Baltic FAB

A PART OF SINGLE EUROPEAN SKY

Towards Baltic FAB ATM System

General information, 2013

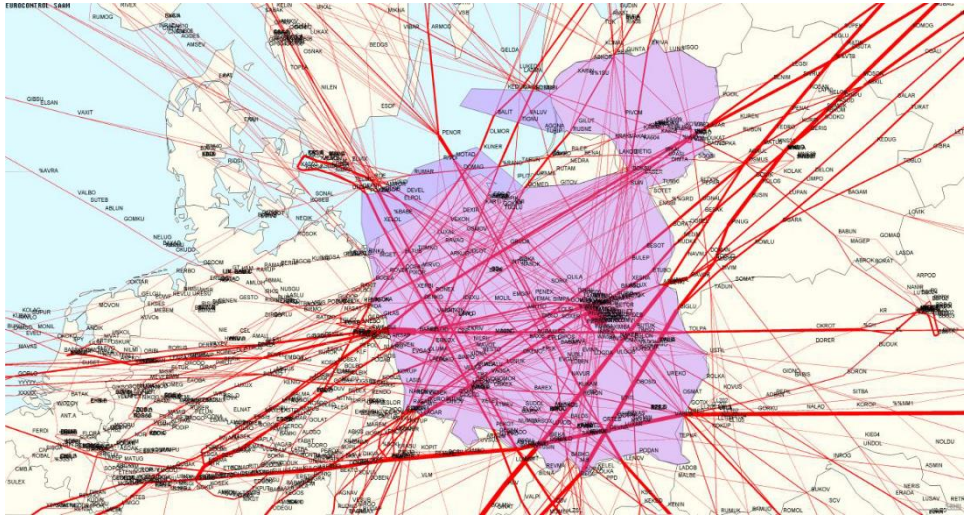
Airspace
408 700 km²

En Route Traffic
680 000

ACC

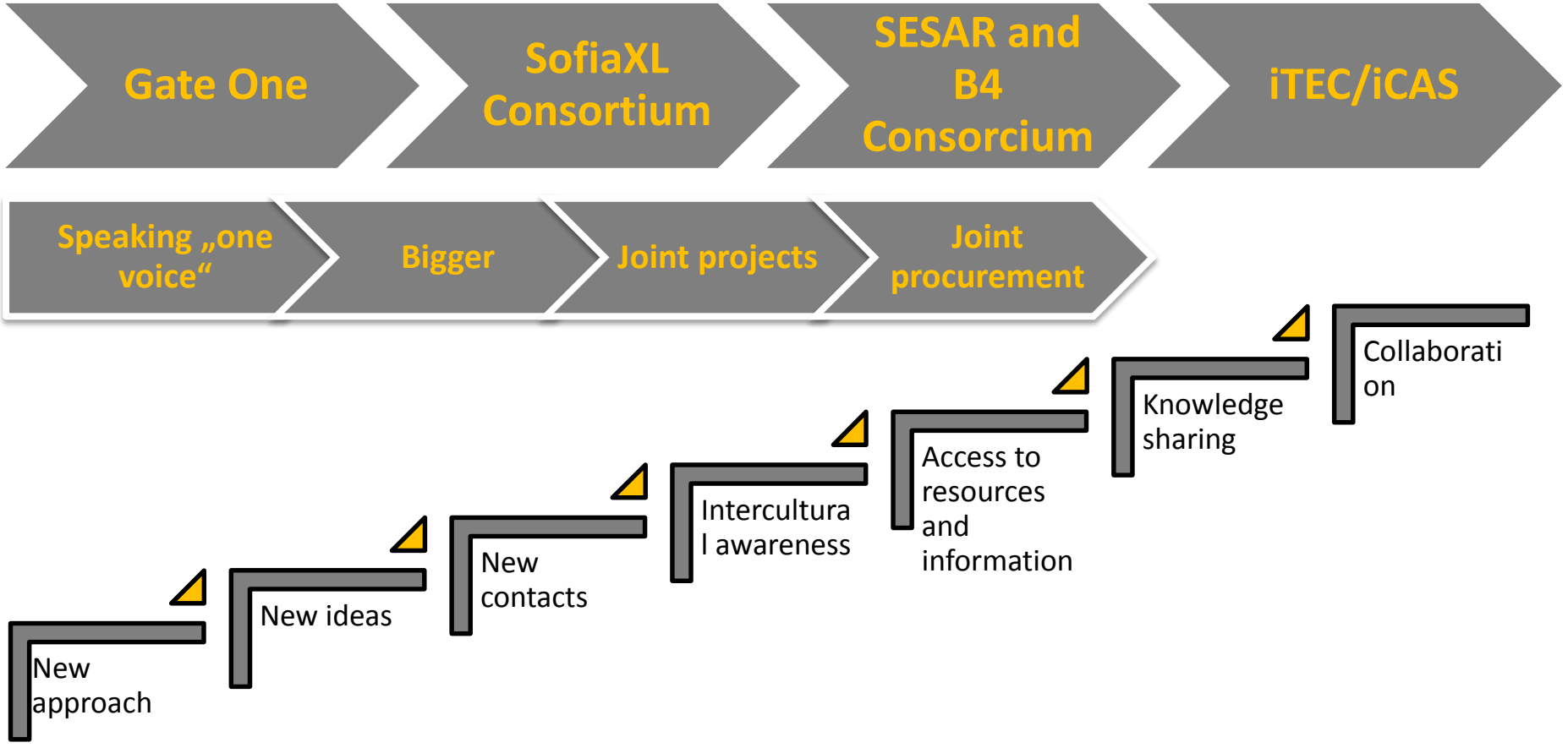
ACC (Vilnius) & 3 sectors

ACC (Warszawa) & 8 sectors



