

# FAB SAFETY CASE

Information to be provided by the  
States – feasibility of using  
a common checklist

- **Article 9a of Regulation (EC) No 550/2004 on service provision as amended by Regulation (EC) No 1070/2009:**

**“2. Functional airspace blocks shall, in particular:**

**(a) Be supported by a safety case;”**

- **Article 3 of Regulation (EU) No 176/2011 - “FAB-IR”:**

**“The Member States concerned shall jointly provide the information set out in the Annex to this Regulation to demonstrate fulfillment of the requirements of Article 9a of Regulation (EC) No 550/2004.”**

Reg. No 176/2011, Annex, Part II:

“1. Functional airspace block safety case

**With regard to the functional airspace block safety case, the following information shall be provided:**

- (a) the common safety policy or plans to establish a common safety policy;*
- (b) a description of the arrangements dealing with accident and incident investigation and plans on how to address safety data collection, analysis and exchange;*
- (c) a description of the way in which safety is being managed to avoid degradation in safety performance within the functional airspace block;*
- (d) a description of the arrangements clearly identifying and allocating the responsibilities and interfaces with relation to the setting of safety targets, safety oversight and the accompanying enforcement measures in regard to the provision of air navigation services within the functional airspace block;*
- (e) documentation and/or statements that the safety assessment including hazard identification, risk assessment and mitigation has been conducted before introducing operational changes resulting from the establishment or modification of the functional airspace block.*

**As a minimum the SC shall refer (provide arguments & evidence) to the existence/plans to establish:**

- **Common FAB safety policy**
- **Reporting and investigation of accidents and incidents, incl.**
- **Safety data collection, analysis and exchange**
- **Safety (performance) management**
- **Arrangements and responsibilities for setting of safety targets**
- **Safety oversight arrangements, including enforcement**
- **FAB operational change management and risk assessment**

- A harmonised approach to FAB SC development is desirable
- The FAB SC is neither a unit safety case, nor a system safety case
- Information to be provided to the EC should address the following:
  - SM arrangements at State, NSA and ANSP level
  - Harmonisation/enhancement of ANSPs SMSs (SMS Roadmaps)
  - Safety assessment of operational changes related to FAB establishment or modification
- Issues:
  - Inclusion of NSA obligations in the SC (not typical)
  - involvement of military, where applicable

# FAB SC development - state of play

ES2-WS3

Bled, 22.09.2011

- All FABs have safety cases at different level of maturity ranging from initial draft to mature draft
- The SA/SC scope differ significantly depending on the intended use, the concept for ANS provision in the FAB, the level of harmonisation / integration of ANS systems, local (approval) requirements, etc.
- In most cases the SC scope exceeds FAB-IR requirements
- Hence, development of SC documents to a common format is rather unlikely
- However, the need to ensure compliance with the EC requirements related to arguments/evidence is recognised

# SC information for submission to EC

ES2-WS3

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- **What can be done to ensure that all FAB meet EC expectations?**
  - **Establish a common checklist for SC information submission in compliance with the regulatory guidance (as available)**
- **What could be the approach to the checklist development?**
  - **Use of the GSN to show that the 5 FAB IR requirements set out at Annex are met**
  - **Use of compliance table**
  - **Other**

# SC information for submission to EC

ES2-WS3

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## Compliance table example

Ref	(EU) 176/2011 requirement (Annex, Part 2)	Safety Argument	Backing evidence	COMME
With regard to the functional airspace block safety case, the following information is hereby provided:				
R1	(a) The common safety policy or plans to establish a common safety policy	Arg. 1	D3.3 – FAB SMS Roadmap, 7.1	COMPLIANT
R2	(b) A description of the arrangements dealing with accident and incident investigation and plans on how to address safety data collection, analysis and exchange;	Arg. 2.1	FAB State Level FAB Agreement <b>Article X</b> + D3.3 – FAB SMS Roadmap 7.4, 7.8, 8.7	COMPLIANT
R3	(c) A description of the safety management system in place or planned to avoid degradation in safety performance within the functional airspace block;	Arg. 2.2	D3.3 – FAB SMS Roadmap 7.6, 7.7, 8.2, 8.7	COMPLIANT
R4	(d) A description of the arrangements clearly identifying and allocating the responsibilities and interfaces with relation to the setting of safety targets, safety oversight and the accompanying enforcement measures in regard to the provision of air navigation services within the functional airspace block;	Arg. 2.3 Arg. 3	D3.3 – FAB SMS Roadmap 7.7, 8.2 <b>NSA Agreement</b>	COMPLIANT
R5	(e) Documentation and/or statements that the safety	Arg. 2.4	D3.2 (this document),	COMPLIANT



### Assumptions

- A1. Current ANS provision in XXX FAB airspace is safe
- A2. Be/remain safe = adequate regulatory framework plus organisations, arrangements and processes are in place to oversee and manage safety

### G 0

**XXX FAB safety management and oversight arrangements are sufficient and appropriate to enable safe ANS provision**

### Context

- C1. SES legislation and in particular EC Regulation 550/2004. Article 9a
- C2. EC Regulation 176/2010 (FAB-IR)

Argue that FAB safety regulatory framework, safety oversight and safety management arrangements meet the FAB safety case requirements of the FAB-IR

### G 1

XXX FAB has a common safety policy

### G 5

Operational changes resulting from FAB establishment and modification are subject to adequate safety assessment

