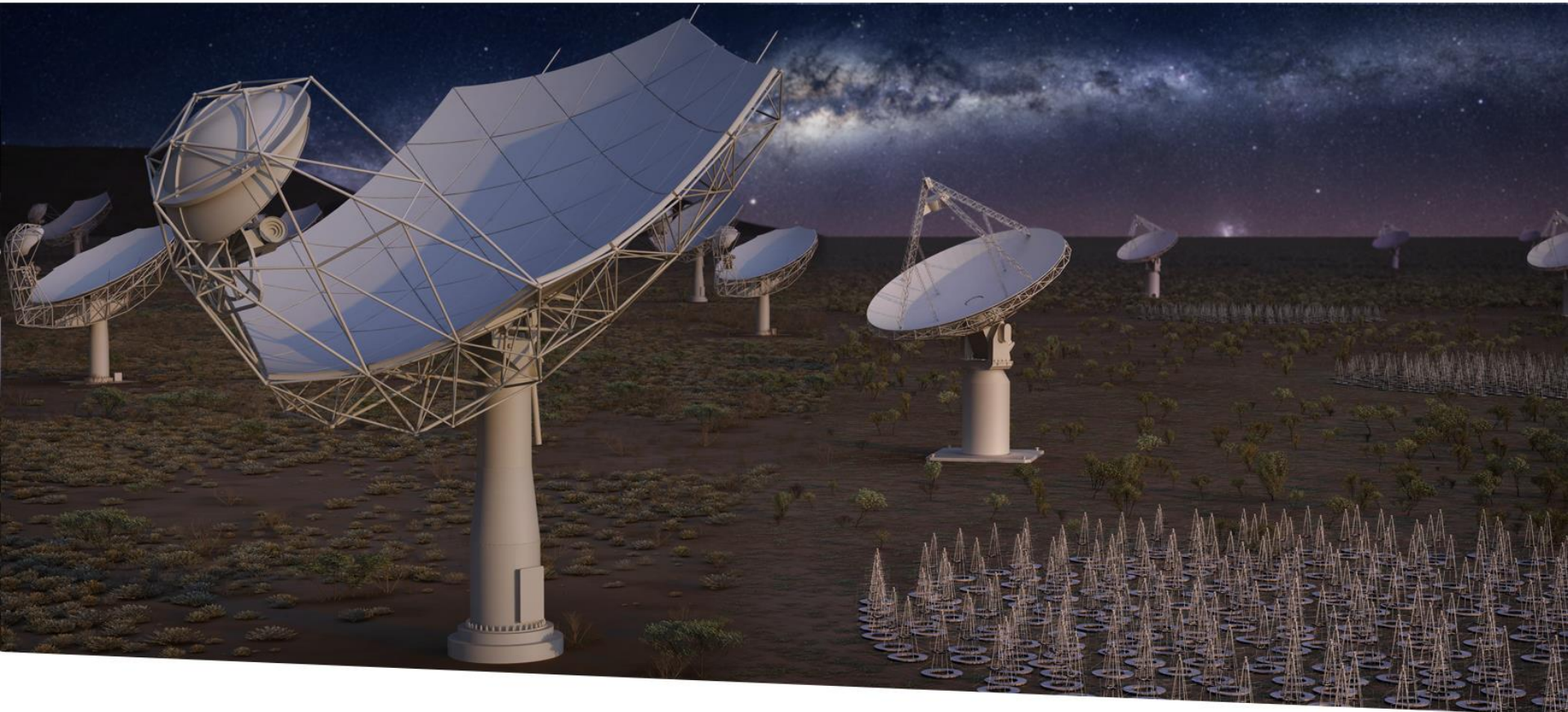


SKA Organisation Status

Swiss SKA Day 2019



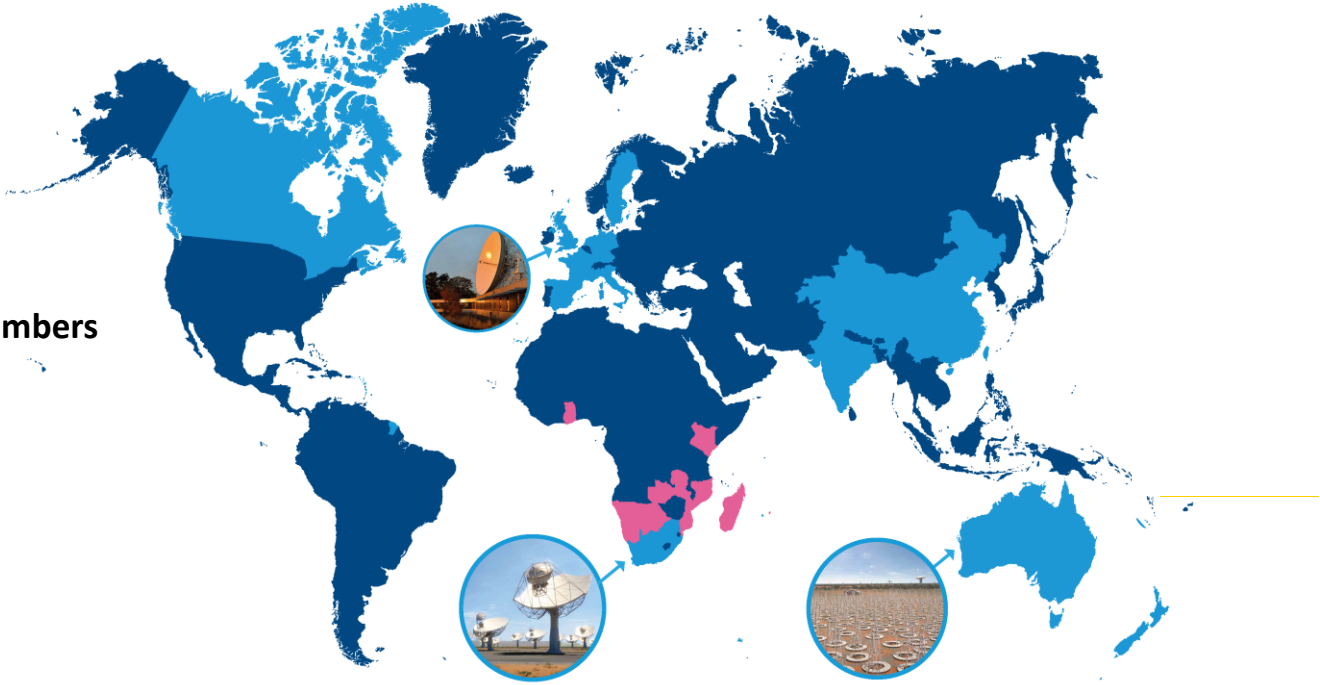
SQUARE KILOMETRE ARRAY

Exploring the Universe with the world's largest radio telescope

Simon Berry: Director Strategy, SKAO

19th June 2019

SKA: A global Research Infrastructure



Potential Future Members



+.....



Members of the SKA Organisation
 Host Countries: Australia, South Africa, United Kingdom



African Partner Countries

SKA Observatory will be established as an Intergovernmental Organisation in 2020, taking over from the SKA Organisation. It will undertake the construction and operation of the telescope.

