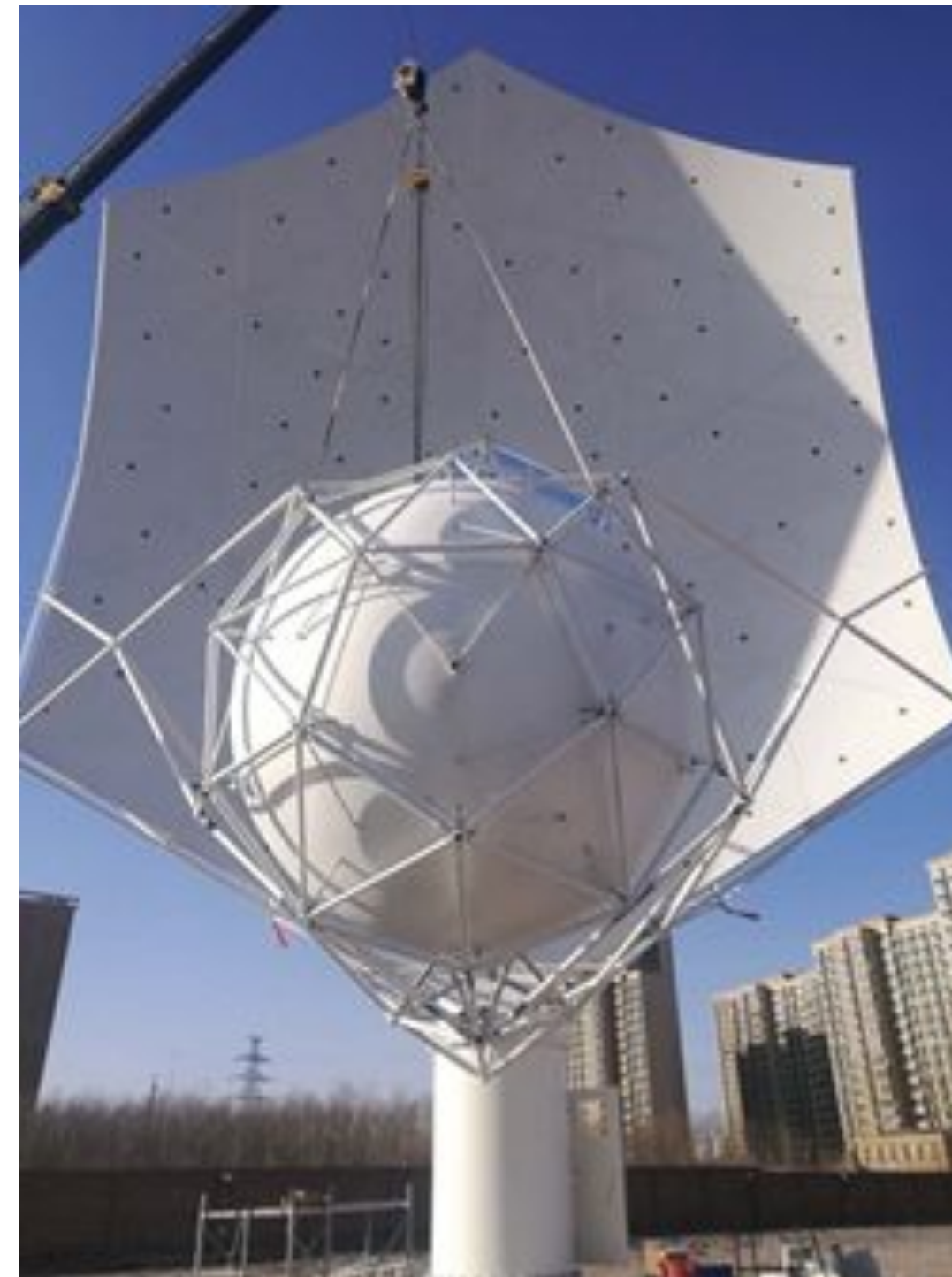
ITC - EMI Cabinet



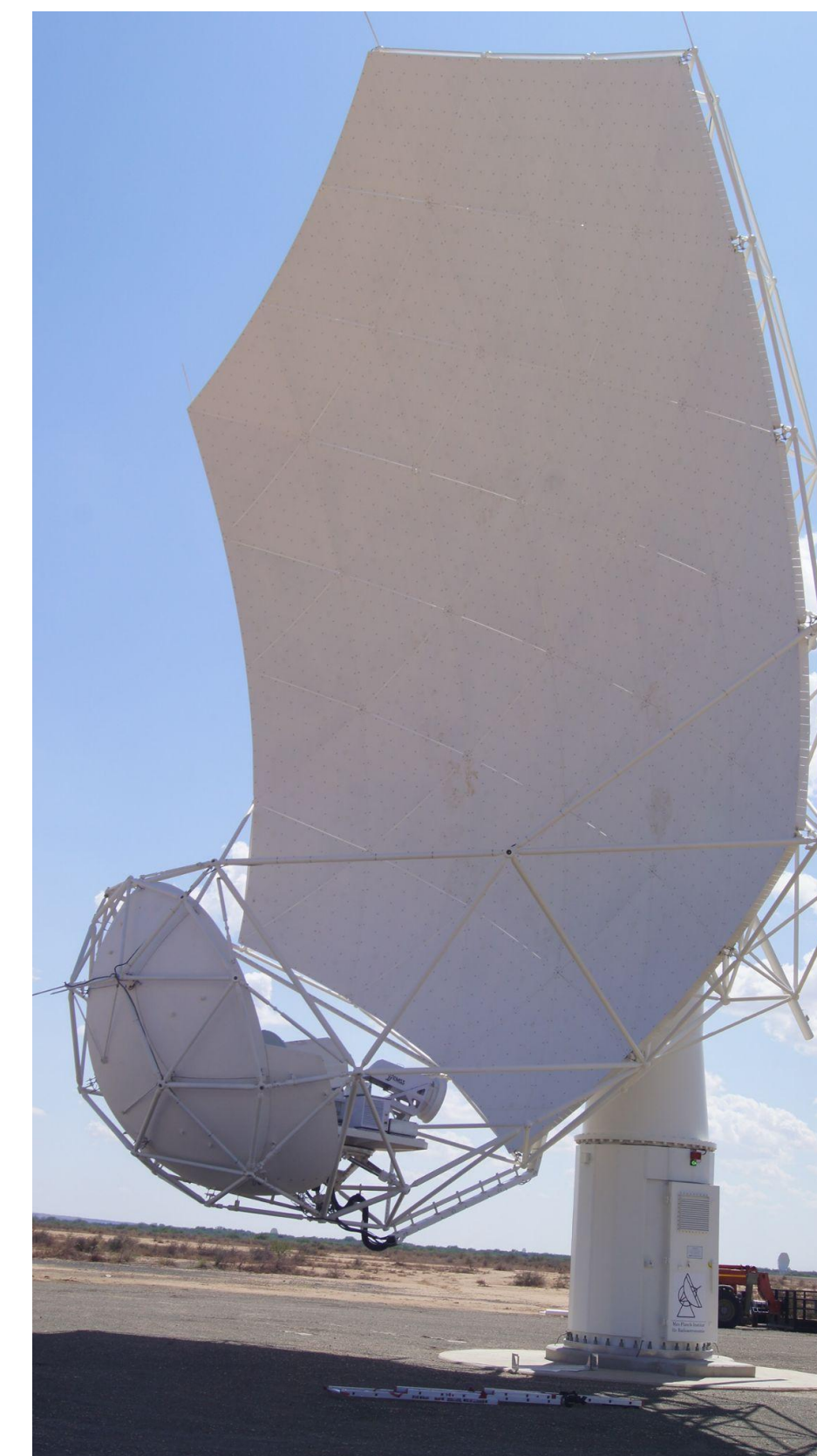
Feed Indexer testing
SAM Italy



