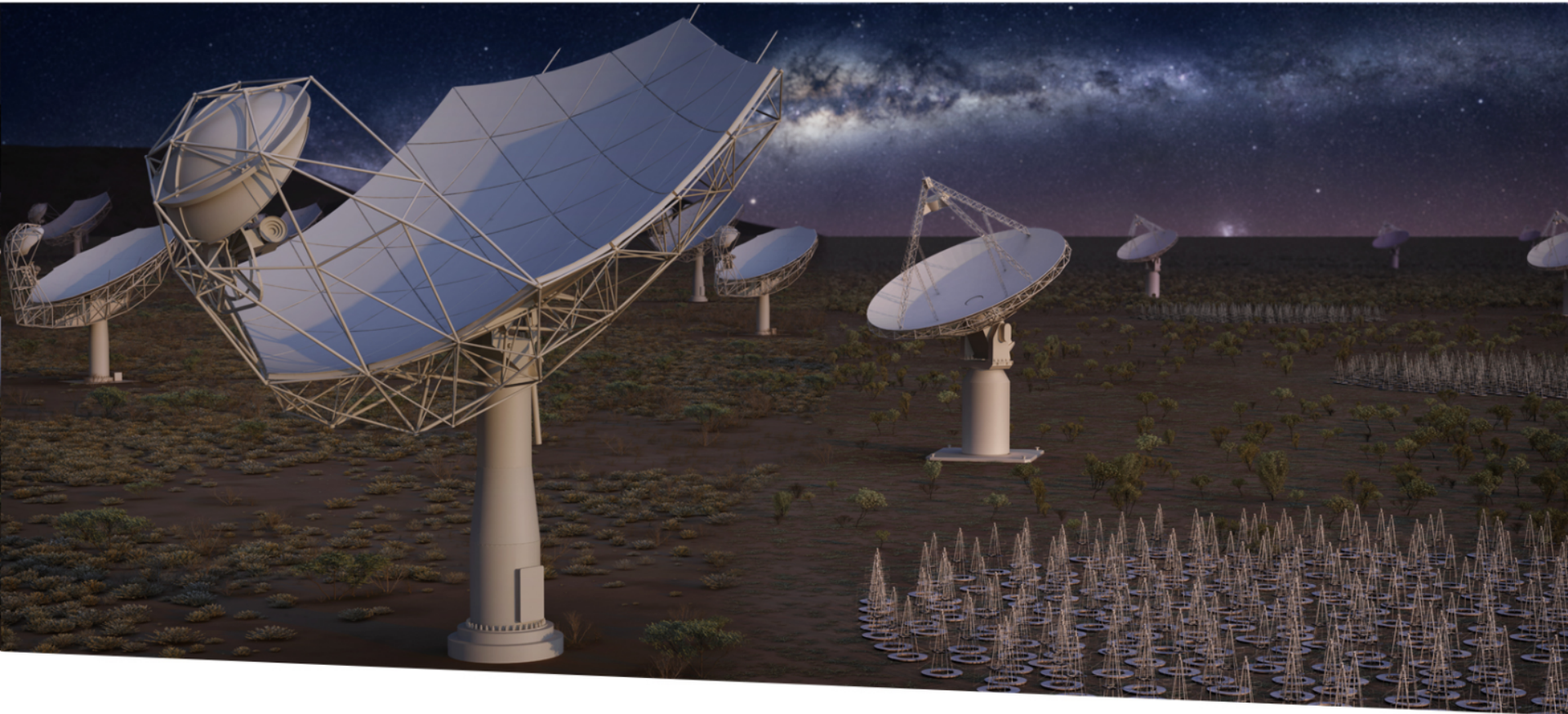


Policy Update

SKA Engineering Meeting 2017: Rotterdam



SQUARE KILOMETRE ARRAY

Exploring the Universe with the world's largest radio telescope

Simon Berry
12th June 2017

Contents

- (Best guess) timeline to the IGO
- Progress since last meeting
- Forming the IGO and transition
- Procurement and IPR

IGO Negotiation process

- Plenary meetings completed September 2016
- Focus now on 'Convention Task Force' – essentially a working group of Delegation Leaders
 - Several meetings since October
 - Focus on the Tier 1 texts: Convention, Financial Protocol and P&I Protocol
 - Range of issues still in play – some editorial, some more substantive
 - Next discussion on exactly what information is needed for signing – documents/policies/'technical information'
- 'De-linked' model: provides a little breathing space:
 - Means initial focus is on establishing the organisation, not SKA1 construction
- Procurement policy and IPR policy: working meeting late June





Host Countries

1. Assets and infrastructure made available by a Host Country in accordance with any existing agreements entered into between the Host Country and the SKAD, and incorporated into SKA-1 or any subsequent phase of the SKA Project, shall be valued by a methodology agreed to between the Host Countries and the SKAD, and approved by the relevant authorities of the Country in and approved by the Council.

