

S-100 ICE PT-5

5th meeting of the S-100 Infrastructure Centre Establishment Project Team
Physical meeting 18-19 March 2024, IHO Secretariat (Monaco)

Desired outcome of this meeting

- Formal decision on definition of role and scope
- Agree upon function
- Discuss and find agreement on governance and composition
- Start discussing financial considerations and location related questions
- Kick-off the HSSC report, so that the rest can be done by correspondence
- Gain common view on next steps
- Anything else?

Agenda 18 March (AM)

Time	Agenda #	Title	Lead
Day 1, 18 March 2024			
9:00 - 9:15	ICEPT5-1	<ul style="list-style-type: none"> Welcome Participants Introduction 	Vice Chair All
9:15 - 9:20	ICEPT5-2	<ul style="list-style-type: none"> Agenda adoption 	All
9:20 - 09:45	ICEPT5-3	<ul style="list-style-type: none"> Review of PT assignments and time line Information: IC-ENC project support 	Vice Chair Vice Chair
9:45 - 10:00	ICEPT5-4	<ul style="list-style-type: none"> Review of ICE PT Decisions and Actions Review of PT Work Plan 	Secretary Vice Chair
10:00 - 10:30		<i>Coffee break and group photo</i>	
10:00 - 12:00	ICEPT5-5	<ul style="list-style-type: none"> Work plan item A: <ul style="list-style-type: none"> Role (review) Scope (review) Function (discussion and decision) 	All
12:00 - 13:30		<i>Lunch Break</i>	

Agenda 18 March (PM)

Time	Agenda #	Title	Lead
Day 1, 18 March 2024			
13:30 - 15:00	ICEPT5-6	<ul style="list-style-type: none">Work plan item A:<ul style="list-style-type: none">Governance for S-100 infrastructure (discussion)	All
15:00 - 15:20		<i>Coffee Break</i>	
15:20 - 17:00	ICEPT5-7	<ul style="list-style-type: none">Work plan item B:<ul style="list-style-type: none">Financial considerations (discussion)	All

Agenda 19 March (AM)

Time	Agenda #	Title	Lead
Day 2, 19 March 2024			
9:00 - 10:00	ICEPT5-8	<ul style="list-style-type: none">• Work plan item C:<ul style="list-style-type: none">• Location of physical infrastructure and personnel (discussion)	All
10:00 - 10:15		<i>Coffee Break</i>	
10:15 - 12:00		Extra time (if needed)	
12:00 - 13:30		<i>Lunch break</i>	

Agenda 19 March (PM)

Time	Agenda #	Title	Lead
Day 2, 19 March 2024			
13:30 - 15:30	ICEPT5-9	<ul style="list-style-type: none">Draft paper to HSSC-16Input to IC-ENC project support contract	All
15:30 - 15:45		<i>Coffee Break</i>	
15:45 - 16:30	ICEPT5-10	<ul style="list-style-type: none">Review Decisions and Actions	Secretary
16:30 - 17:00	ICEPT5-11	<ul style="list-style-type: none">Any Other BusinessElection of vacant chair team positionsNext Meeting (Date and Venue, if needed)	All IHO Sec. All
17:00 (latest)		<i>Close</i>	

Review of previous decisions and actions

[List of Actions S-100 ICE PT.xlsx](#)

Reminder: ICE-PT's assignments

To develop the management documents and operating plan for the proposed S-100 Infrastructure Center taking into account the following:

1. The role, scope, function and governance
2. The composition, financial considerations, and work procedures
3. The location
4. A preliminary work plan
5. The timeline for the establishment

To support the HSSC with the creation of documents required to submit the proposal to the IHO Council.

ICE-PT work plan (part of HSSC work plan)