As of March 2019, confirmed SKA Observatory members are



Final Record signing





Convention signing – 12th March





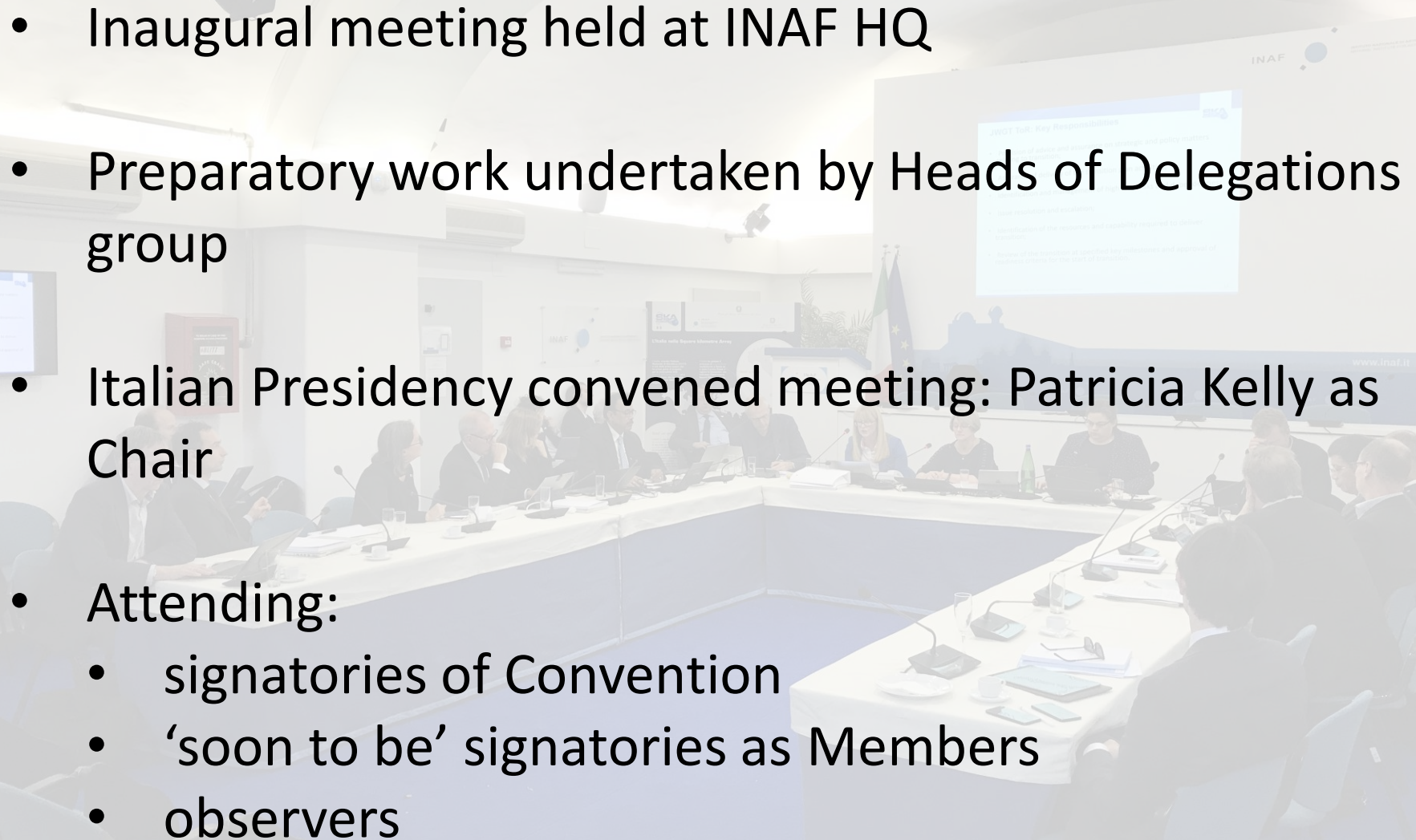
Council Preparatory Task Force

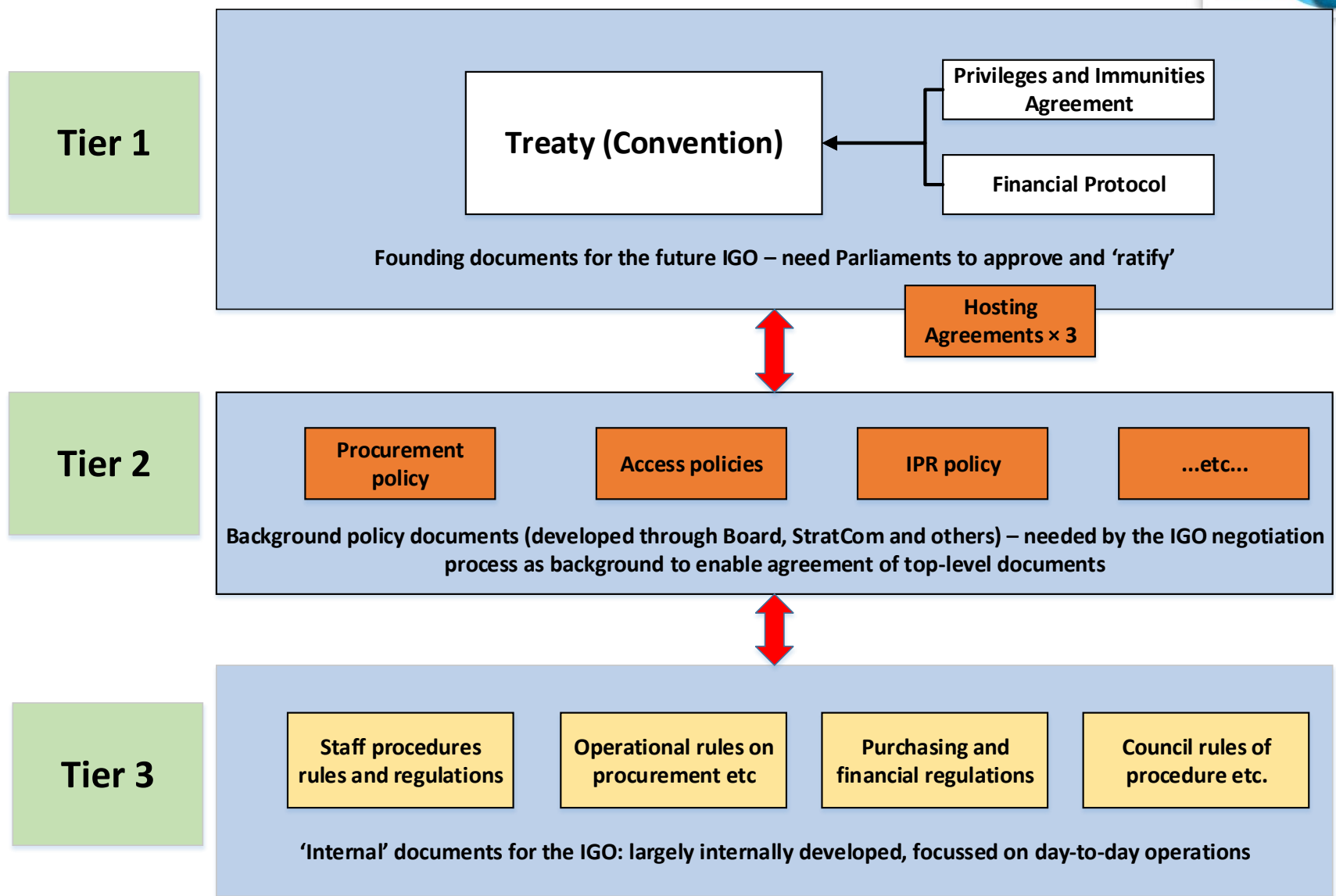


JWGOT ToR: Key Responsibilities

- Provision of advice and assurance on strategic and policy matters relating to transition;
- Assurance of delivery of the transition plan activities;
- Identification and management of high level risks and dependencies;
- Issue resolution and escalation;
- Identification of the resources and capability required to deliver transition;
- Review of the transition at specified key milestones and approval of readiness criteria for the start of transition.

Council Preparatory Task Force: 13th March 2019, Rome

- Inaugural meeting held at INAF HQ
 - Preparatory work undertaken by Heads of Delegations group
 - Italian Presidency convened meeting: Patricia Kelly as Chair
 - Attending:
 - signatories of Convention
 - 'soon to be' signatories as Members
 - observers
- 



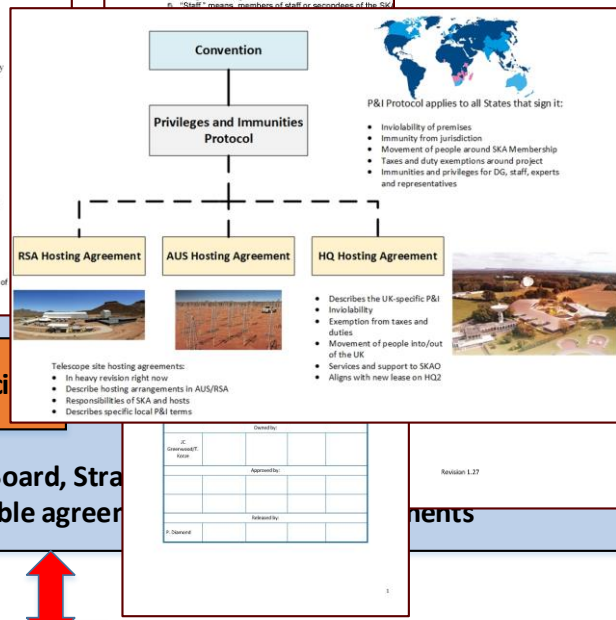
CONVENTION ESTABLISHING THE
SQUARE KILOMETRE ARRAY OBSERVATORY

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 realising 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:
a) "Expert" means a person named by the SKAO as being in the service of the SKAO for a defined period of time;
b) "Family" means, with respect to any person, the spouse or partner and/or dependent children forming part of such a person's household;
c) "Official Activities" means all activities undertaken pursuant to the Convention including the SKAO's administrative activities;
d) "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;