### G 2

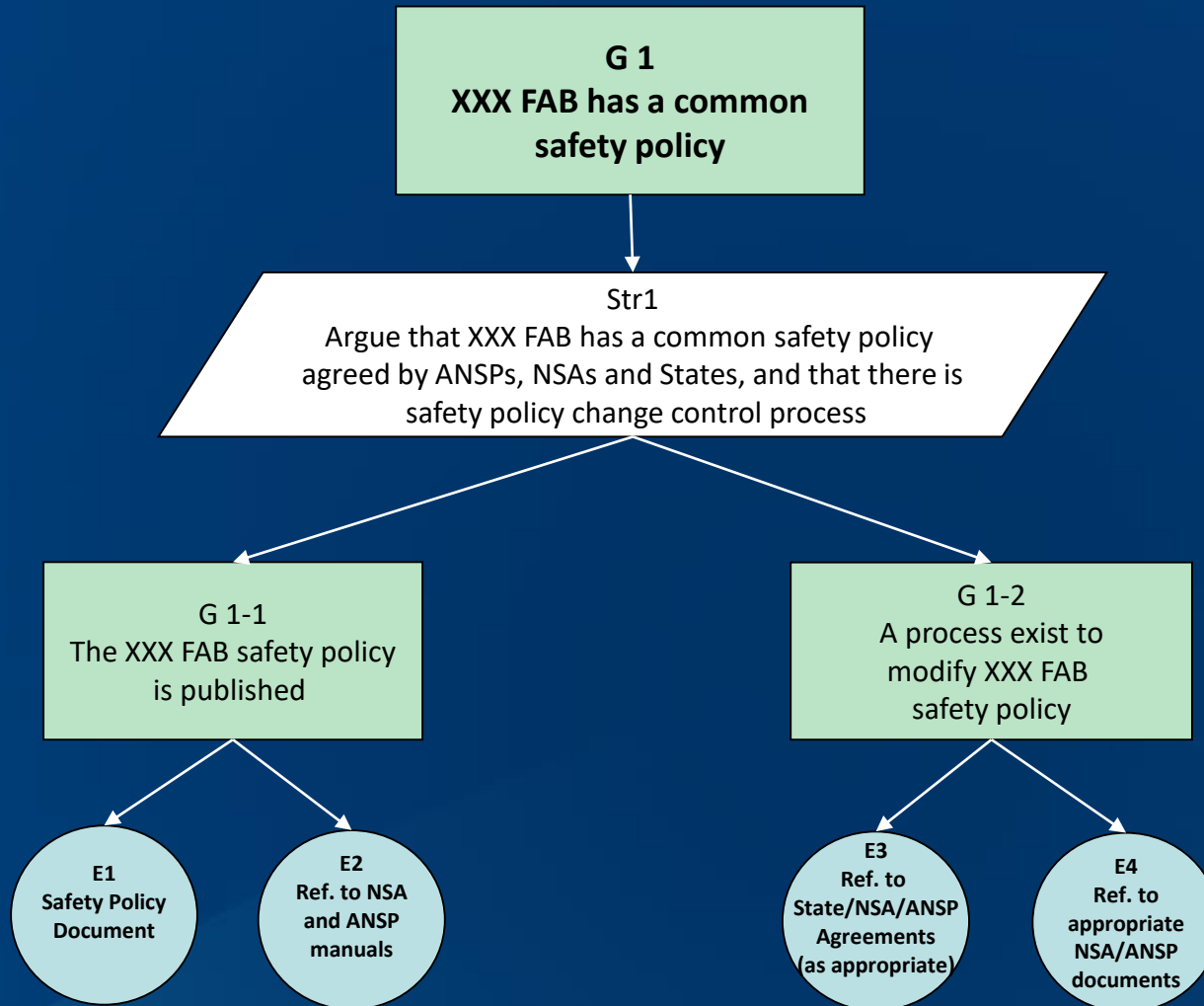
Arrangements for reporting and investigation of A & I, including data collection, analysis and exchange are adequate