2. The value of assets and infrastructure made available, and incorporated, under Article 8, paragraph 1, of the Protocol shall be settled by the Council as a financial contribution towards the contribution budget of a subsequent phase of SKA-1, unless otherwise agreed with the Host Countries.

Article 8
Budgeting

1. The SKAD may draw loans and incur debt, within the limits specified by the financial rules and regulations to be made under the Convention.

Tier 1



CONVENTION ESTABLISHING THE SQUARE KILOMETRE ARRAY OBSERVATORY

The Parties to this Convention,

DESIRING to deliver one of the most visionary and ambitious science projects of the 21st century involving significant international cooperation;

COMMITTED to testing the limits of engineering and scientific endeavour and to exploring fundamental questions in astronomy and physics;

NOTING that the Square Kilometre Array will be a next generation radio telescope facility that has a discovery potential far greater than any previous instrument;

RECOGNISING that the scale and ambition of the Square Kilometre Array demands a global effort with long-term investment;

EMBRACING the potential for scientific discovery to contribute to advances in technology and innovation and to deliver a broader benefit for industry and society;

DEDICATED to realizing the full ambition of the Square Kilometre Array Project;

ACKNOWLEDGING the preparatory work done by the Square Kilometre Array Organisation in the establishment of the Square Kilometre Array Observatory;

Annex [...]

Protocol on Privileges and Immunities of the Square Kilometre Array Observatory

The Parties to the Convention have agreed as follows:

Article 1

Definitions

For the purposes of this Protocol:

- "Expert" means a person named by the SKAO as being in the service of the SKAO for a defined period of time;
- "Family" means, with respect to any person, the spouse or partner and/or dependent children forming part of such a person's household;
- "Official Activities" means all activities undertaken pursuant to the Convention including the SKAO's administrative activities;
- "Premises" means sites, buildings and facilities or parts thereof, irrespective of ownership, that are occupied exclusively by the SKAO for the performance of its Official Activities;
- "Representatives" means representatives of the Parties to the attendance at meetings of organs or committees of the SKO designated delegates, alternates, advisors and secretaries;
- "Staff" means members of staff or secondaries of the SKO.

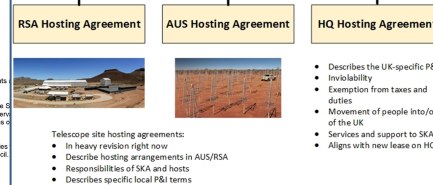
Privileges and Immunities

Convention Privileges and Immunities Protocol



P&I Protocol applies to all States that sign it:

- Inviolability of premises
- Immunity from jurisdiction
- Movement of people around SKA Membership
- Taxes and duty exemptions around project
- Immunities and privileges for DG, staff, experts and representatives



Telescope site hosting agreements:

- In heavy revision right now
- Describe hosting arrangements in AUS/RSA
- Responsibilities of SKA and hosts
- Describes specific local P&I terms

Document number: SKAO-P&I-001
Revision: 1
Author: T. Kotzé
Date: 2016-06-17
Status: Draft

Name	Designation	Affiliation	Date	Signature
JC Greenwood/T. Kotzé				
Approved by:				
Released by:				
P. Diamond				

Tier 2

Procurement and Intellectual Property Working Group (PIPRWG) SKA PROCUREMENT FRAMEWORK

Purpose

This paper is an agreed position paper of the Working Group on procurement. The resultant framework will be based on a Procurement Policy possibly together with more detailed Rules & Regulations. This would best be done by legal/procurement drafters.

Overview

The proposed framework comprises:

- Objectives for the SKA procurement framework;
- Principles for the SKA procurement framework; and
- A high-level procurement framework and rules to be implemented by the future SKA Council consistent with the objectives and principles.

Objectives

The primary objective of procurement is to successfully acquire the goods, works and services required to deliver the SKA Project through such, in kind contributions or a combination of both, while effectively managing risk.