e) "Representatives" means representatives of the Parties to the Convention at meetings of organs or committees of the SKAO designated delegates, alternates, advisors and secretaries;
f) "Staff" means members of staff or secretaries of the SKAO

Privileges and Immunities



Tier 1

Tier 2

Tier 3

Procurement and Intellectual Property Working Group (IP&P/WG)
SKA PROCUREMENT FRAMEWORK
Purpose
To prepare an agreed position paper of the Working Group on procurement. The resulting framework will be used to guide the Procurement Policy working group and to ensure that all SKA procurement is consistent with the objectives and principles.
Objectives
The proposed framework comprises:
• Objectives for the SKA procurement framework;
• Principles for the SKA procurement framework;
• 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 cost, risk, innovation and a combination of both, while also ensuring transparency and value for money.
It is proposed that the following objectives support the primary objective and be used to guide development of the procurement framework:
• The Member states who are already participating to their financial contribution to the project (the SKA Host Nations) (IP&P/WG) and the other Member states who are not yet participating to their financial contribution to the project (the SKA Non-Host Nations) (IP&P/WG) should have access to opportunities to participate in the procurement process.
• Where appropriate, members wish to enable positive outcomes for small and medium enterprises (SMEs) and women-owned businesses.
• Where appropriate, members wish to ensure that the procurement framework facilitates compliance with applicable laws, regulations and standards.
• The Member states' procurement framework that is supported by good governance.