Baltic FAB is a synergy of States (including civil and military stakeholders), National Supervisory Authorities and Air Navigation Service Providers where each has its own role and responsibility

Achivements and advanatges



Baltic FAB
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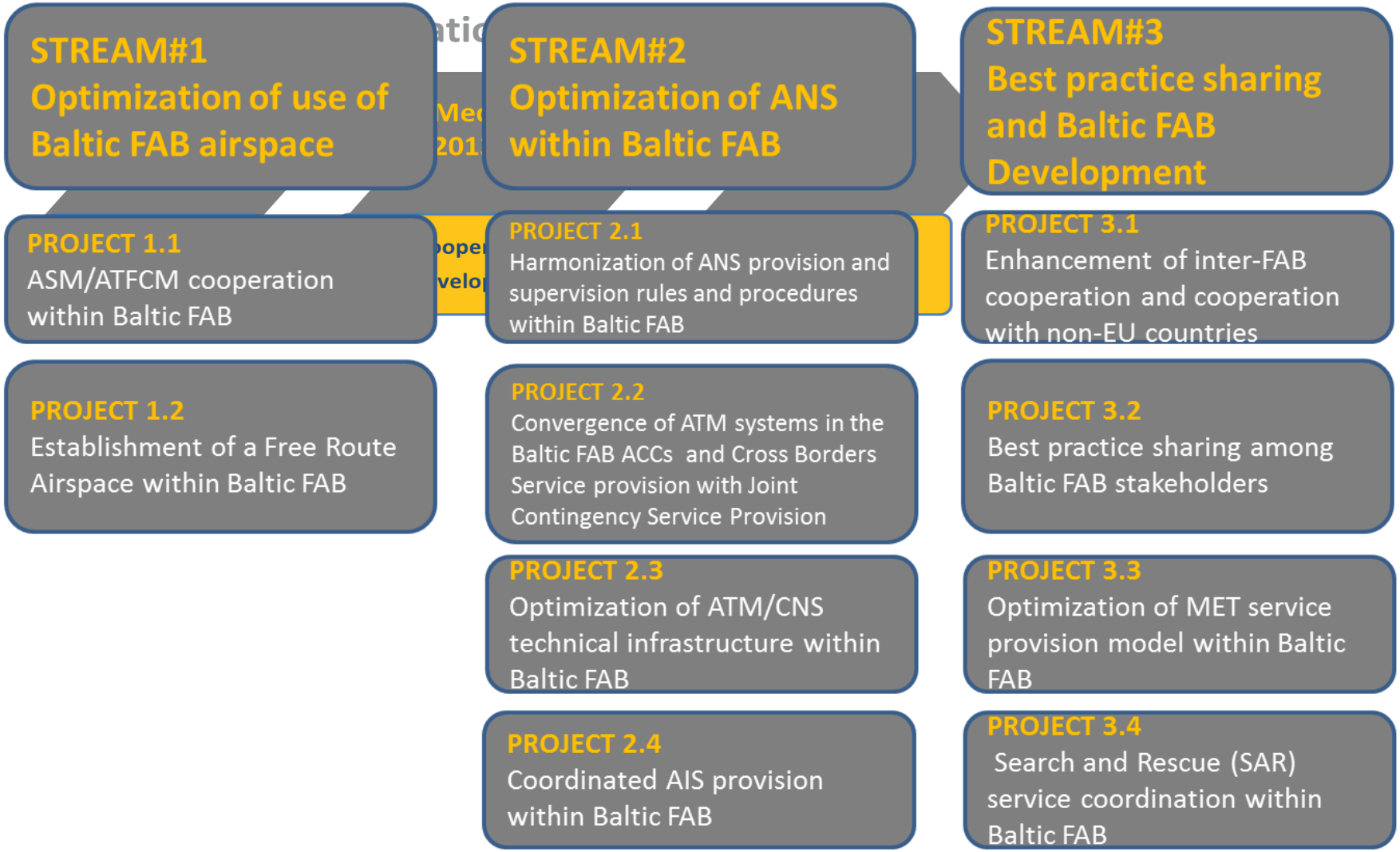
Implementation programme 2013-2018