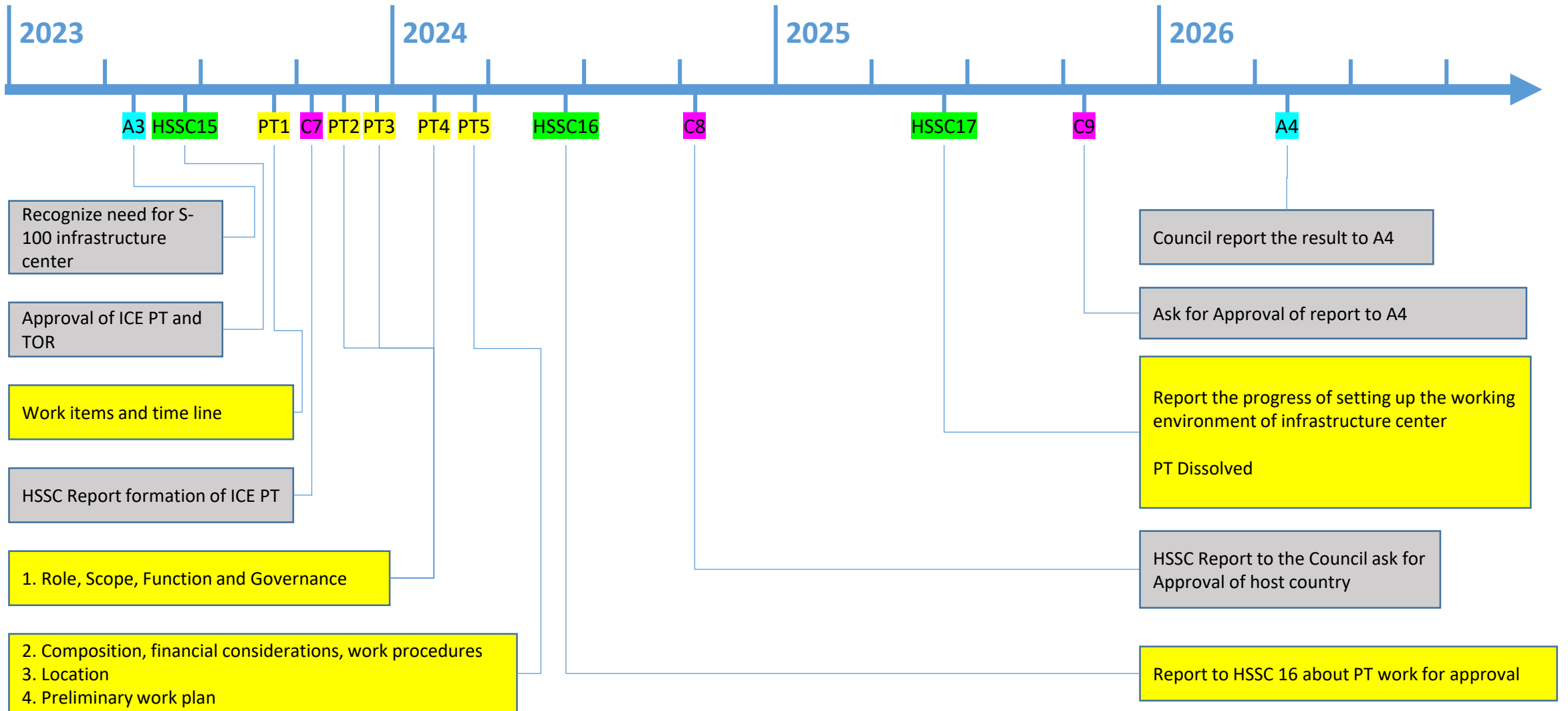
To develop the management documents and operating plan for the proposed S-100 Infrastructure Center, in particular:

- A. Propose role, scope, function and governance of the S-100 Infrastructure Centre
- B. Propose composition, identify financial considerations, and suggest working procedures
- C. Propose location
- D. Propose the timeline for the establishment of the Infrastructure Centre
- E. Support the HSSC with the creation of documents required to submit the proposal to the IHO Council
- F. Conduct the 2023 and 2024 meetings of the S-100 ICE PT

ICE PT work plan: Interpretation

Role	Work plan item A.1	Why? What are the desired results?
Scope	Work plan item A.2	What? Which functions/services need to be supported?
Function	Work plan item A.3	How? How should the support be structured?
Governance	Work plan item A.4	Who decides, and how are decisions made? What management levels are needed? Who appoints the decision makers? What mandate do the decision makers have?
Composition	Work plan item B.1	Who does what? Which key functions need to be staffed?
Financial considerations	Work plan item B.2	Who pays for what? What estimated budget will be required? What financing sources could be appropriate?
Working procedures	Work plan item B.3	How is the work carried out? How do management levels interact? Who is responsible for day-to-day operations?
Location	Work plan item C	Where to place the operations?
Timeline	Work plan item D	When needs to happen what? What steps need to happen and when?