Access Policy
Date: 3.17
SKA Convention Working Group on Operations and Access
Purpose
This Access Policy (herein referred to as "Policy") applies to all access to the instruments and sites of the Square Kilometre Array Observatory (SKAO).
This Policy forms the framework for approval of the Access Policy and Regulation by the SKAO Council, established under the Convention, establishing the Square Kilometre Array Observatory (herein referred to as "Convention"). This Policy should be used alongside the provisions of the SKAO Financial Protocol and will take effect following approval by the SKAO Council.
This Policy primarily applies to the routine operations phase of the SKAO Project. Provisions for 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:
1. "Normal" means to use or benefit from the use of SKAO resources, including time as a resource or computing-related resources.
2. "Time allocation" is the process by which Access is allocated to SKAO users.
3. "New Science Project" (NSP) are observing projects that require large observing time allocations over a period longer than one year. Time allocation rules.
4. "Proposed Investigator" (PI) projects are observing projects allocated through competitive processes that are not New Science Projects.
5. "SKAO Council" means the SKAO Council established under the Convention.
6. "SKAO Council" means the SKAO Council established under the Convention.
7. "Open Time" is time available for scientists from Member and Associate Member States.
8. "Member Time" is time available for scientists from Member and Associate Member States.
9. "Original data products" are data products produced by the SKAO.
10. "General data rights" are rights to analyse and publish data for any scientific purpose.

Staff procedures rules and regulations **Detailed process documents/policies to be developed** **Council rules of procedure etc.**

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

Proposed workstream approach



	Workstream1 Funding	Workstream2 Membership	Workstream3 Tier2 Docs	Wk stm4 Transition	Workstream5 Tier3 Docs
Who	<p>Lead: SKA Board/ Member Chair – Director General</p> <p>Participation: Members who initial and/or intend to sign in the founding group, potential Members, Observers.</p>	<p>Lead: Chair of CPTF</p> <p>Participation: Entities who have expressed in accession as Members or associate members.</p>	<p>Lead and participation: SKA Office with specialist Tier 2 working gro. Inputs provided by:</p> <ul style="list-style-type: none"> • HA: Policy team UK, AUS, RSA • Procurement/IPR; SKAO-led – working group on IP; procurement discussions ongoing • Ops/Access: SKAO with expert groups 	<p>Lead: TOC/ JWGT:</p> <p>Support by Transition Working Group (TWG) of SKA Office</p>	<ul style="list-style-type: none"> • Preparatory work by SKAO • Overseen by TOC/JWGT • CPTF plenary endorses overall framework
How	<p>Pre-signing: Bilateral interaction on Funding Schedule context via DG and Board Chair.</p> <p>Post-signing: Continuation of dialogue then multilateral activity</p>	<p>SKA Office supports developing draft documents</p> <p>Specific negotiation team from CPTF engages with prospective member individually</p>	<p>Pre-CPTF supports any requirements for signing process; then, CPTF works on finalizing documents</p>	<p>Activity report for discussion at CPTF plenary and keep the Board informed then agreed.</p>	<p>Support by TWG of Office</p> <p>External expertise:</p> <ul style="list-style-type: none"> • SPB on legal • iSRP on HR • Specialists in 3 Hosts for HR/Finance
Time	<p>Q4 2018- Q1/2 2019</p> <p>Then frozen for Council approval</p>	<p>Q4 2018- Q4 2019</p> <p>Ready for formal accession discussions</p>	<p>Preparation of policies Q4 2018- Q4 2019</p> <p>Approval by Council as soon as practicable</p>	<p>Prep Q4 2018- Q4 2019</p> <p>Council endorse and implements</p>	<p>Q4 2018- Q2 2020</p> <p>Preparing for Council Approval</p>