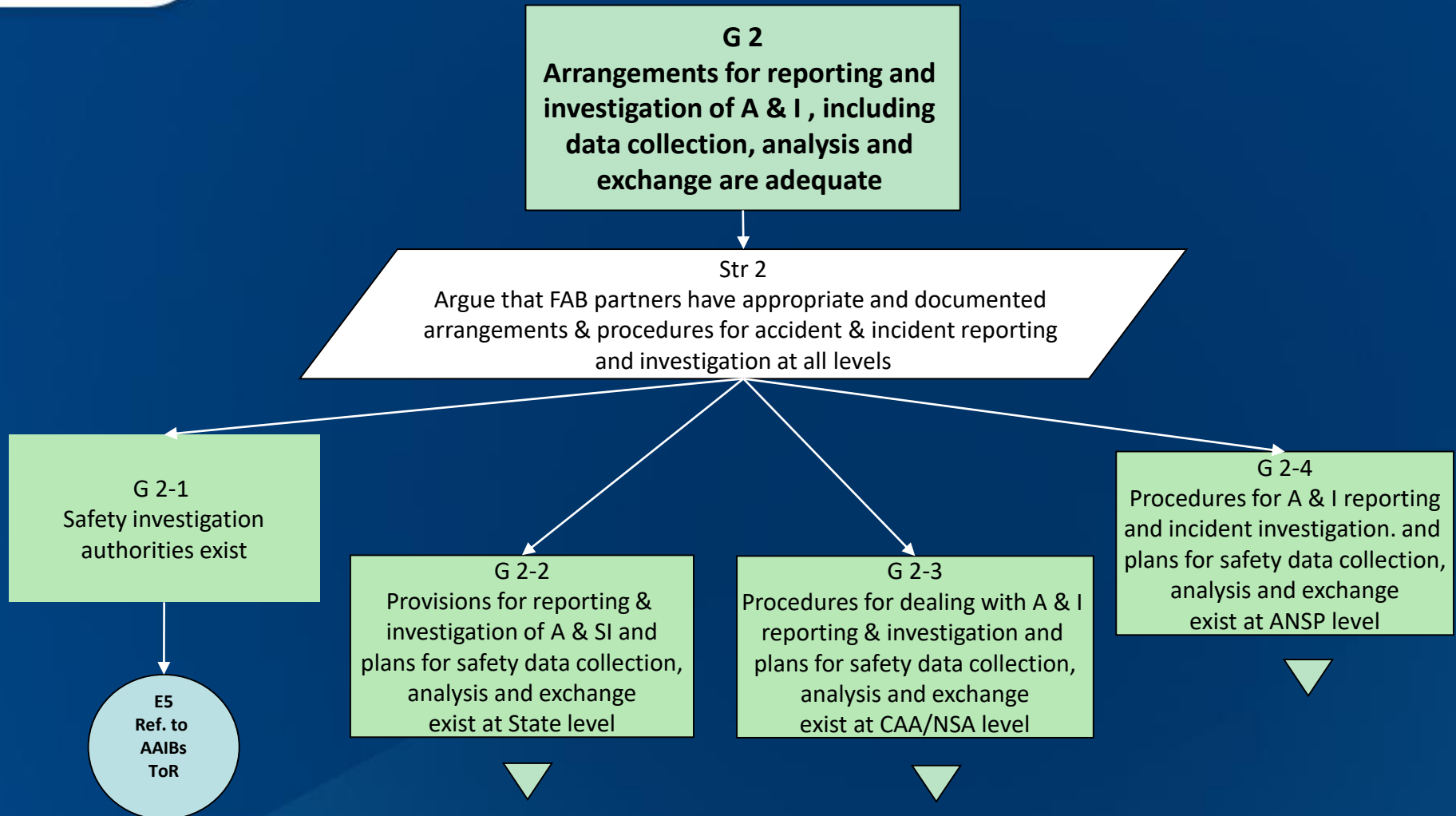
### G 3

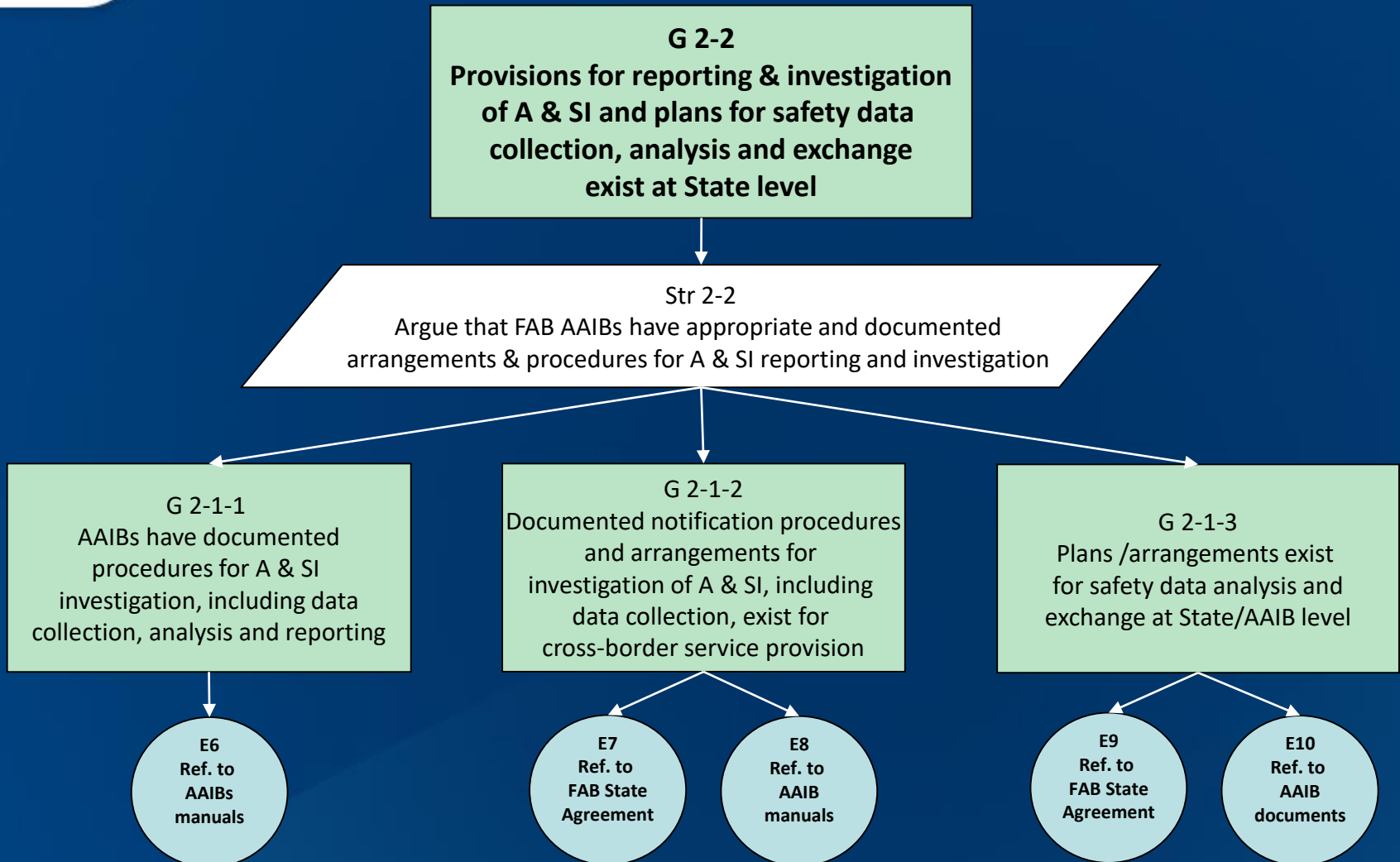
Safety performance is managed for continuous improvement