Panel Manufacturer
CETC54



SKAP - China



SKAMPI- SA

Contracting Initiated. - Complete August 2022

First Dish - April 2023

IDR finding risks - Development of Drive system,

Verification of Rfi, Pointing and surface



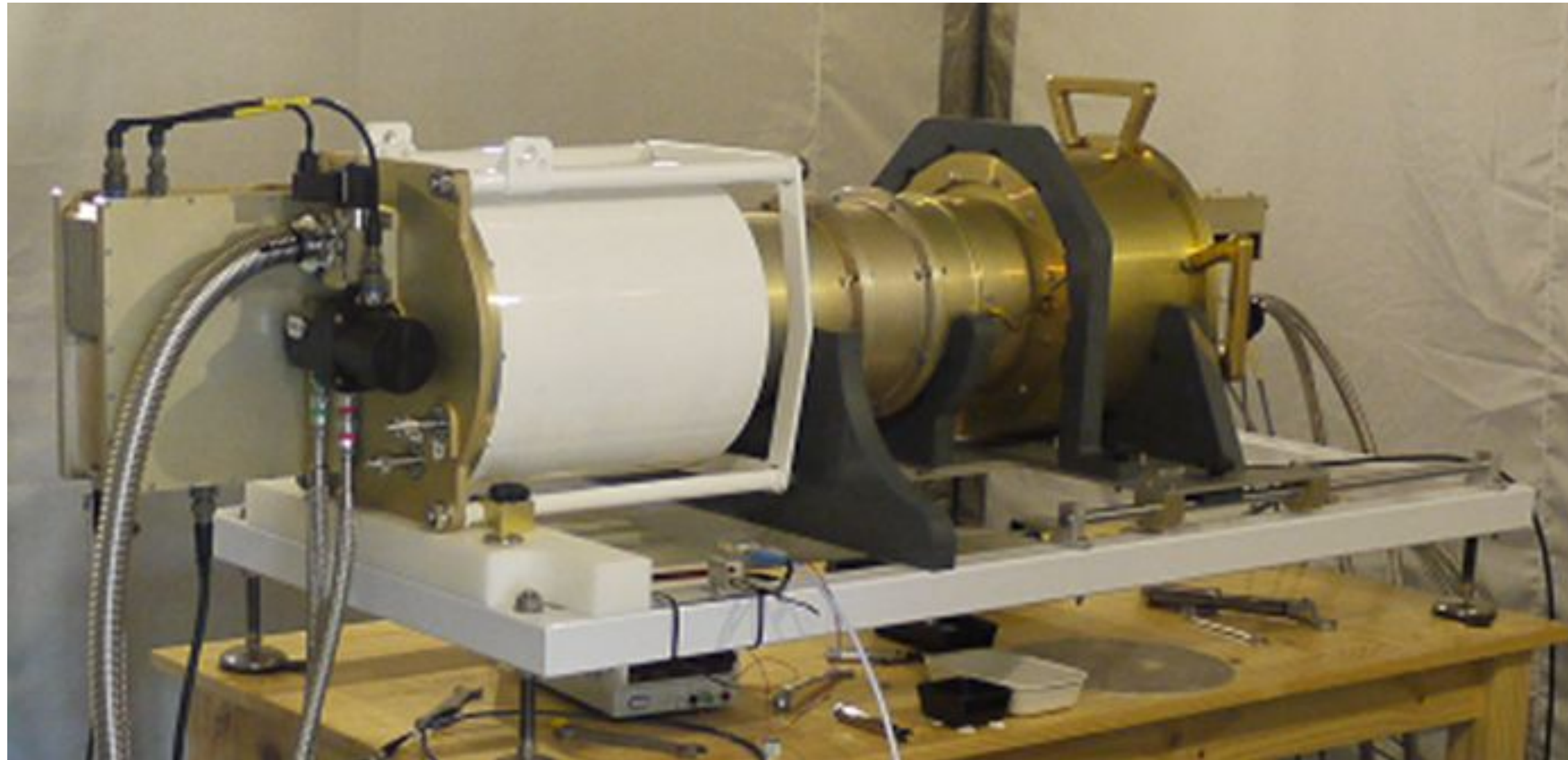
Band 1



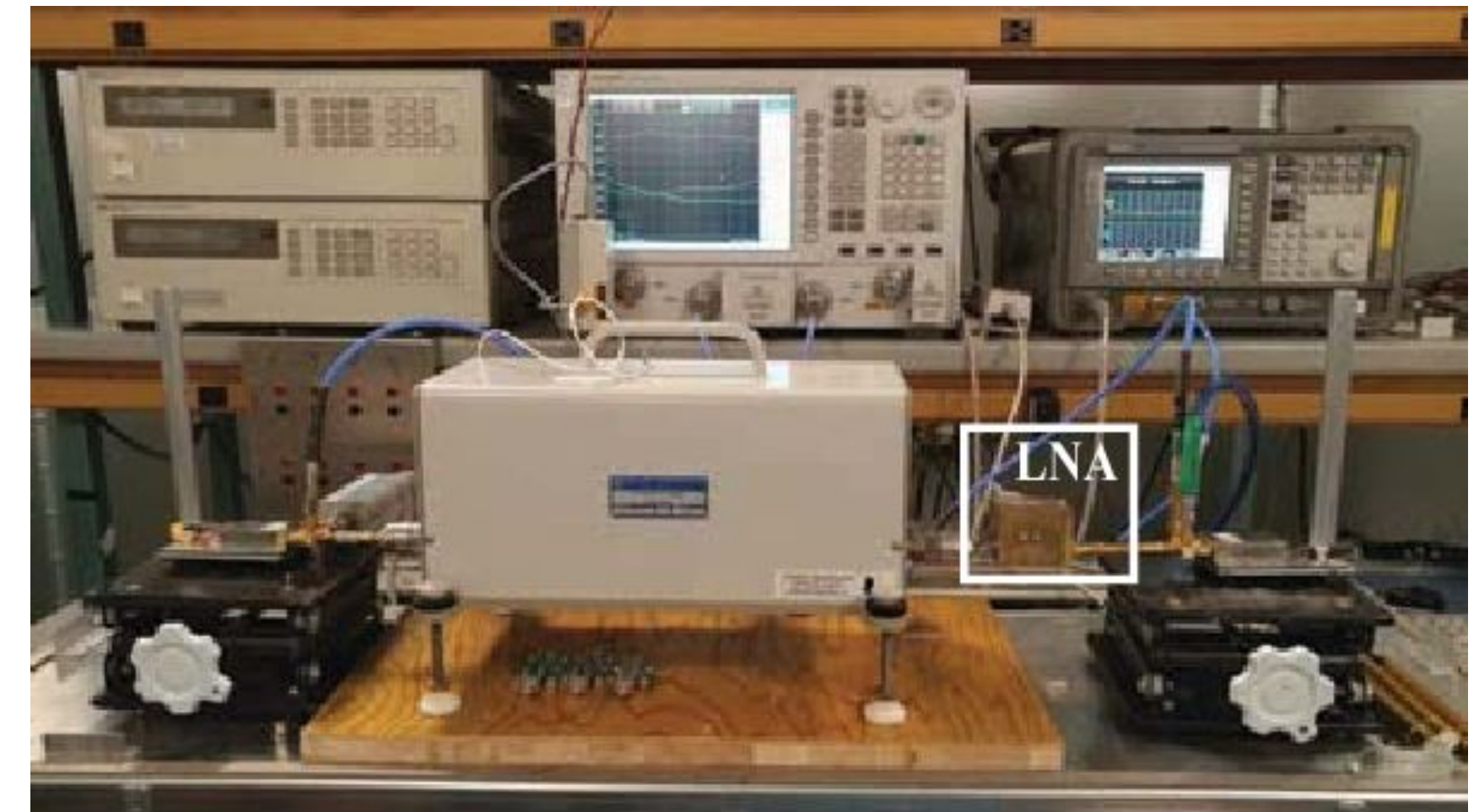
On Dish testing completed on SKAMPi.
Procurement in process and advancing.
Planned contract competitive award in Sweden Oct
2022