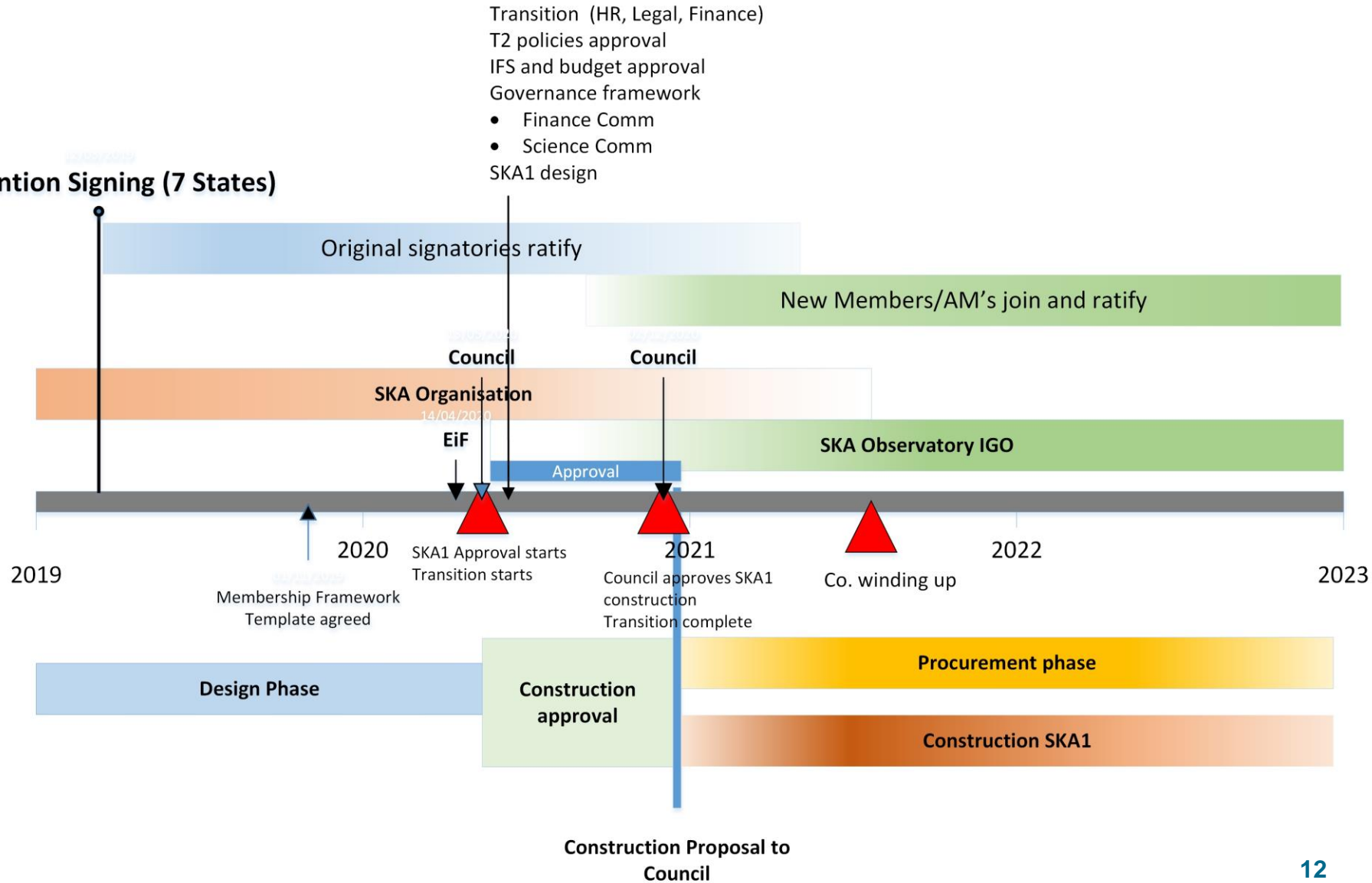
Transition timeline

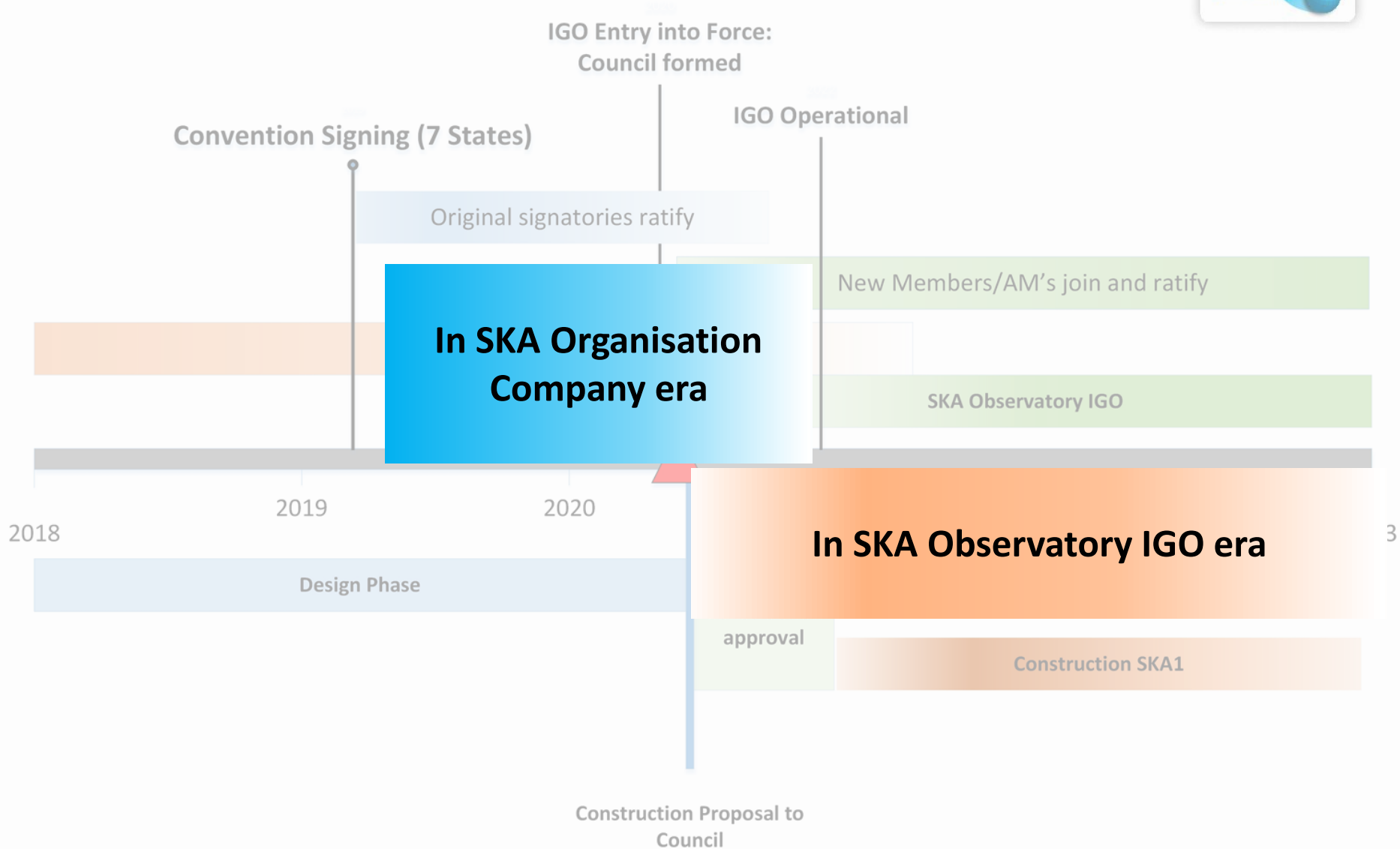
Transition (HR, Legal, Finance)
 T2 policies approval
 IFS and budget approval
 Governance framework