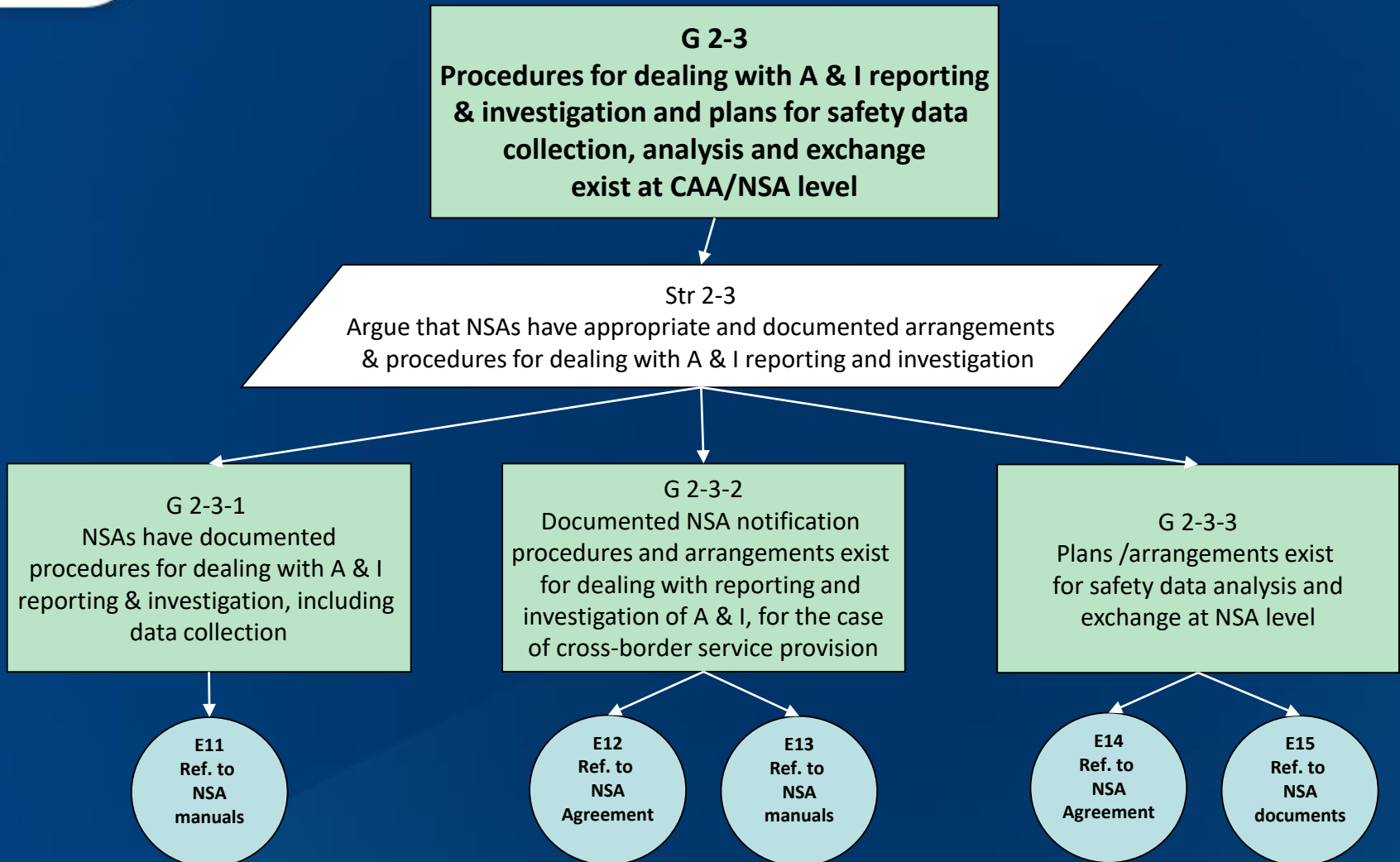
### G 4

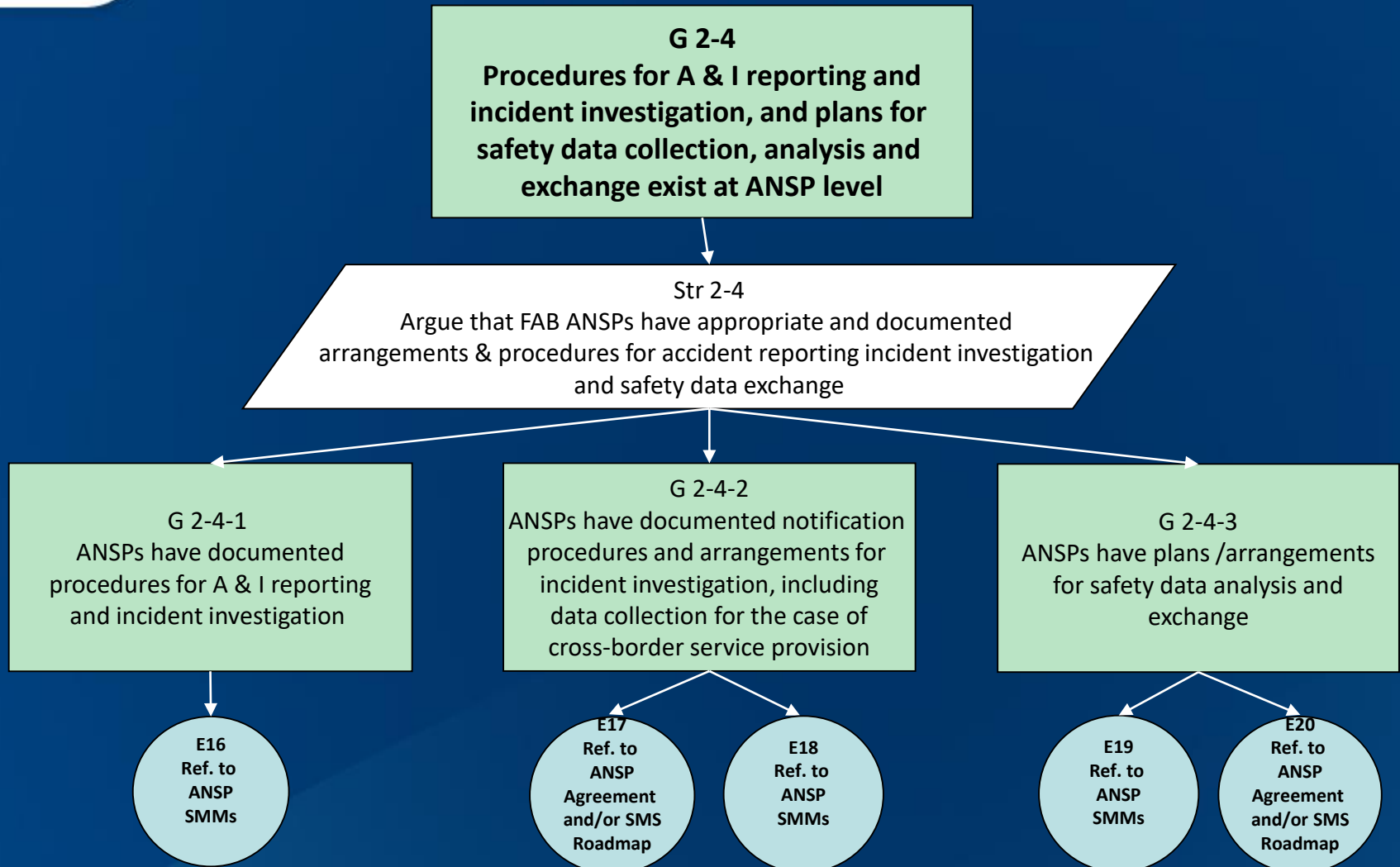
Adequate arrangements exist and responsibilities are assigned for safety targets setting and safety oversight