It is proposed that the following objectives support the 'primary' objective and be used to guide development of the Procurement Policy:

- The Members achieve returns broadly proportional to their financial contribution in the Project (the 'Fair Work Return' (FWR) principle) and specifically that:
 - during the construction phase with partner makes a minimum level of return (Possible 75% but this requires modelling and agreement);
 - during the operations phase both host and non-host members have access to appropriate opportunities that will allow them to realise an acceptable level of return; and
 - accounting for return for infrastructure and non-infrastructure contracts will be done separately.
- Where appropriate, members wish to enable positive outcomes for small and medium enterprises in Member Countries;
- Where appropriate, Members want the procurement framework to facilitate consortia arrangements that operate across Member Countries;
- The Member want a procurement framework that is supported by good governance.

Version 4 – 5 July 2016

1

Access Policy Draft 0.17 SKA Convention Working Group on Operations and Access

Preamble

This Access Policy (herein referred to as "Policy") applies to all access to the instruments of the Square Kilometre Array Observatory (SKAO).

This Policy forms the framework for approval of the Access Rules and Regulations by the Council, established under the Convention establishing the Square Kilometre Array Observatory (herein referred to as "Convention"). This Policy should be read alongside the provisions of SKAO Financial Protocol and will take effect following approval by the SKAO Council.

This Policy primarily pertains to the routine operations phase of the SKAO Project. Policies science commissioning and early science phases will be determined by the SKAO Council.

Definitions

Definitions in this Policy are the same as those in the Convention. Additional definitions that are specific to this Policy are below.

- "Access" means to use or benefit from the use of SKAO resources, including time on a telescope or computing-related resources.
- "Time allocation" is the process by which Access is allocated to SKAO users.
- "Key Science Projects" (KSPs) are observing projects that require large observing time allocations over a period longer than one Time allocation cycle.
- "Principal Investigator (PI) projects" are observing projects allocated through competitive process that are not Key Science Projects.
- "Director-General's Discretionary Time" is time allocated by the Director-General outside the normal process of assessment by the Time Allocation Committee.
- "Share in the project" is as defined in the Financial Protocol.
- "Open Time" is time available for scientists from Members, Associate Members and Non-members.
- "Member Time" is time available for scientists from Members and Associate Members.
- "Original data products" are data products produced by the SKAO.
- "General data rights" are rights to analyse and publish data for any scientific purpose.

1

Tier 3

Standard procedures
rules and regulations

Operational rules on
procurement etc

Financial regulations

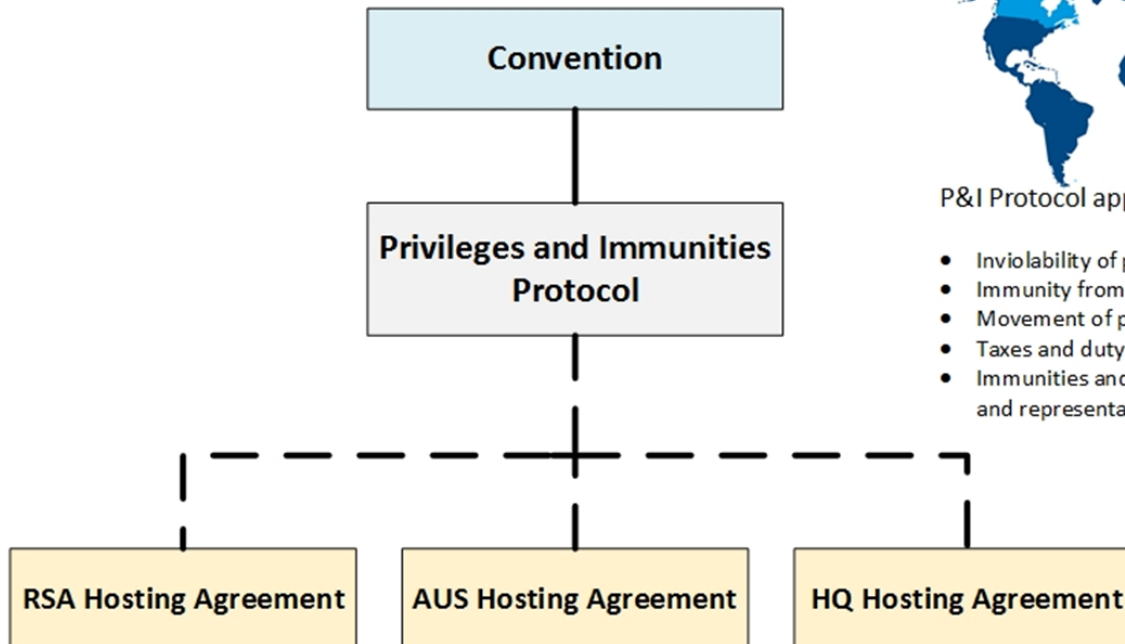
Council rules of
procedure etc.