Band 2



Band 2 SPF
Under test at EMSS SS



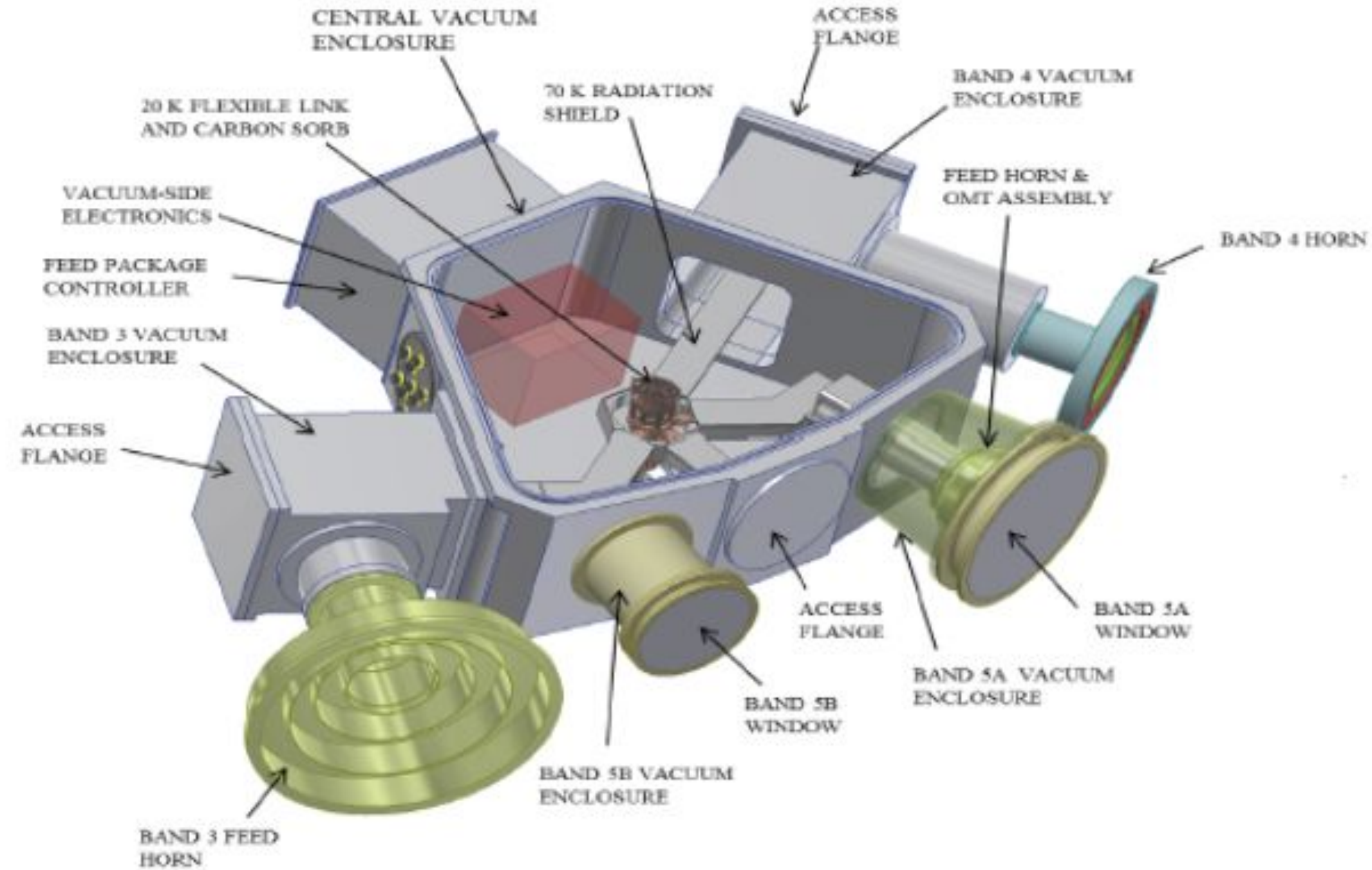
LNA under test at NRC

- On Dish Testing completed on SKA Mpi
- Contributions from Canada
- Probably a Single Source contract award planned - Nov 2022 - likely to be later



Band 5

- On Dish Testing still to be completed
- UK Contractor with contributions from Spain and Sweden
- Planned contract award - June 2023



