

**PART 4: DIGITAL ECONOMY – THE 3RD GREAT
ECONOMIC REVOLUTION
(COLOCATION PROGRAMME)**

28 SEPTEMBER

THE PIPELINE SERIES

SIDSS  21

OUTLINE

The Presentation covers the following

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- 1 High Level Project Information
- 2 Investment Plan and Financing Gap
- 3 Capital Required
- 4 Project Risks and Mitigation
- 5 Project Implementation Milestones
- 6 Q&A



OVERVIEW

The Colocation Programme

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The SKA Africa: The African Partner Countries (APCs) are Botswana, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia and Zambia.

The AVN programme is a commitment by South Africa to the APCs for their support in the bid to host the SKA in South Africa.

The AVN project commitment is to develop a network of VLBI radio telescopes on the African continent in order to transfer knowledge and technology, develop skills and new science opportunities.

A model for colocating science and industry on African sites.



PROJECT

(Colocation Programme)

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Project Scope

- The objective of the AVN colocation programme is to provide a model for colocating science and industry equipment on AVN sites
- Unique blend of government, industry and academia
- The colocation model provides a solution to the AVN funding challenges as well as the ongoing sustainability of operations

Developmental Impact

- Generates revenue and sustainability
- The colocation model supports the opportunity for wider skills development and skills transfer
- Development of South African industry and an African marketplace
- Foster innovation and industry development around the AVN sites

Project Sponsor(s)

Department of Science and Innovation (DSI)

Implementing Agent

The SA Radio Astronomy Observatory (SARAO), a national Facility of the National Research Foundation (NRF)

Other Key Stakeholders

SKA Africa Partner Countries



INVESTMENT PLAN AND FINANCING GAP

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Estimated Capital Cost R1,1 bn

Funding Gap

R1,1 bn

- | | | |
|--------------------------------|--------|---------|
| • Ground Station (per country) | R 45 m | |
| • Ground Stations X7 | | R 448 m |
| • Infrastructure | | R 140 m |
| • Data Facilities | | R 140 m |
| • CubeSat array X 8 | | R 320 m |

Sources of Funding		Uses	
Equity	R'm	Project Identification	R'm
• Ground Stations	1093	Project Management	20
• Infrastructure		Project Development	88
• CubeSats		Project Implementation (Construction)	985
TOTAL	1093	TOTAL	1093