'Internal' documents for the IGO: largely internally developed, focussed on day-to-day operations

Organisation membership summary

- Future organisation (IGO) – 2018 onwards:
- Assumes 'State' involvement in project, and representation by federal body
- Detailed process still in discussion at present, but some areas clear on membership:
 - Members (States) contributing to construction and operations → **full access/industry access rights**
 - Associate Members (**access/industry etc terms to be agreed....**)
 - Collaborating bodies (**.....much less clear.....**)
- Joining process (and perhaps financial assumptions) depends on timing –

Hosting Agreements



P&I Protocol applies to all States that sign it:

- Inviolability of premises
- Immunity from jurisdiction
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- Taxes and duty exemptions around project
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- Describe hosting arrangements in AUS/RSA
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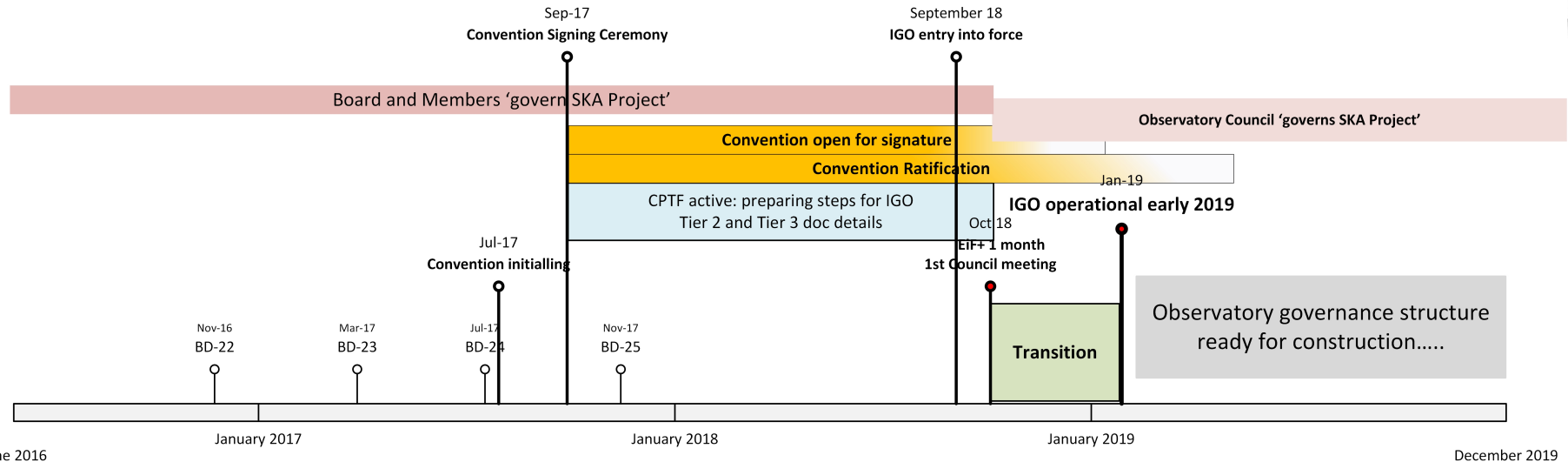
- Describes the UK-specific P&I
- Inviolability
- Exemption from taxes and duties
- Movement of people into/out of the UK
- Services and support to SKAO
- Aligns with new lease on HQ2



High-level IGO timeline

- **Now to July+: Convention Task Force at work:**
 - Finalising the Convention text and other ‘treaty-level’ documents
 - Bilateral discussions with each country
 - High-level discussions on procurement principles, other critical issues
 - Governments preparing to ‘initial’ the documents
- **~July+:**
 - Documents ‘initialled’ to mark end of negotiation process; governments prepare to sign the Convention
- **Best guess – September:**
 - Signing event for negotiating governments – most sign in one go, others when ready
 - Ratification of Convention by governments begins
 - ‘Proto IGO Council’ starts work preparing for IGO – policies, the transition from the company etc