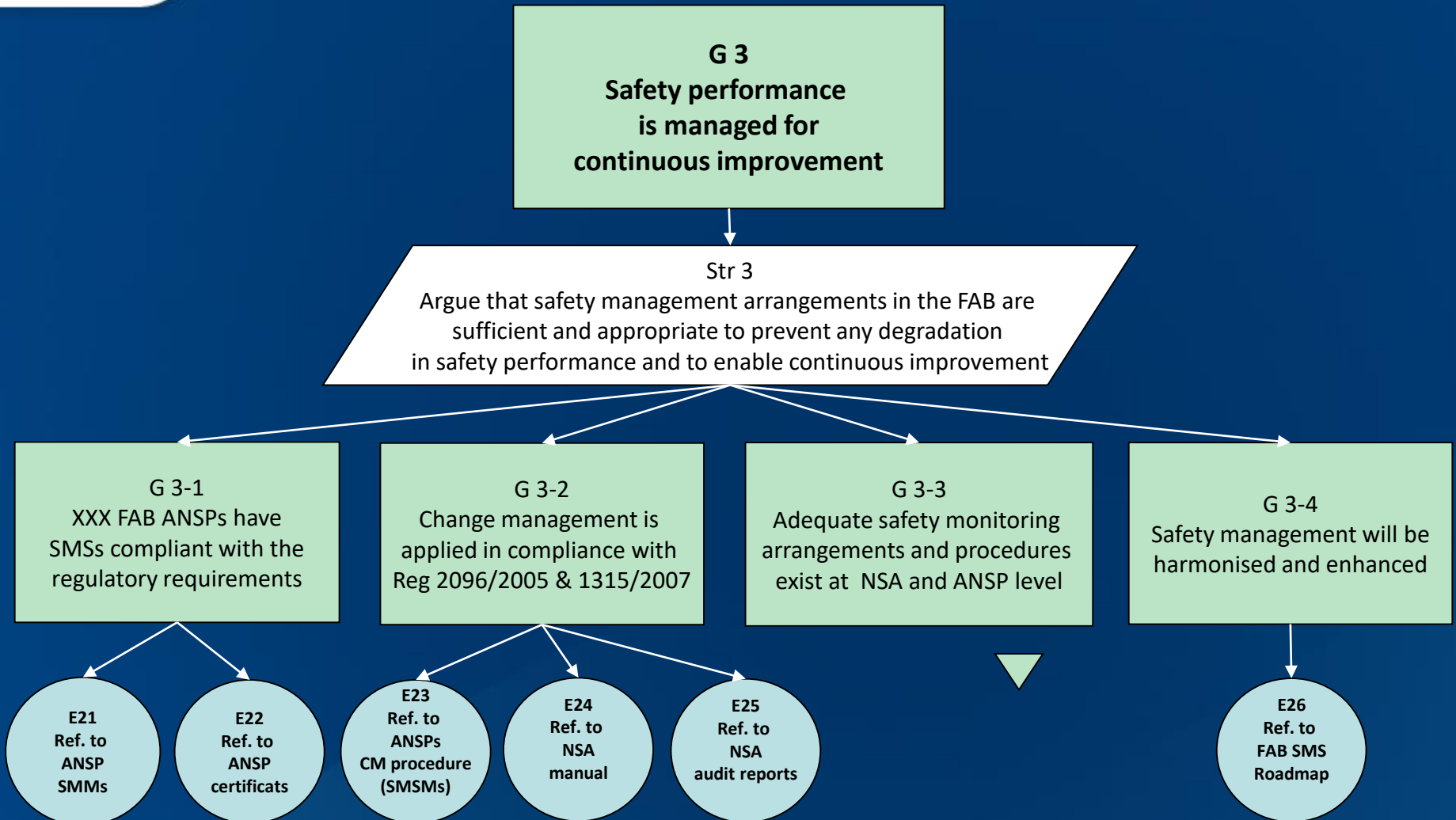


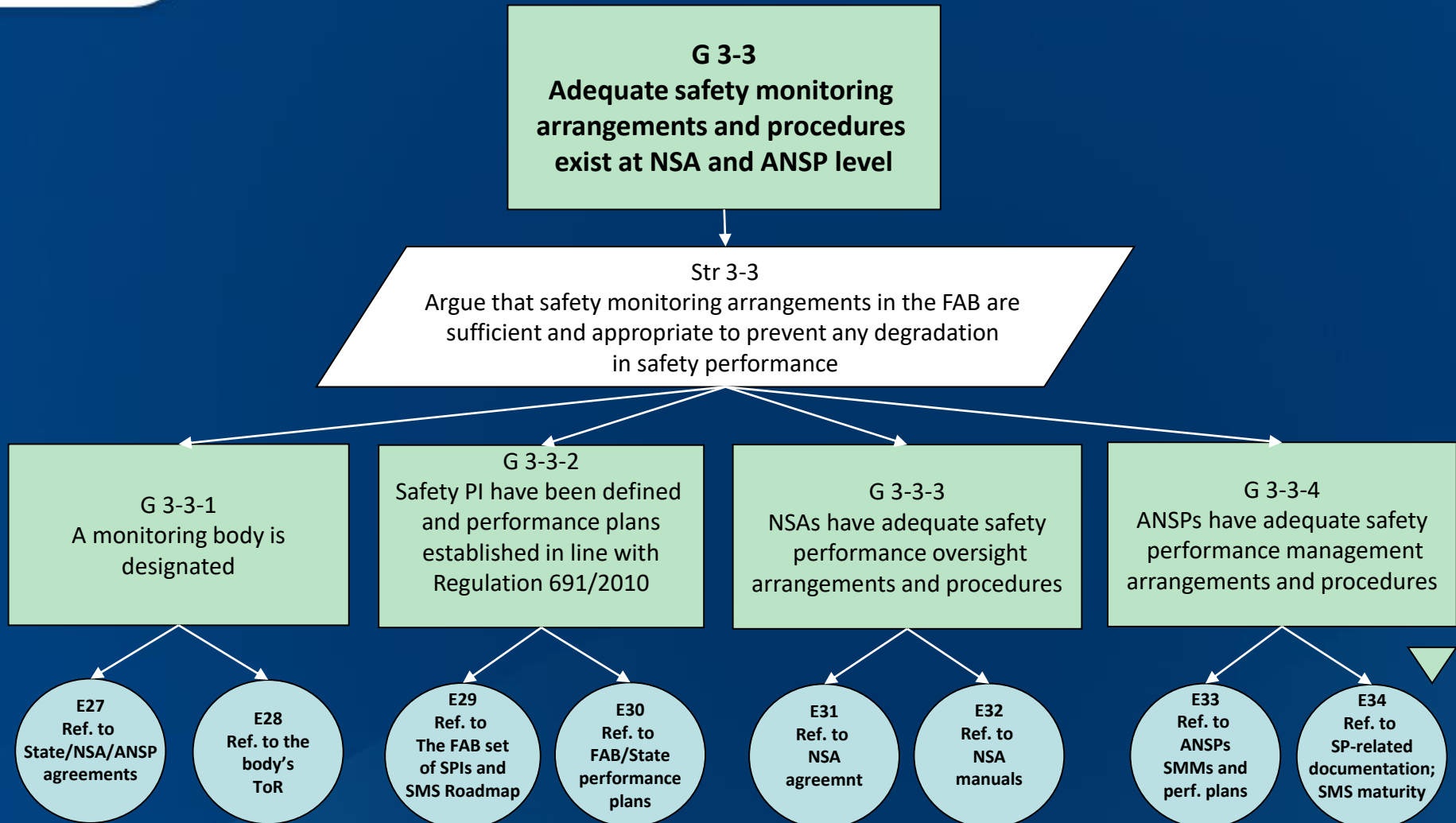