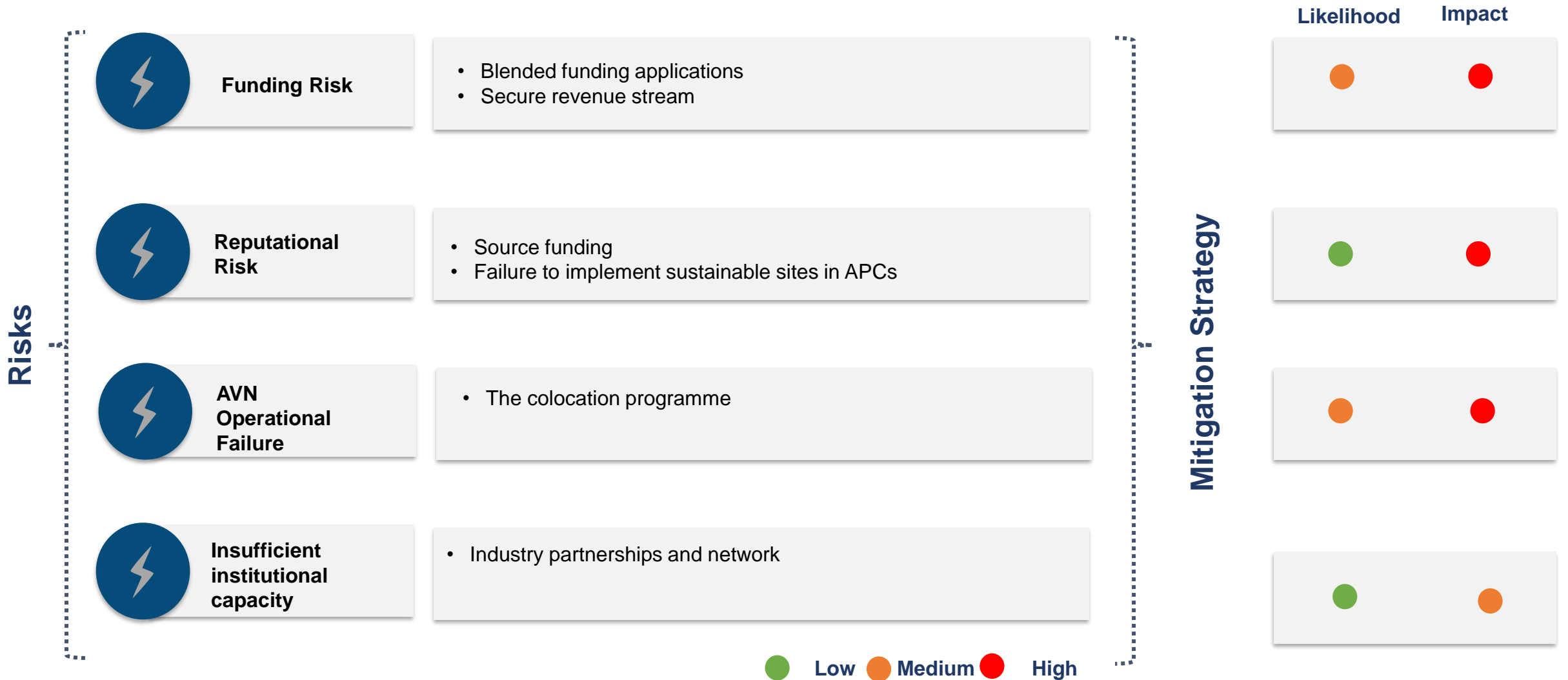
REVENUE MODEL

DESCRIPTION	Annual Value
Operational Costs	1200000
Countries x 8	84000000
Gross Profit	21600000
Countries x 7	151200000
Net Revenue	96000000
Countries x 7	67200000
Value add sales	32000000
Countries x 7	224000000

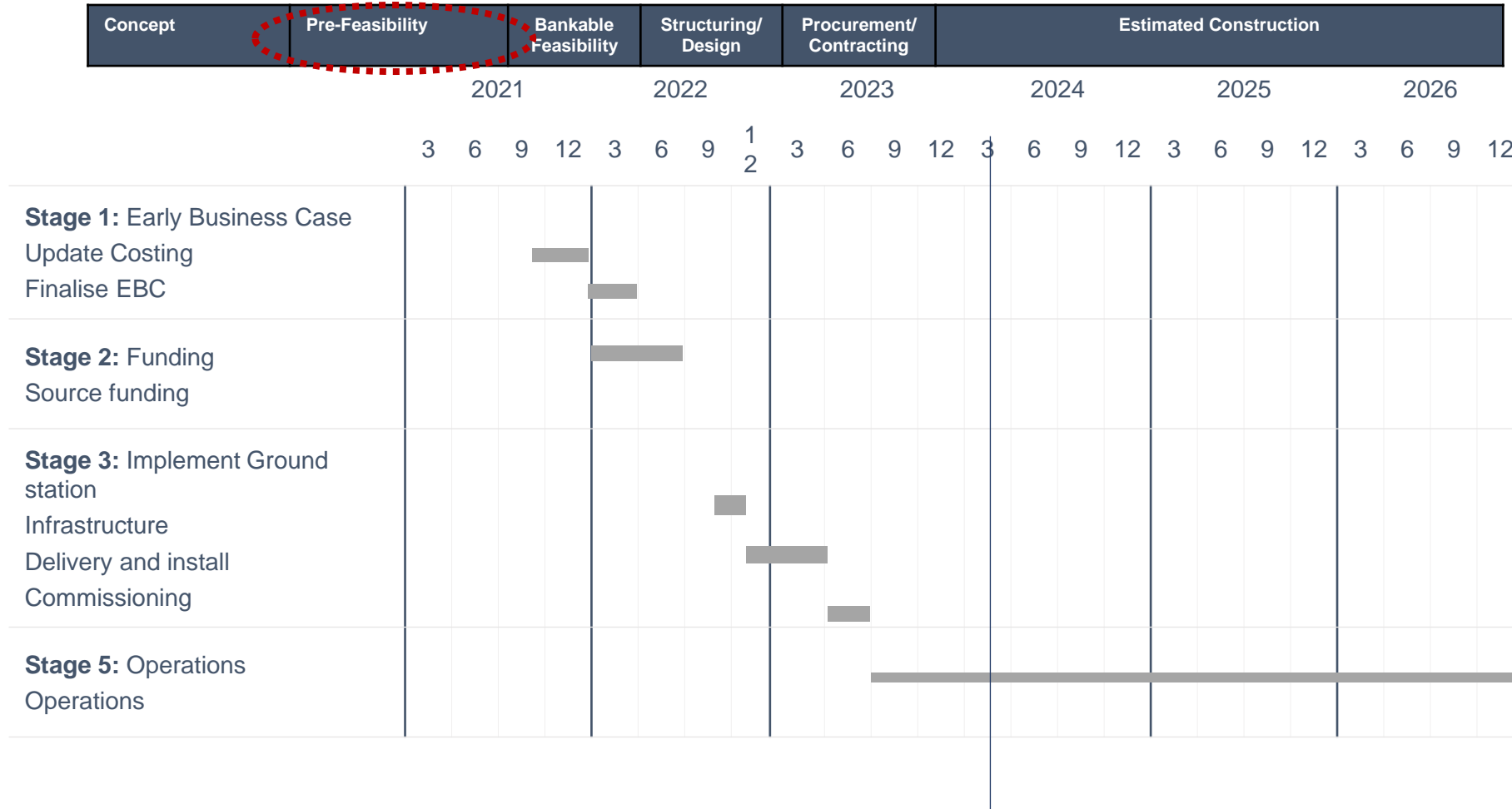
Value added Sales revenue is dependent on the funding model



PROJECT RISKS AND MITIGATION



PROJECT IMPLEMENTATION MILESTONES



It is estimated that Financial Close will be reached in 2023



THANK YOU
Q&A

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