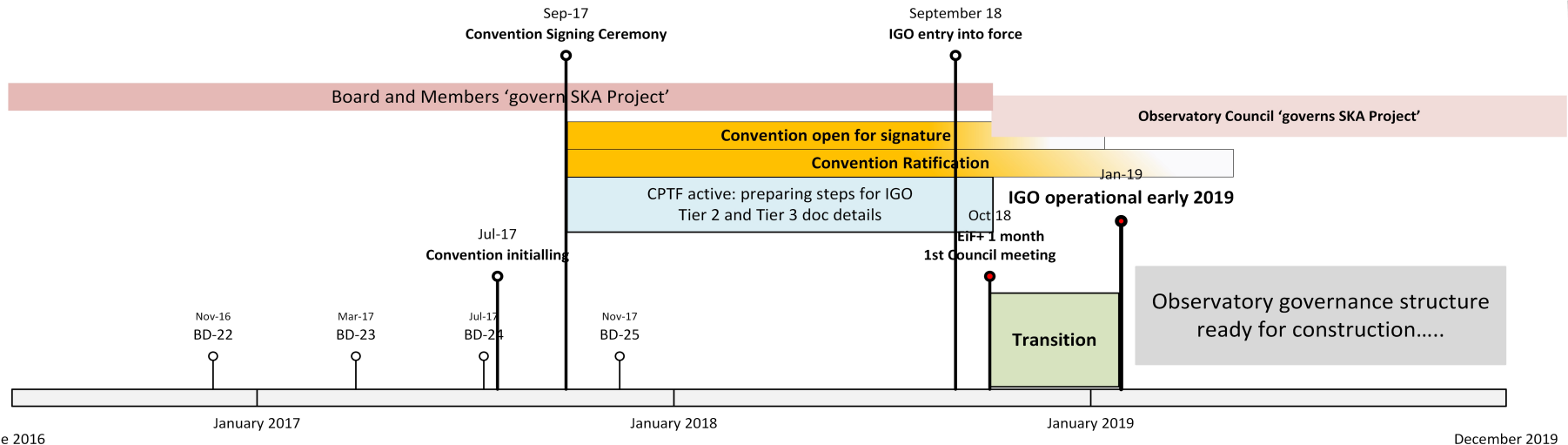
Creating the SKA IGO



The things we know:

- IGO 'enters into force' when 5 countries (including UK, AUS and SA) complete ratification of the Convention
- At some point TBD we transition assets and responsibility for the project to the IGO: between now and then, much preparatory discussion on all issues
- Once there is a critical mass of ratified countries (and money and 'a plan') the IGO Council can approve SKA1 construction
- Once that happens, we move into a phase of preparing for procurement

Creating the SKA IGO



The things we don't know:

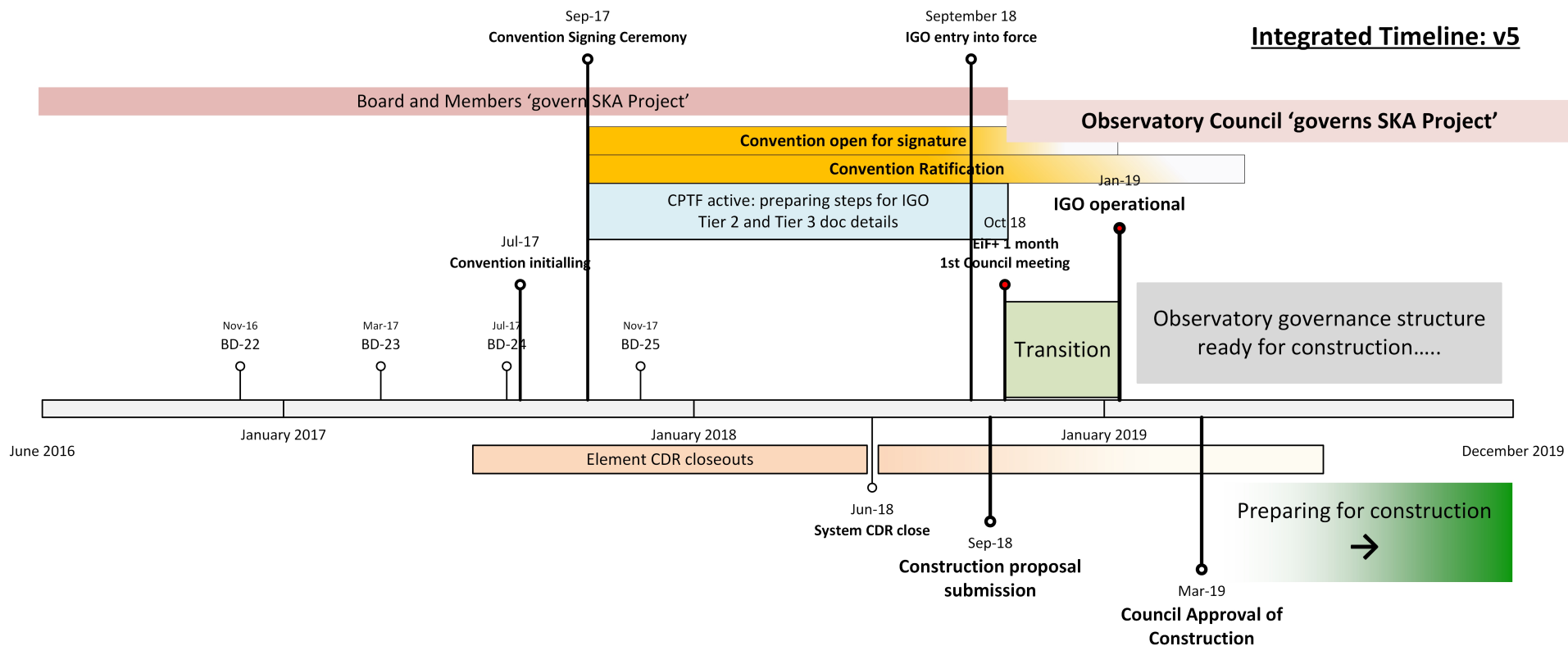
- When will the IGO 'enter into force'? [Best guess 12+ months after signing](#)
- When do we transition and have an operating IGO? [Best guess early 2019](#)
- When will there be a critical mass of ratified countries (and money and 'a plan') so that the IGO Council can approve SKA1 construction? [Best guess later in 2019](#)