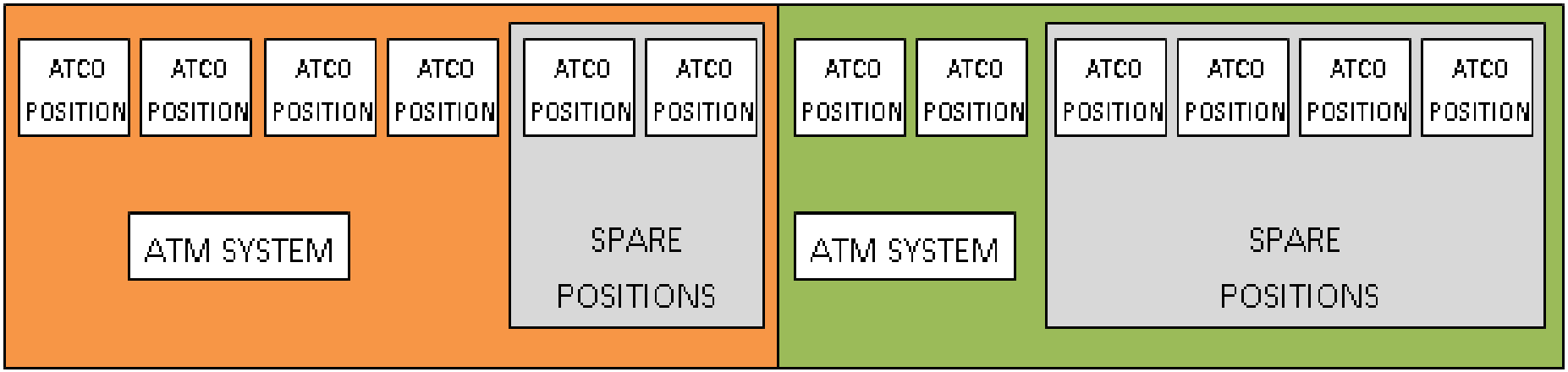
Baltic FAB ATM: idea

- to achieve ATM system convergence which will be an enabler for several solutions aiming at achieving the optimal use of technical and human resources resulting in lower provision costs and higher operational performance in the Baltic FAB.
- It will be then possible, for two ANSP operating the same ATM system, to provide contingency ATM services for themselves, without necessity to build an external ATM contingency centre