Time line of the PT work



Information: IC-ENC project support

- Proposal submitted to IC-ENC for funding an *IHO Operational S-100 Infrastructure study* by John Nyberg (IHO Sec.) and Benjamin Hell (SE, ICE-PT) in close collaboration with James Harper (IC-ENC) and Michael Andrews (AU, IC-ENC & SS PT vice chair)
- Goal 1: Help with further analysing the needs and possible management structure around S-100 base infrastructure. Could be conducted together with a similar study regarding the security scheme.
- Goal 2: Help with details for HSSC-Council proposal
- Contract will be procured after this meeting (input!).

- Why?
- What are the desired results?

A.1 Agree upon role

The role of the IHO Infrastructure Centre is to support the development, operation and management of IHO governed products and required/associated IHO services with a common base infrastructure.

Its initial focus will be to get S-100 operational.

Notes:

- Define what we mean with operation (support, enable...), give examples on what we mean with IHO governed products and associated services. IC-ENC project may be able to fill in meaning here!
- For HSSC: Decide upon initial priorities (S-100 security scheme operations and catalogue validation/distribution are important and urgent)
- For whom, and what desired results?
 - Standard development bodies across domains, OEMs, distribution chain, data providers

A.2 Agree upon scope

- What?
- Which functions/services need to be supported?

Currently the services of the S-100 Critical Infrastructure Framework that need to be supported are:

1. Support of Product Specifications lifecycle
Notes:
 - Support of S-98 interoperability would fall in here as a more standalone item
 - “Lifecycle”: More comprehensive and technical than what’s defined in 2/2007. Should be clarified in S-97.
 - Includes catalogue distribution
2. Management and operation of IHO Geospatial Information Registry
Notes:
 - High level management guidance available in S-99
 - Support of all domain control bodies
3. Support of navigation system type approval
Notes:
 - Screen shots, S-164 packaging, in support of the relevant WGs
4. Support of Security Scheme operations
Notes:
 - Lifecycle management of the security scheme technology
 - The Infrastructure will be able to take care of the work/results of the Security Scheme PT (processes etc.)

All items include training and documentation in support of the respective target groups.

Notes:

- Generally, think about “customer” to be “enabled” to do what?
- Implementer “first line” support?

Major changes to the above scope will be handled by the HSSC / Council / Assembly.

A.3 Agree upon function

- How?
- How should the support be structured?

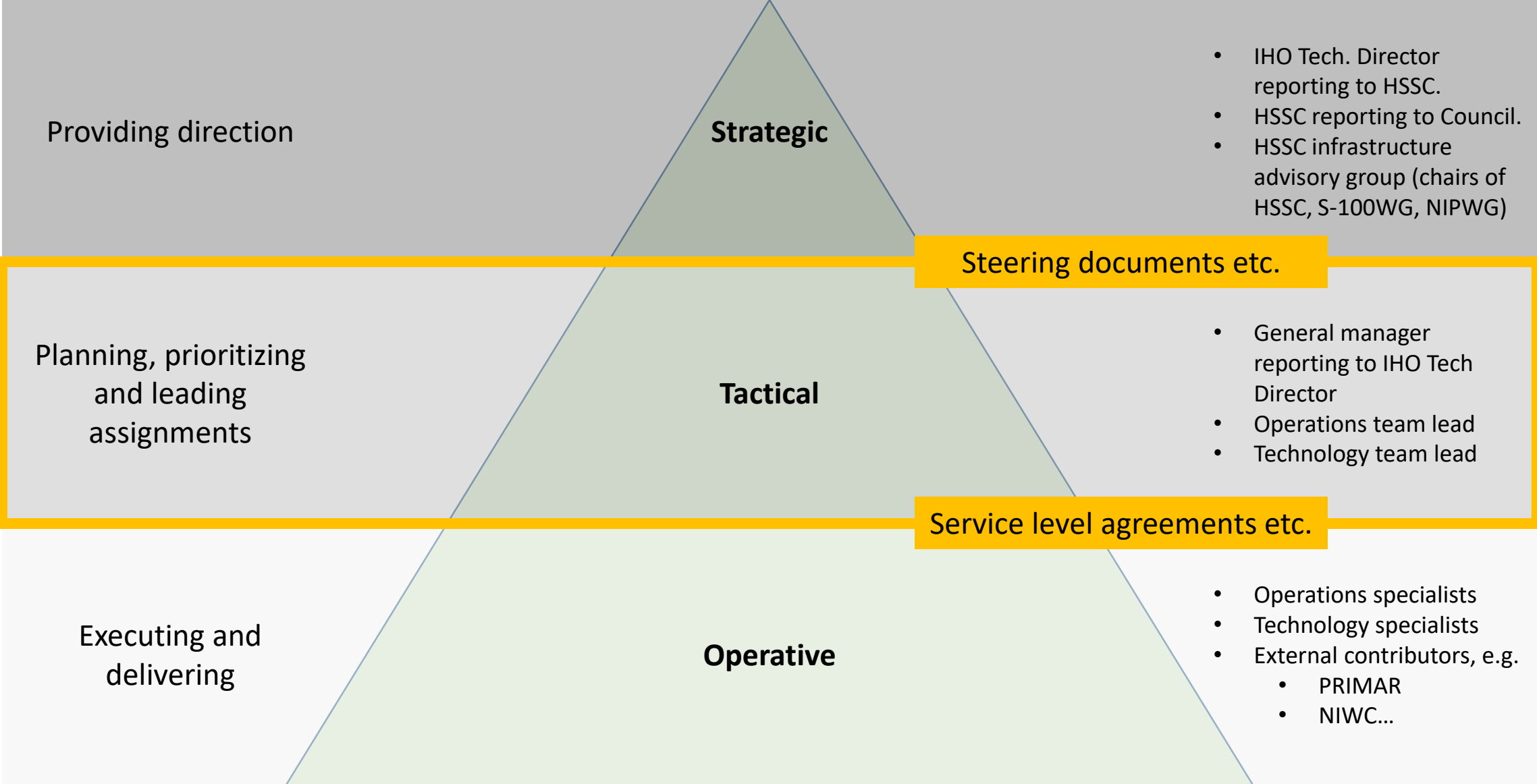
Operating concept:

Operations managed outside of the IHO Infrastructure Centre	IHO Infrastructure Centre			IT operations managed by "general IT provider"
Supported operations: <ul style="list-style-type: none"> • Product Specification development and maintenance • Navigation system type approval 	<p>Operative components</p>	<p>Tactical management of components</p>	<p>Technology components maintenance</p>	<ul style="list-style-type: none"> • IT infrastructure • Pure IT support
<p>Lifecycle management of:</p> <ul style="list-style-type: none"> • Operative <i>processes</i> <ul style="list-style-type: none"> • Forms • Templates • Testing documentation • <i>Information</i> structure <ul style="list-style-type: none"> • Data models • User support (process) <p>Operations:</p> <ul style="list-style-type: none"> • GI Registry operations • Security Scheme operations • Catalogue distribution • PS testcycle 	<p>Implementation of directional strategic management provided through IHO Technical Director:</p> <ul style="list-style-type: none"> • Prioritisation <ul style="list-style-type: none"> • Short-term • Long-term • Plans • Requirements management 	<p>Lifecycle management of (dev/test/prod):</p> <ul style="list-style-type: none"> • IT Systems Code • Software tools • User support (tech) • Systems security 		

What

Management Level

Who

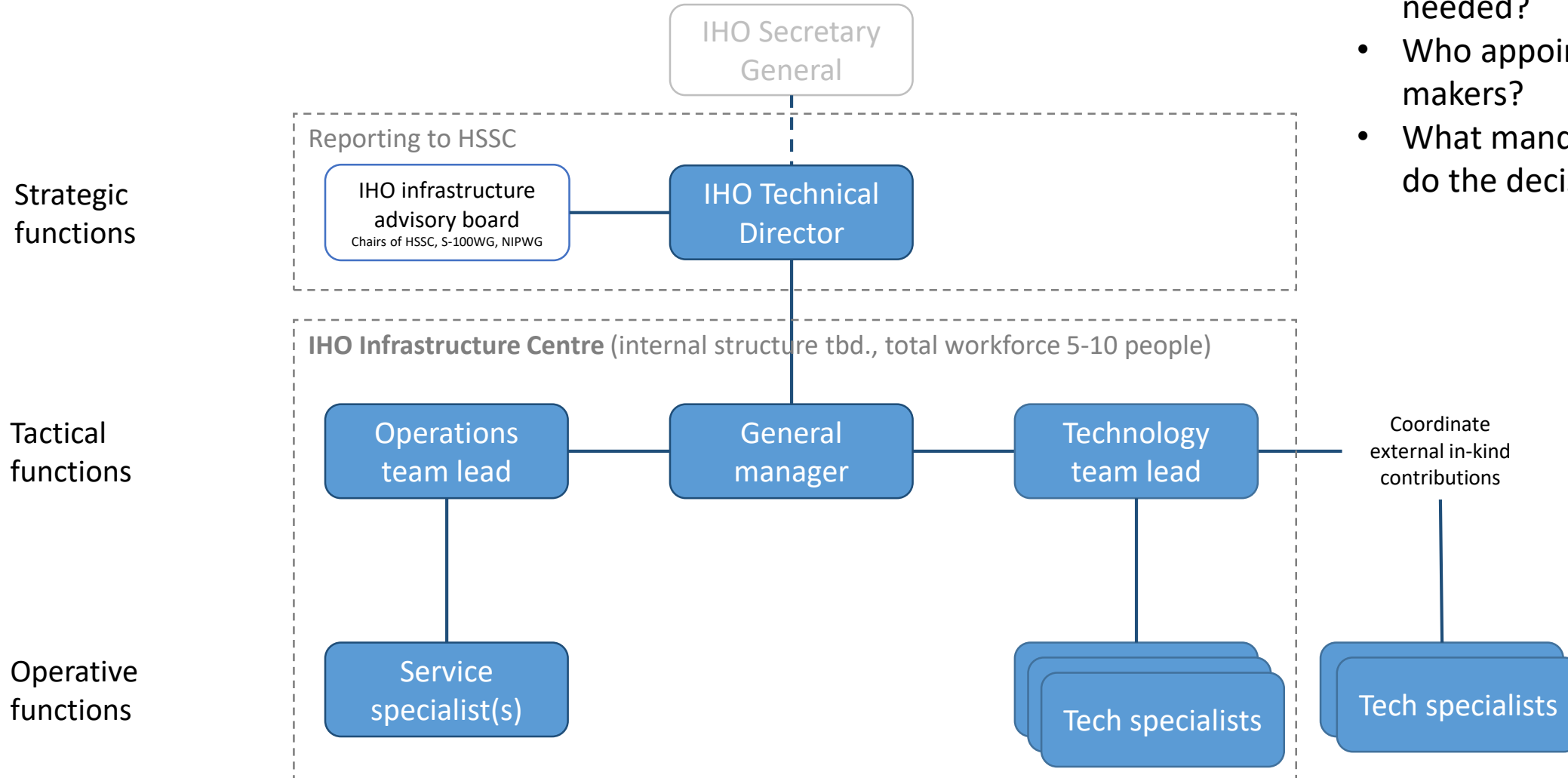


Steering documents etc.

Service level agreements etc.

A.4 Agree upon governance

- Who decides, and how are decisions made?
- What management levels are needed?
- Who appoints the decision makers?
- What mandate and resources do the decision makers have?



A.4 Agree upon governance