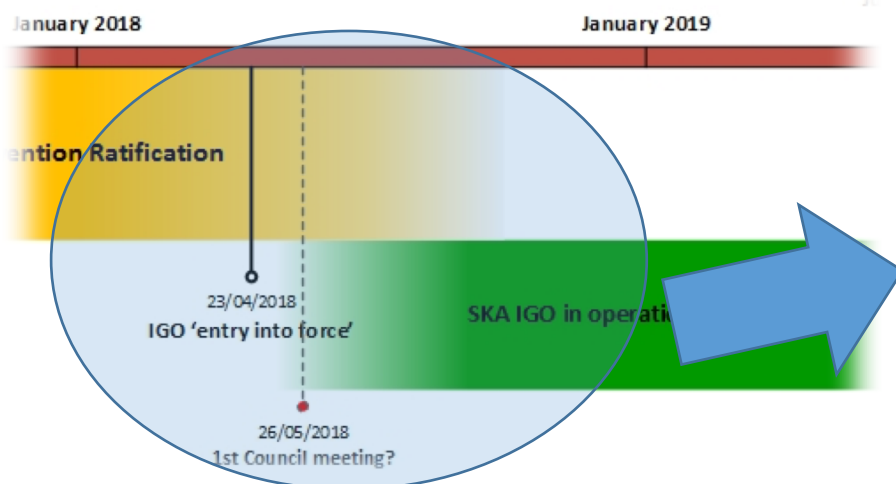
The full picture...



Integrated Timeline: v5



Transition to the IGO



Transition:

- Establishment of a functioning SKA IGO and transfer of activities from the SKA Organisation

Organisation transition:

- Legal mechanics of establishing the IGO and moving from SKA Ltd to SKA IGO being explored
- Asset transfers – IPR register, agreements, physical assets, personnel etc
- Governance change from Board to Council

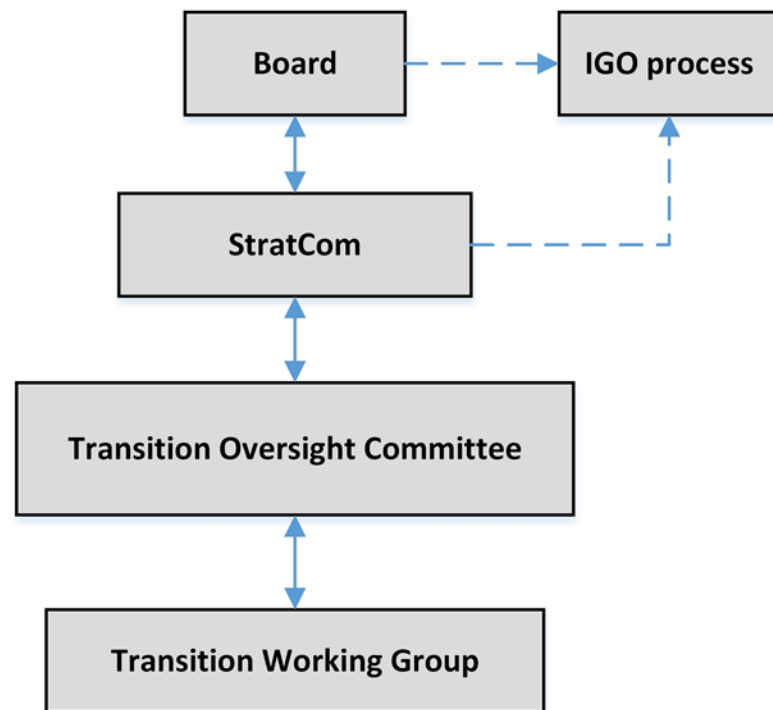
Programmatics:

- Completion of design process and its timing wrt the transition
- Preparation for construction decision
- Moving to implementation: planning the financial arrangements

Transition cont'd



- Internal team in place
 - Coordinator: Theresa Devaney
- Working within reporting structure to Board and IGO process
- Next set of plans to Board in July
- Once established, Council Preparatory Task Force (CPTF) will be important actor
 - Preparing many of the initial decisions
 - Negotiating initial financial arrangements
 - Preparing how the IGO will look



Transition Core Team:

- Simon Berry (Policy, SLT owner)
- Theresa Devaney (Transition Coordinator)
- Theunis Kotze (Policy, Legal)
- Qiming Wang (Policy)
- Andrew Taylor (HR)
- Faiza Saban (HR) from May 2017
- Helen MacDonald (Finance)
- Warren Bax (Finance) to March 2017

Procurement

- New Head of Procurement Services: Ian Hastings
- Three areas of activity:
 1. Building overarching organizational capability and capacity to transact procurements for SKA-1 construction project:
 - Overarching procurement processes (implementation of an enterprise system to facilitate expected ramp-up in transactional workload)
 - Development of appropriate procurement business controls
 - Development of an appropriate HQ procurement structure and subordinate business procedures

Procurement

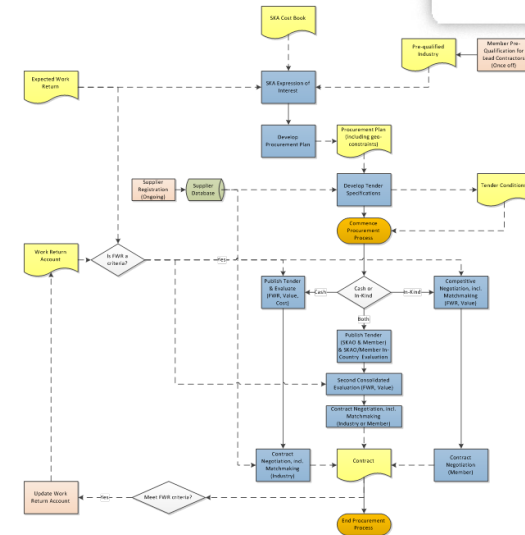


2. Collaborating with Members to develop SKA Observatory (IGO) procurement rules/policy:
 - Broadly aligned with peer organisations such as CERN, ESO, ITER etc.
 - Appropriate governance and oversight structure
3. Development of an outline SKA-1 Procurement Plan and strategy for managing the SKA-1 construction project macro supply chain(s)

Procurement



- Key founding points:
 - Each Member should receive ‘fair work return’ from investment
 - Ability to manage both ‘cash procurement’ and ‘in-kind’ activities
- Excellent progress made:
 - Methodology and convergence on what constitutes ‘fairness’ in terms of process
 - The steps around an initial exploratory expression of interest to inform SKA1 Procurement Plan
 - Managing the approach to varying interest in cash and in-kind tender responses – general support for draft process, but further discussion needed



SKA Outline Procurement Principles and areas of common understanding:

Following a series of working sessions and negotiations under the auspices of the SKA Observatory Convention Task Force, the Negotiating Parties have reached a common understanding on several principles that will inform the development of:

- A Procurement Policy for approval by the Council of the SKA Observatory; and
- Detailed Procurement Procedures for approval by the Council of the SKA Observatory, and underpinning the day-to-day activities of the SKA Observatory

In its work the Negotiating Parties have been cognisant of:

- Article 12 of the Draft SKA Observatory Convention, which specifies certain provisions around Procurement;
- The definition of ‘Fair Work Return’ as specified in the Draft SKA Observatory Convention; and
- The statement ‘Understandings on Fair Work Return’ agreed by the Heads of Delegations at IGO4