Band 5 CAD Model with Full SKA baseline deployment

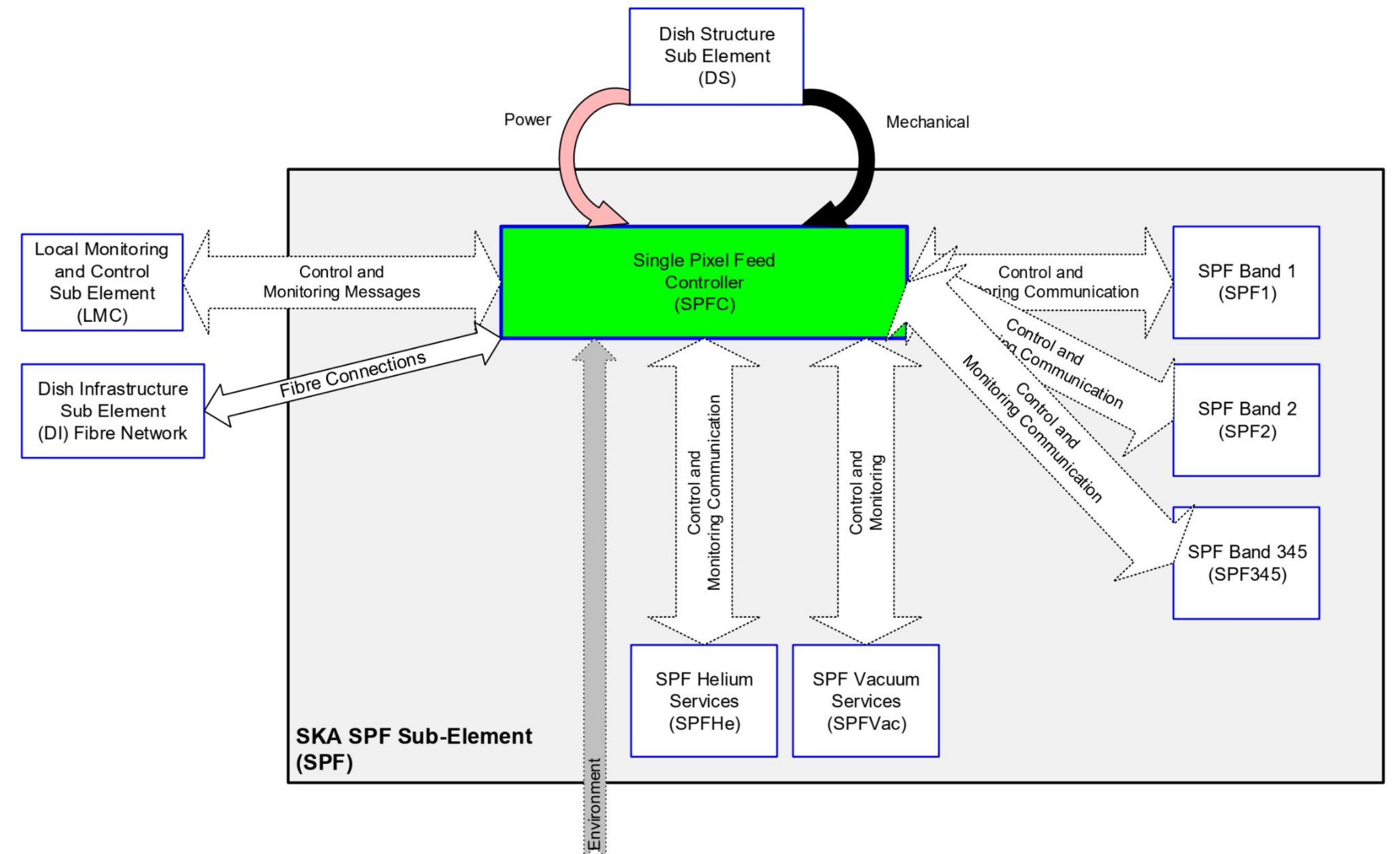


Band 5 Cryo test at Oxford University





CDR June 22
 Single Source Tender - Oxford Cryo Systems
 Planned Contract award - November 2022



CDR Complete
 Single Source Tender - EMSS South Africa
 Planned Contract award September 2022



*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