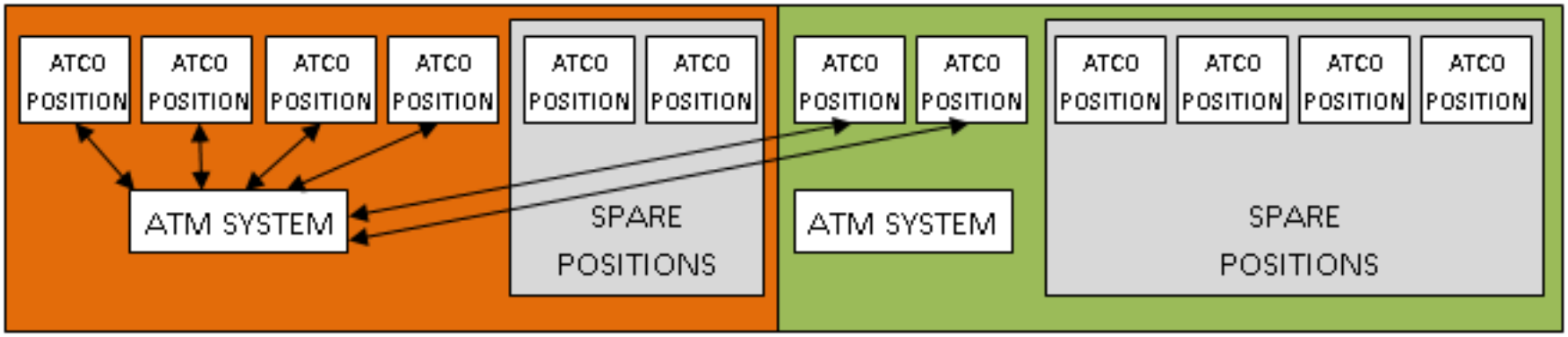
GOALS

- **Convergence of ATM systems in the Baltic FAB ACCs and Cross Borders Service provision with Joint Contingency Service Provision**
- **Identical ATM systems** – PANSA and Oro Navigacija operate identical ATM systems
- **Cross border and dynamic sectorization** – based on traffic/staffing requirements
- **Joint contingency** – AATC centres provide contingency for themselves without need of additional contingency centre(s)

