

FAB Safety Case

Should be a

Unit Safety Case

or a

Project Safety Case

or, as per EC GM FAB IR, a

Unique Safety Case

Or ...

What do we know:

- establishment of FAB has to be supported by a Safety Case
- there is no definition in SES legislation for Safety Case
- there is no any Safety Case „regime” for Air Navigation Services (i.e. regulations like in Railway and Off-shore industries)
- FAB Safety Case is not intended for any safety approval or safety certification
- ESSAR 4 deals only with ANS system changes but not with „organizational” changes

“The Safety Case regime has lost its way. It has led to a culture of ‘paper safety’ at the expense of real safety.

Safety Cases should be renamed Risk Cases”

Charles Haddon-Cave QC - THE NIMROD REVIEW

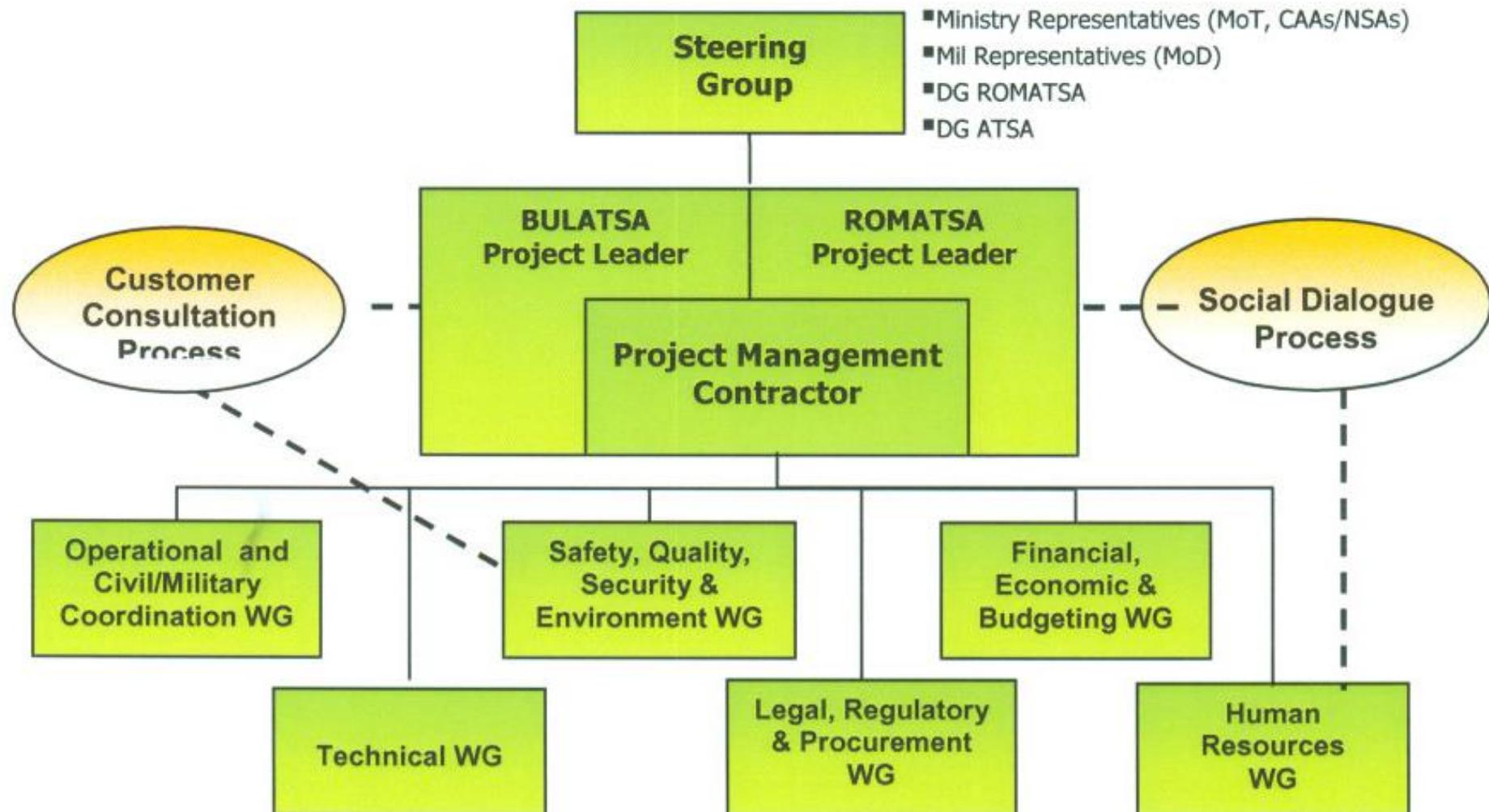


What do we know (cont 1):