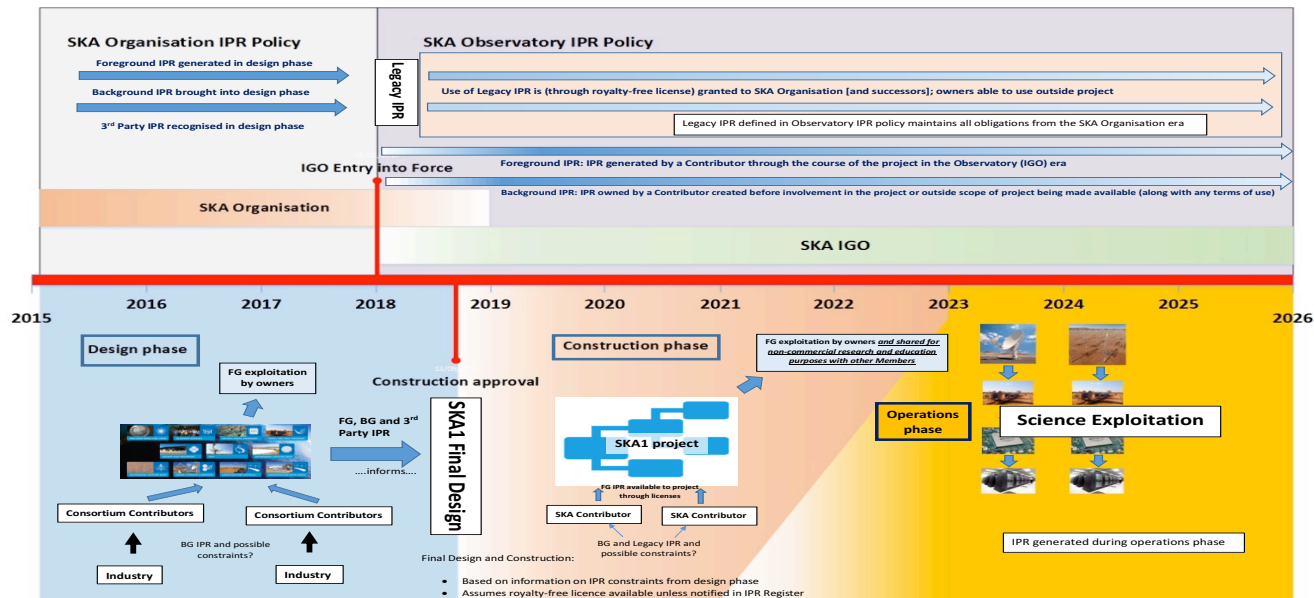
The agreed Principles and areas of common understanding are as follows:

- Governance:**
 - 1.1 Procurement activities shall be centrally-managed, equitable, and transparent and the SKA Observatory procurement function shall be accountable to the Council, as stated in the Observatory Convention
 - 1.2 A Procurement Oversight Committee shall be established to develop, implement and oversee the SKAO’s overarching procurement strategy, including Procurement Policy, Procurement Procedures, Work Return Policy and oversight of the SKAO Tender Committee.
 - 1.3 Members will have the right to nominate one participant to sit on the Procurement Oversight Committee; the Committee shall elect a Chair and Secretary, the SKAO Head of Procurement Services shall act as a non-voting advisor to the Committee.
- SKAO Preferred Methods of Procurement:**
 - 2.1 Unless there are sound economic or operational arguments for an alternative methodology competitively tendered procurements will be awarded on the basis of “lowest priced technically qualified bidder”.
 - 2.2 A two part Expression of Interest process is planned, an exploratory and non-binding Expression of Interest package shall be forwarded to Members asking them to declare an interest in a range of work packages. The returns from Members will be used by the SKAO to inform the Procurement Plan. As and when construction requirements are formed up, and in accordance with developed Procurement Plans, SKAO shall release further detailed Expressions of Interest to Members on a work package by work package basis.
 - 2.3 Pre-Qualification of entities supplying goods, services and works for use in construction of the SKA1 shall be carried out by Members in accordance with guidelines to be issued by the SKAO.

IP Policy



- Issues now:
 - Ensuring the IPR register is fit-for-purpose
 - Ensuring current IPR picture in design phase is fully understood
- Issues for IGO era:
 - Finalising the IPR policy and detailed understanding
 - Understanding the transition to the construction phase alongside the legal transition to the IGO



Meetings this week

- IP meeting:
 - Tuesday: 1100 – 1200 Auditorium
 - Meeting with consortium personnel to discuss issues and actions needed now
- Industry contact point meeting:
 - Tuesday: 1400 – 1600 Auditorium
 - Discussion with national contact points for industry engagement on current tasks, issues and future plans

Summary



- In the final stretch towards signing the Convention:
 - Final steps on ‘legal docs’ and high level policies, final steps to ensuring all parties have what they need for signing
 - Planning what happens once signing has taken place
 - Board will continue to run the design process
 - ‘Council Preparatory Task Force’ to take on preparatory steps towards the structure of IGO and how it works
- Internally:
 - Planning how the establishment of the IGO and the transition from SKA Organisation happens
 - Ensuring there is a coherent timeline across policy and engineering
- SKA Engineering 2018?

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