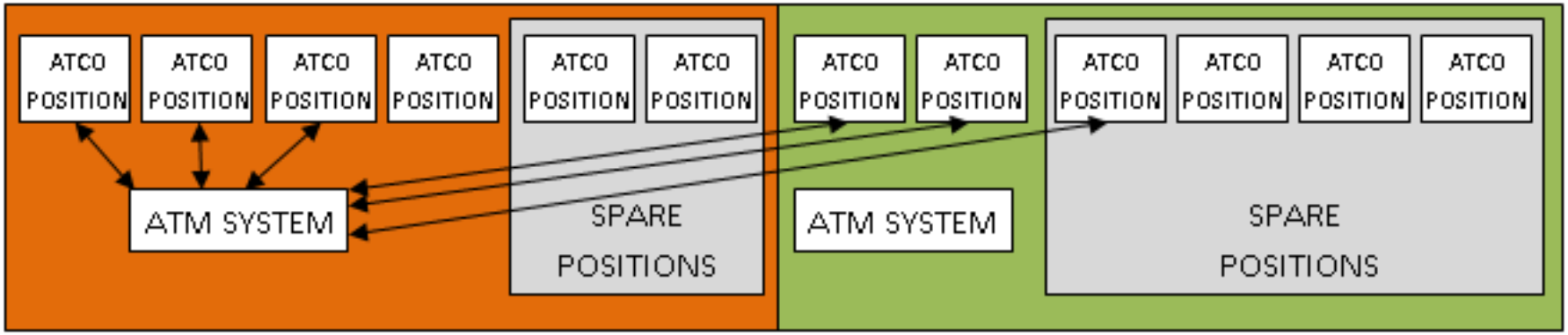
System physical configuration



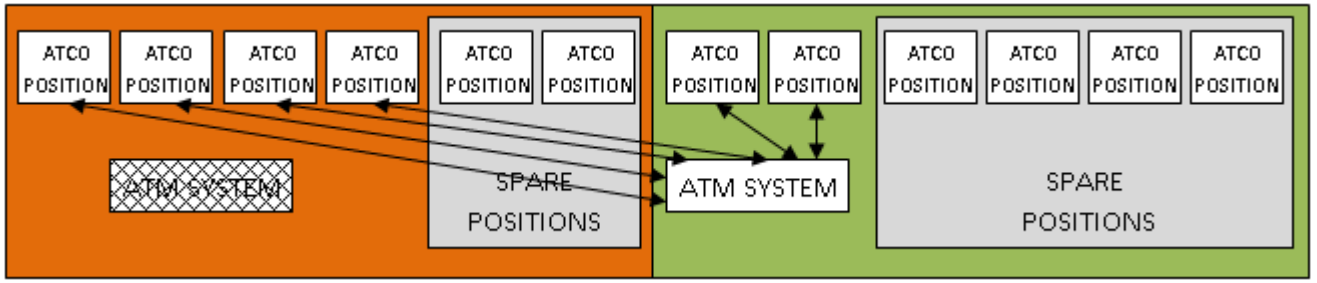
Single system operation mode



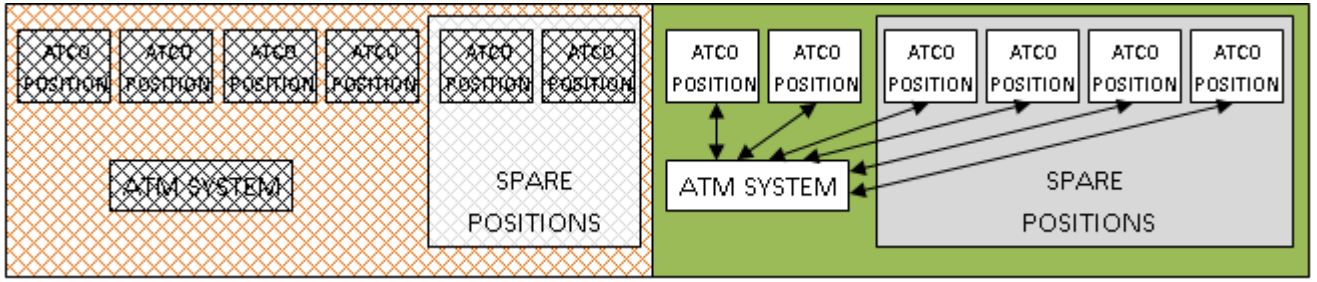
Joint operation mode – cross border operations



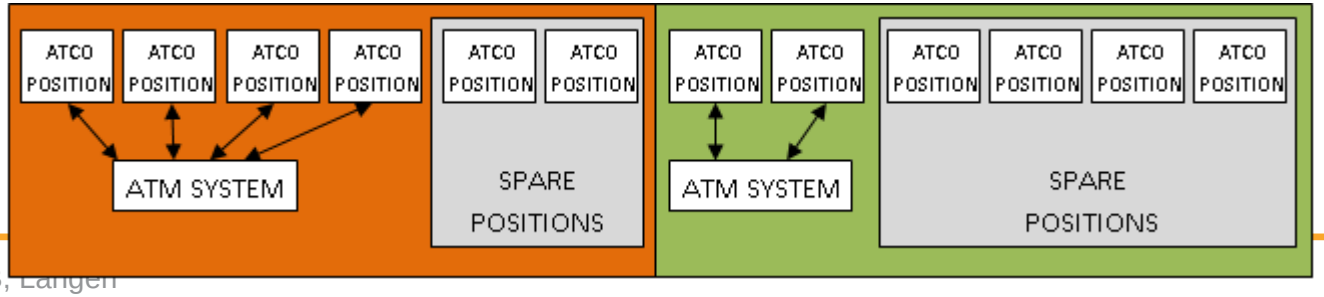
Single ATM system operation mode in the event of system failure