- Finance Comm
- Science Comm

SKA1 design

Convention Signing (7 States)

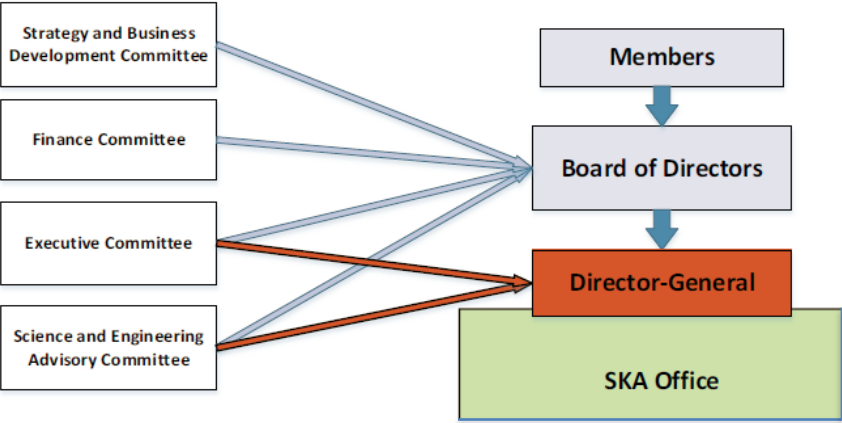




**In SKA Organisation
Company era**

In SKA Observatory IGO era

Current SKA Organisation structure

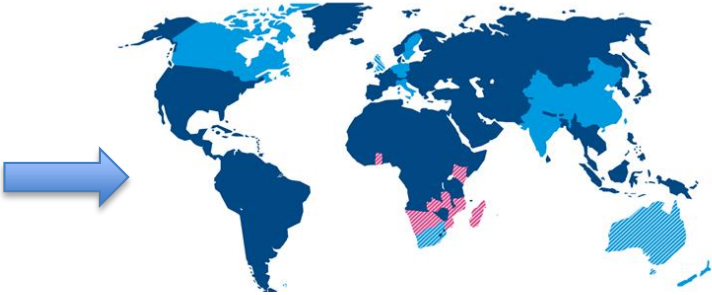


SKA Office supported by:

- a joining fee and
- cash 'subscription'