- Strategic level: Who is needed to be responsible for providing direction?
 - IHO Technical Director, with help of infrastructure advisory board
 - Changes of Role: Assembly & Council?
 - Changes of Scope: HSSC & Board?
 - Changes of Budget: Assembly and Council?
 - Mandates need to be set once now at the beginning, then leaving some freedom to the board and management in order to be agile enough.
 - Tactical level: Who is needed to
 - Be responsible for planning?
 - Continuously prioritise?
 - Lead assignments?
 - Operations team lead + General manager + Technology team lead
 - Operative level: Who is needed to
 - Take responsibility for executing assignments?
 - Take responsibility for deliveries?
- Who decides, and how are decisions made?
 - What management levels are needed?
 - Who appoints the decision makers?
 - What mandate do the decision makers have?

B.1 Agree upon composition

- Who does what?
- Which key functions need to be staffed?

Open discussion about:

- IHO Technical Director role – redefine/amend?
- General manager?
- Operations lead?
- Technology lead?
- Operations specialist(s) (e.g. GI Registry, Security Scheme, ...)
- Tech specialists (knowledge currently focused in KR)

Review of decisions and actions

See ICE PT-5 rows in *List of Actions S-100 ICE PT 2024-03-19.pdf*

List of participants

Name	Role	Country
Yong Baek	Ass. dir IHO Secretariat	
James Harper	Expert contr. IC-ENC	
Benjamin Hell	ICE PT vice chair / MS	SE
Gyenmin Jo	Bluemap	
Nathalie Leidinger	ISO cell / HSSC / MS	FR
John Nyberg	Dir. IHO Secretariat	
Sewoong Oh	KRISO	KR
Martin Park	KHOA / MS	KR
Julia Powell	S-100WG / MS	US
Tom Richardson	S-101PT / MS	UK
Magnus Wallhagen	HSSC / MS	SE