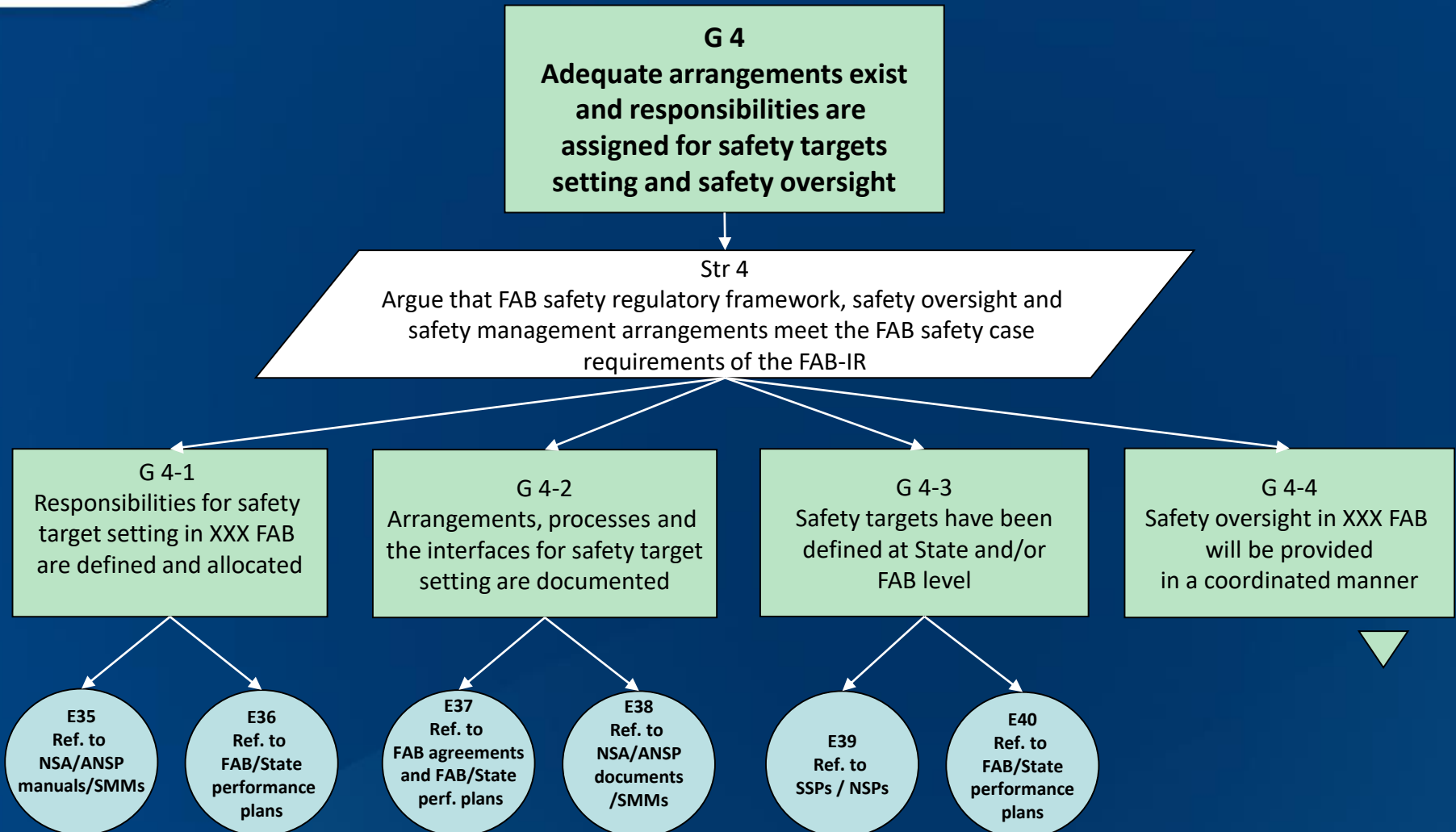


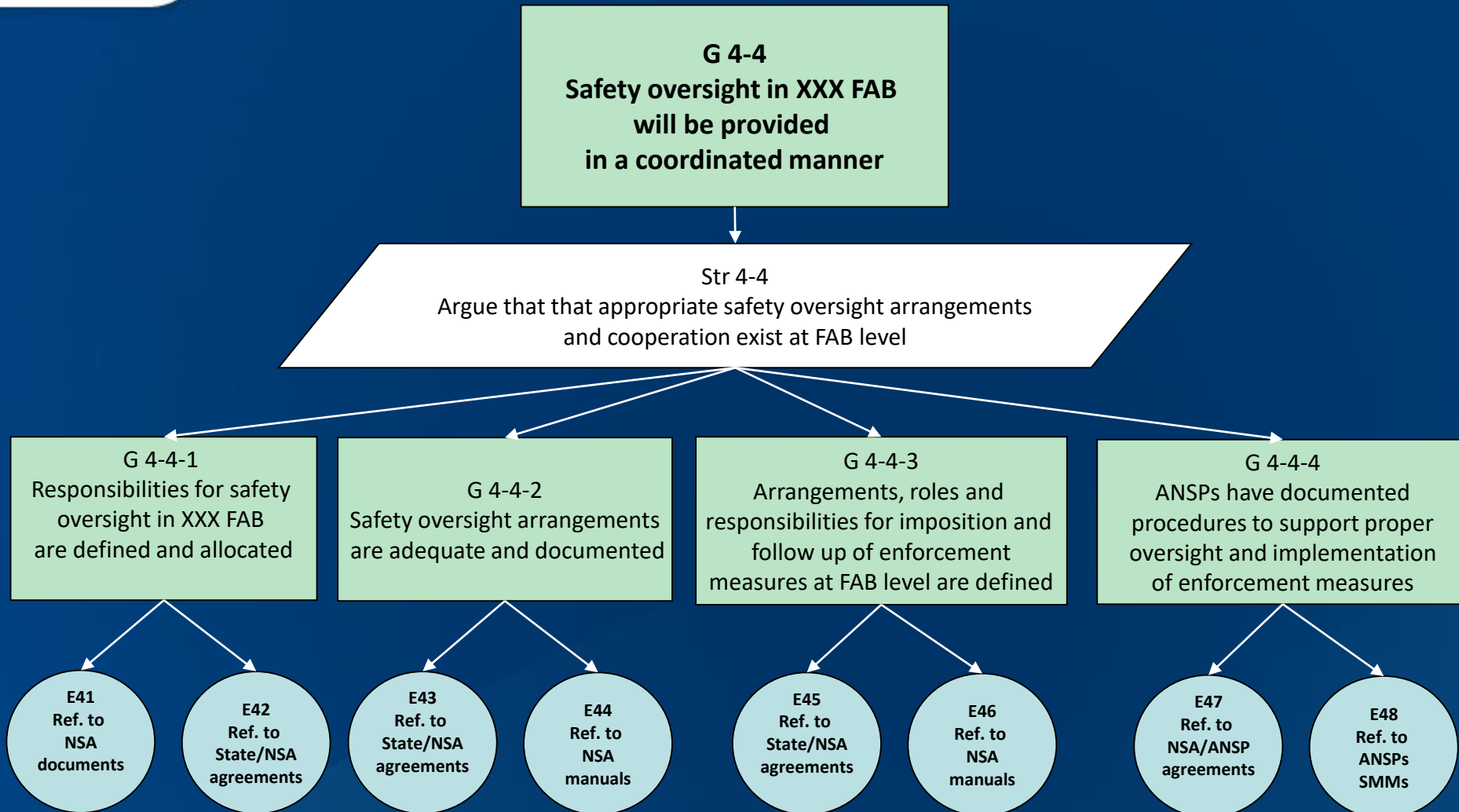