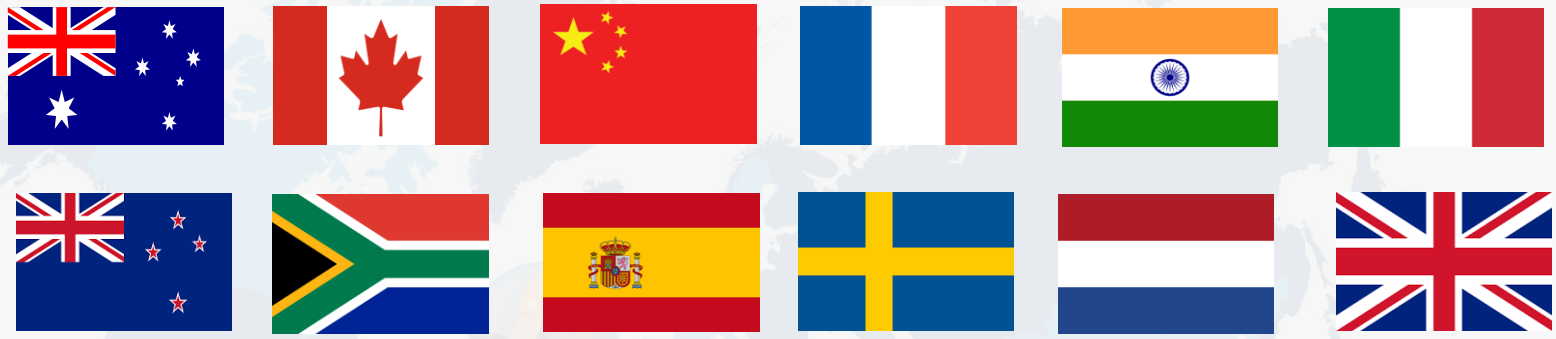


- WIDE BAND SINGLE PIXEL FEEDS
- TELESCOPE MANAGER
- CENTRAL SIGNAL PROCESSOR
- SIGNAL AND DATA TRANSPORT
- SCIENCE DATA PROCESSOR
- DISH
- MID-FREQUENCY APERTURE ARRAY
- LOW-FREQUENCY APERTURE ARRAY
- ASSEMBLY, INTEGRATION & VERIFICATION
- INFRASTRUCTURE AUSTRALIA
- INFRASTRUCTURE SOUTH AFRICA



- Global design effort organised in consortia.
- Supported by local funding

SKA: current organisation members

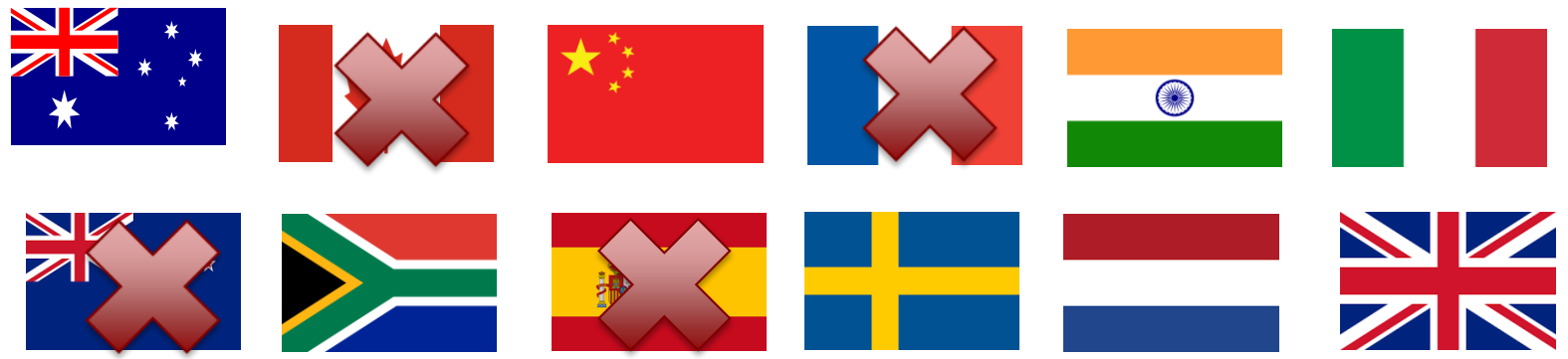


 **Members**
Host Countries: Australia, South Africa, United Kingdom



 **African partner countries**

SKA Observatory:



- India – signing soon, depends on business case....
- Sweden – signing later in 2019

• But.....



- Portugal signed....

Transition

- Transition of organization:
 - IGO ‘entry-into-force’ March-May 2020
 - Council meets and authorizes transition
 - Asset transition to IGO during 2020
 - IGO operation by end 2020 ready for 2021
- CPTF discussion on how to manage transition of membership:
 - Aligning the company and IGO membership arrangements
 - Ensuring correct balance of rights between long-standing members and ‘new’ members
 - For Switzerland: 2021 seems to line up.... Earlier engagement in some way?

IGO membership categories

- Members:
 - Signatories to the Convention or accession to Convention – ‘Full Rights’ as a Member
 - States and IO’s, Council decides terms of late joiners
- Associate Members:
 - Don’t accede to Convention
 - Open to States and IO’s, Council decides terms
 - ‘Don’t enjoy same benefits as Members’
- Cooperating partners:
 - Open to ‘other entities’ as well as States and IO’s
 - Bilateral arrangements/agreements between Council and party

Frameworks for Membership

- All live discussion!
 - Direction of travel: frameworks supporting bespoke arrangements?
- Issues emerging:
 - ‘Back payment’ for late joiners (but at what point?)
 - Minimum contribution level for any joiner to IGO?
 - Potential for collective membership?
 - Associate Membership: what’s the right balance of rights and obligation?
 - Could ‘cooperating agreements’ be a way of managing transition of Members?

Conclusions

- Convention signing exciting moment...
- Focus now on establishing the IGO structure ready for EiF
- Big transition coming in 2020; financial, administrative, programmatic, membership, governance
- Preparatory Council group now working through details

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