- for ANS System changes safety assessment should be carried out based on EUROCONTROL SAM
- we use the term „**Safety Case**” to name the report produced as a result of performed safety assessment processes for the proposed change
- in literature this type of Safety Case is known as „**Project Safety Case**” and is used to demonstrate the safety of a substantial change to a service or operation and/or underlying system(s)
- when we want to demonstrate the safety of an ongoing operation, service or activity then it is used the term „**Unit Safety Case**”

What do we know (cont 2):

- EC GM related to FAB IR 176/2011 highlights that „attention should be given to the fact that a **FAB Safety Case is different from a Unit or a Project Safety Case and has a specific nature** as reflected in the relevant requirements of the FAB-IR”
- the relevant requirements of the FAB IR are 5 and they mainly ask for „arrangements” to be in place for managing safety
- we are all aware that for FAB establishment a Safety Roadmap is needed
- we are members in FAB Project Teams responsible for the implementation of the „Project”



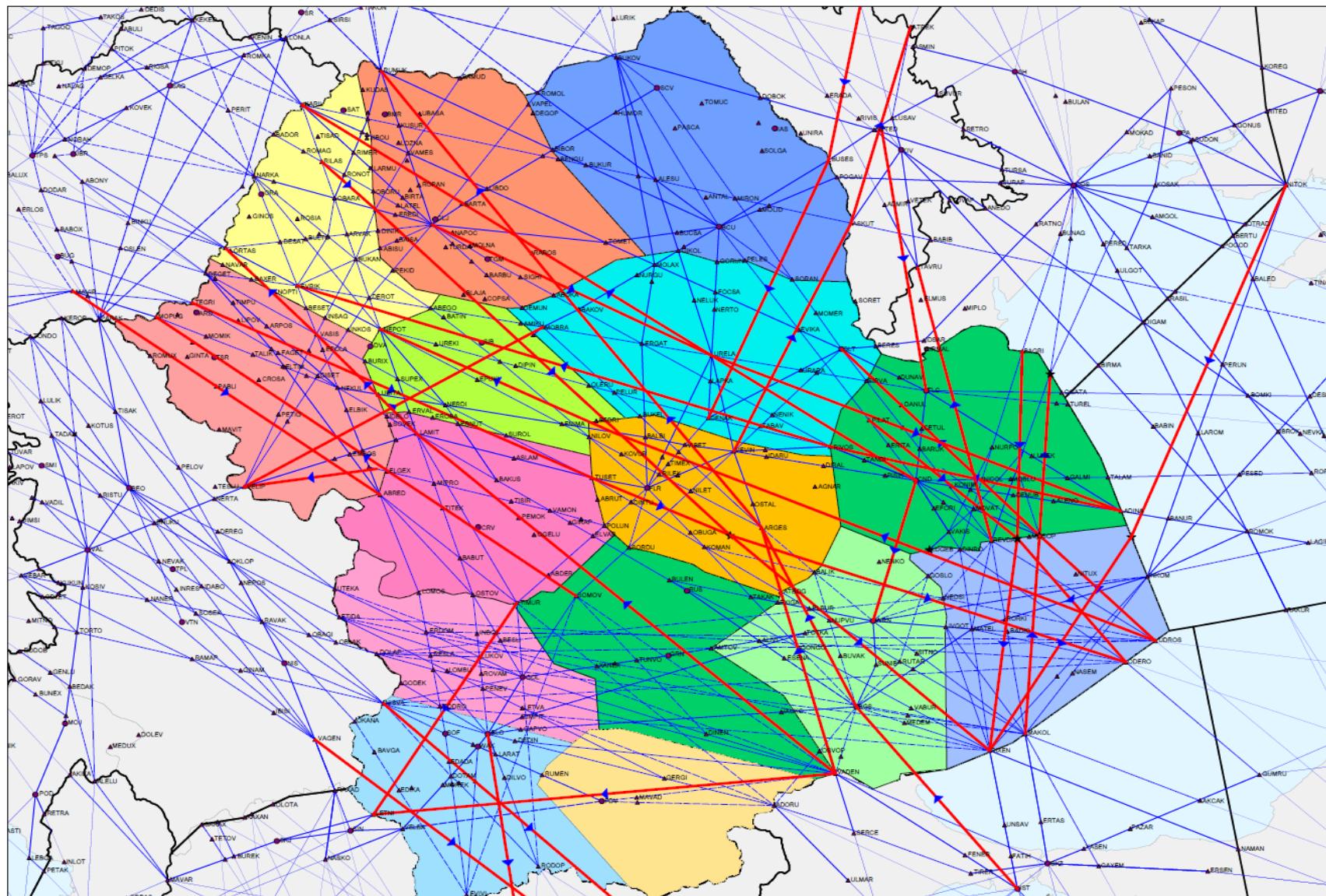
What is a FAB Safety Case for:

- to prove by means of argument and supporting evidence that safety has been adequately considered during all phases of FAB establishment and the operations in FAB will be acceptable safe (**Safety Claim**) to satisfy the following **Safety Criteria**: “The risk of an accident/incident due to establishment of the FAB will be not higher than prior to the establishment.”
- to document how achievement and maintenance of safety are planned, organized and managed at **States, NSAs and Service Providers levels**

What are we required:

- **to develop, review and maintain FAB Safety Case** (for Danube FAB, development, review and maintenance of DANUBE FAB Safety Case rest in the responsibility of ROMATSA and BULATSA through their ANSP Board, it has to be endorsed by NSAs Board and approved by DANUBE FAB Governing Council as set in the envisaged “Agreement on the establishment of the DANUBE Functional Airspace Block between Romania and the Republic of Bulgaria”)
- **to carry out the activities settled in Safety Roadmap and document them**
- **to perform safety assessments related to ANS system changes as per requirements of ESSAR 4 (common requirements 2096/2005)**
- **to provide information to EC with regard to FAB Safety Case as per FAB IR 176/2011**

ES2 WS2-11 FAB SAFETY CASE & FAB SAFETY ROADMAPS 18-19 May 2011 Bosnia and Herzegovina - Sarajevo



What is the existing context (DANUBE FAB example):

Context 1: International, European and National Legislation (including SES, FAB IR) are in place and are binding for aviation industry in each State. This ensures a certain level of harmonization for legislation and further more for processes related to provision of Air Navigation Services.

Context 2: In each State Air Navigation Services are provided by designated and certified ANSPs (as per common requirements regulation). This means:

- 2.1 existing ANS systems are acceptable safe:
 - a) procedures (including airspace organization) applied by ANSPs are acceptable safe;
 - b) equipment used by ANSPs are acceptable safe;
 - c) ANSPs personnel are adequately trained and competent for the job they are required to do, in addition to being properly licensed.

- 2.2 each ANSP has in place a Safety Management System covering:
 - a) safety general: management, responsibility, priority, objective;
 - b) safety achievement: competency, management responsibility, safety levels, SMS documentation, risk assessment and mitigation, external services and supplies, safety occurrences;
 - c) safety assurance: survey, monitoring, records;
 - d) safety promotion: awareness, dissemination, improvement.
- 2.3 SMS is contributing to the enhancement of Safety Culture within each organization.

Context 3: In each State a NSA is designated and established to verify air navigation service provider's compliance with common requirements and applicable regulations.

Context 4: In each State aviation regulation is undertaken by state aeronautical authority (Ministries of Transport).

Context 5: In each State an independent Air Accidents Investigation Board is designated and established.

We can conclude that:

For each state there are in place regulations, arrangements, processes, etc. to give assurance that aircraft operation within their airspace is acceptable safe.

I think we accept this statement even if there is no any Safety Case for it. Probably this is why SES II legislation has limited the possibility for a State to declare a FAB comprised only of its own airspace.