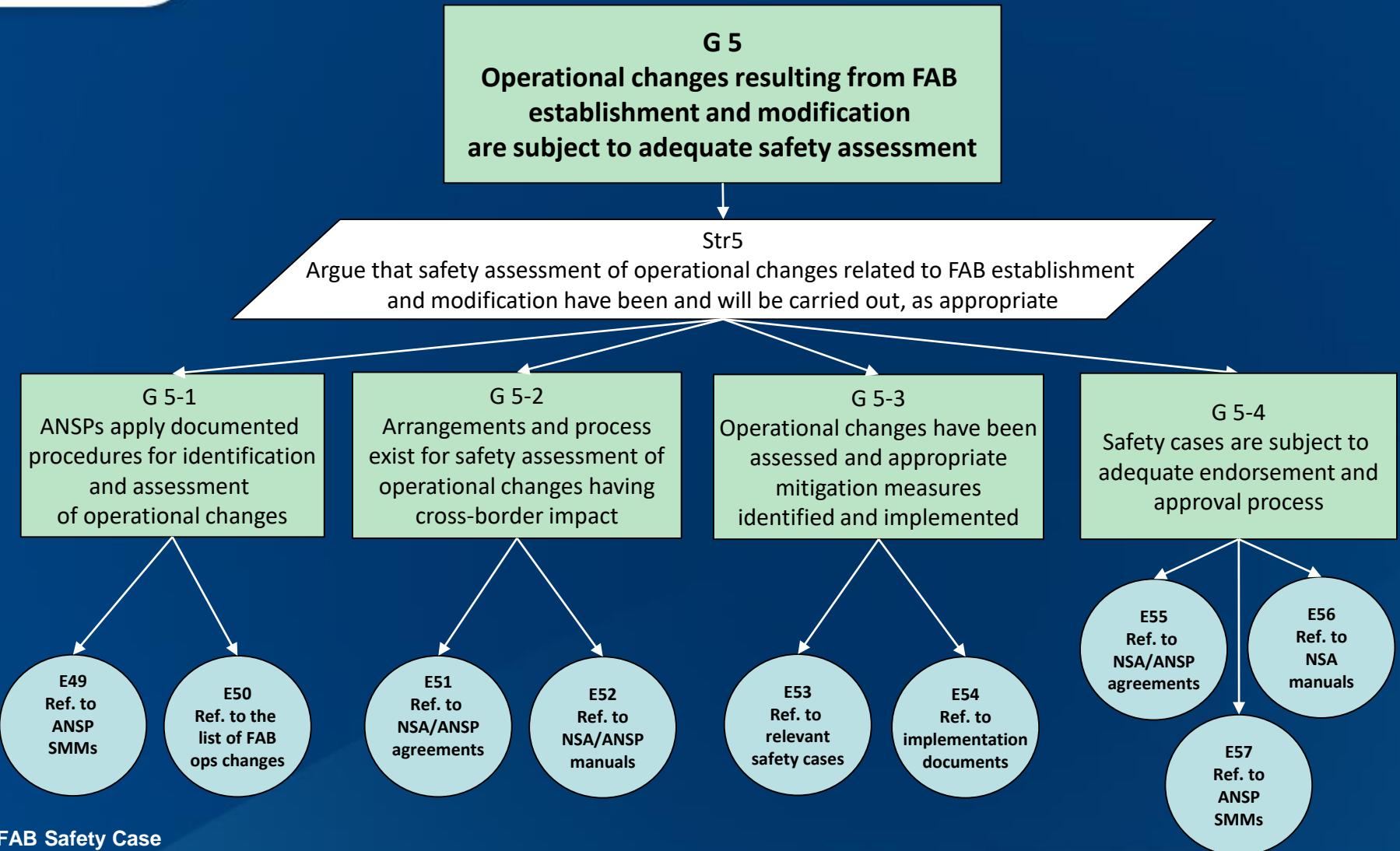












# Feasibility of using a common FAB SC information checklist

ES2-WS3

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*Your opinion is invited !*