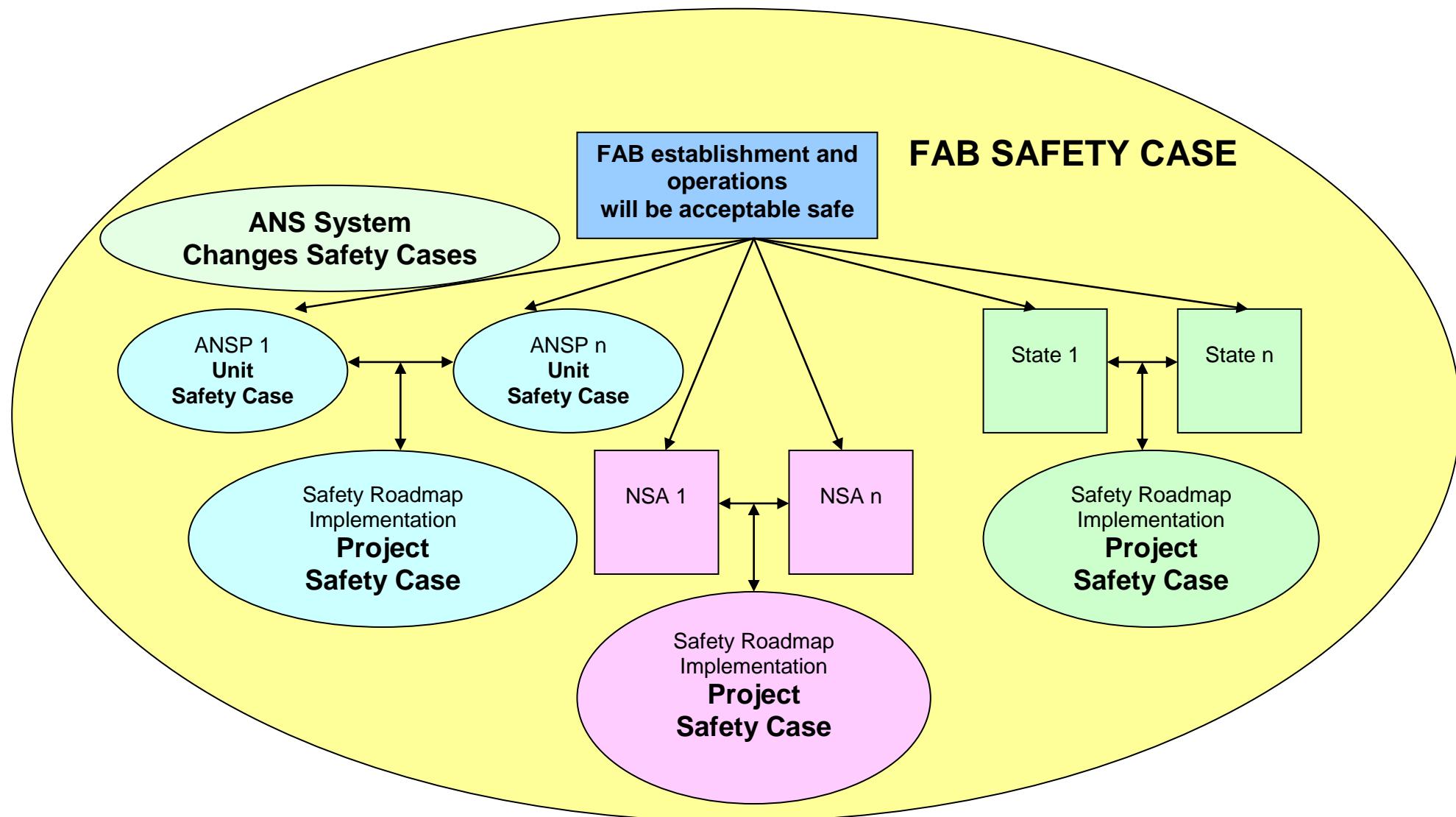
<http://go.funpic.hu>

In this context, what argument can we invoke to give assurance that the establishment of FAB will be acceptable safe:

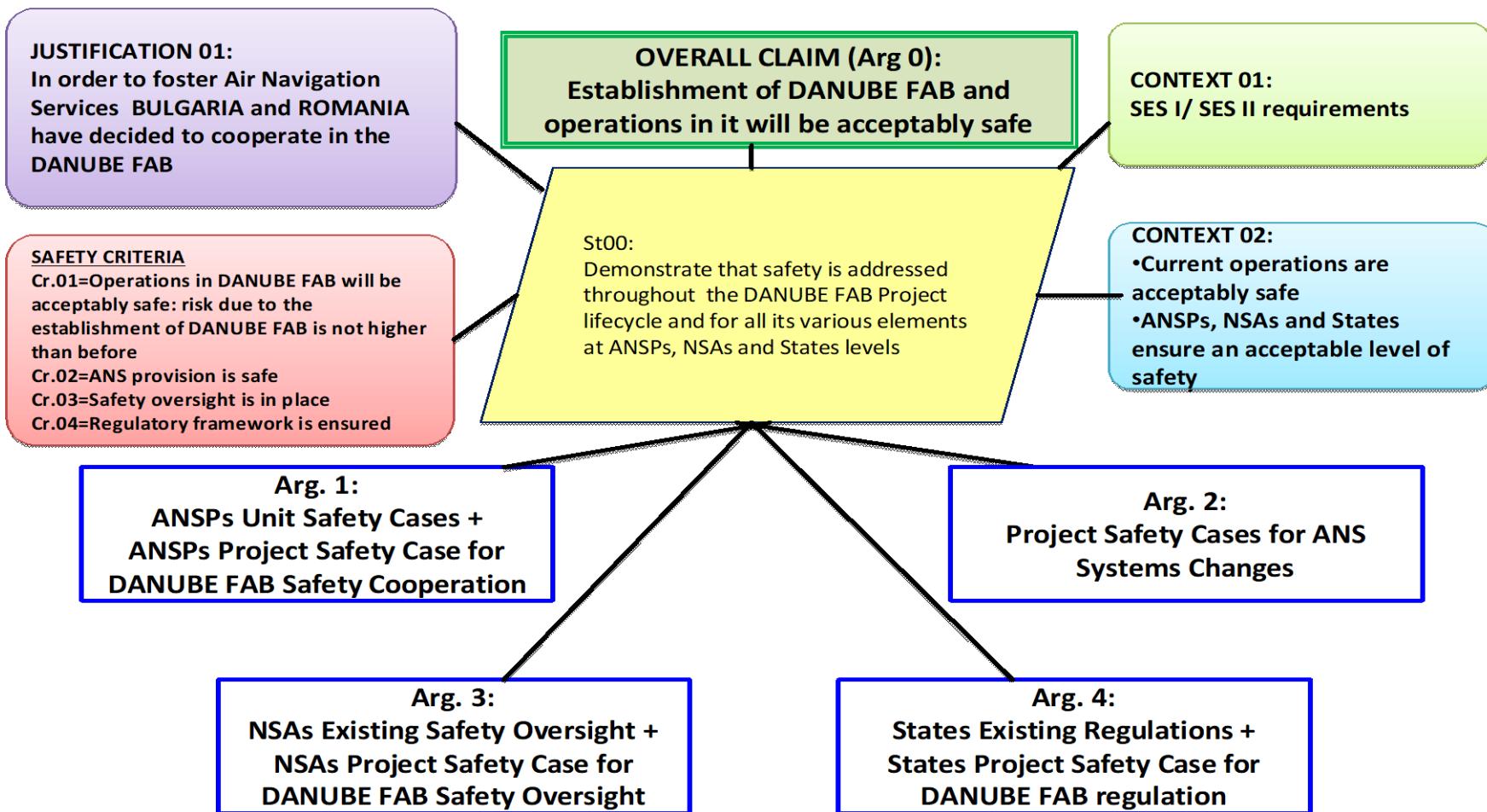
- **the existing global aviation safety system will remain the same or even improved as far as:**
 - State regulations for FAB will be in place
 - ANS will be provided by certified ANSPs
 - ANSPs will be (remain) certified by each NSA as per 2096/2005 common requirements regulation
 - NSAs will oversight FAB ANSPs
 - ANSPs will be (remain) designated by States

- **ANS systems changes will be introduced safely based on performed safety assessments (as today)**
- **States, NSAs and ANSPs will cooperate, collaborate and coordinate in regard to FAB establishment**
- **the formal arrangements between States, NSAs and ANSPs or all together will be managed with due consideration to safety aspects by competent safety people**

This can be represented as follows:



DANUBE FAB Safety Argument



So, what is our approach to deal with FAB Safety Case:

To have a combination of Unit Safety Case and Project Safety Case supported by any ANS System Changes Safety Cases.

Could be a way to reach the „unique” specific nature of a FAB Safety Case.