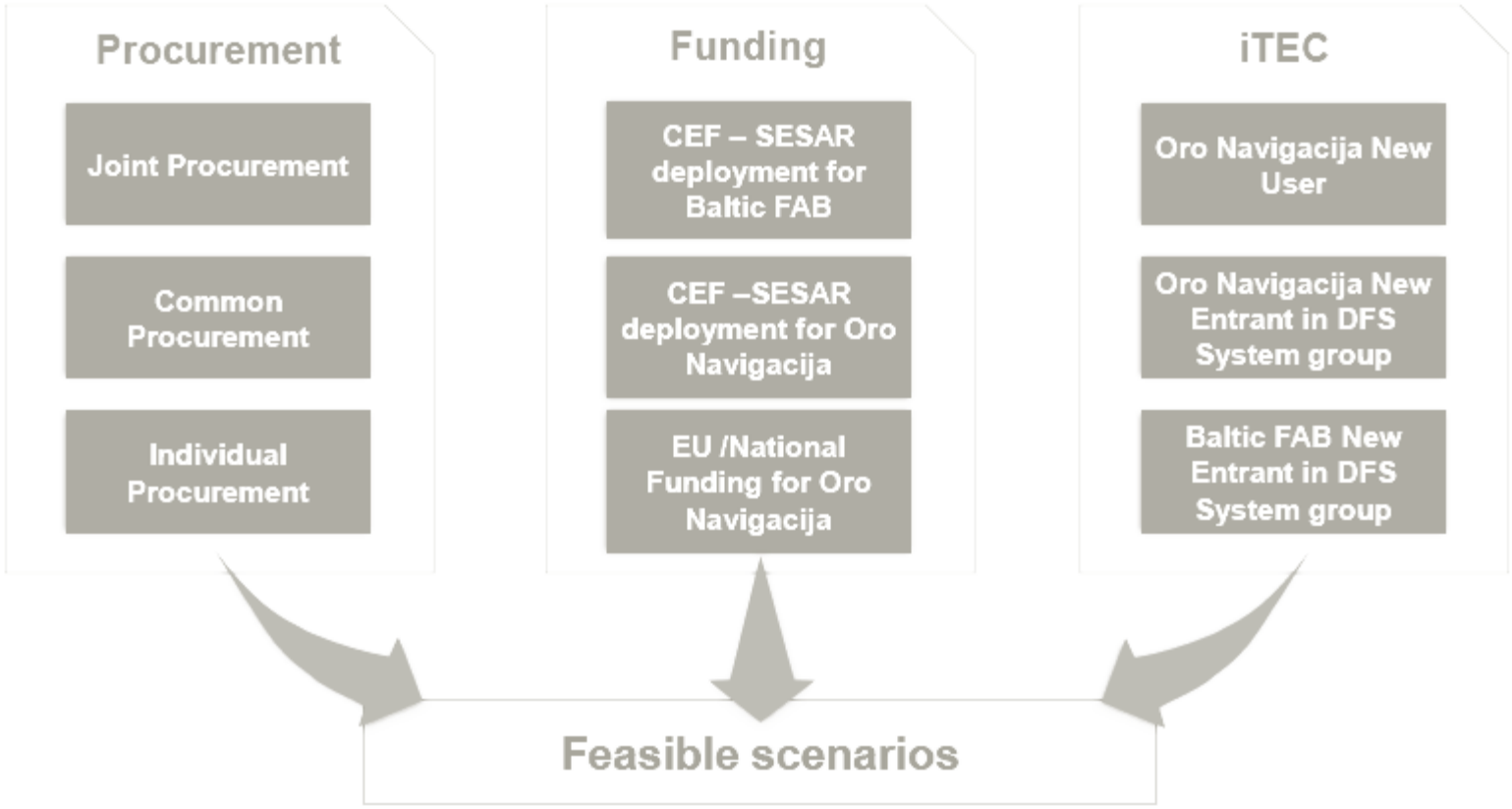
Single ATC centre operation mode in the event of ATC centre breakdown



Parallel system operation mode



	Procurement options	Analysis of the approaches
Individual procurement	• Most tender processes are run by individual ANSPs based on national legislation • If tenders surpass a certain monetary value, EU-wide rules have to be taken into account.	• Probably result in the fastest contract negotiation • Low harmonisation opportunities resulting in highest tendering, implementation and operational costs • The tender would probably go through an open call process
Common Procurement FAB Level	• Sharing of the procurement process in order to save costs and harmonize systems or services. • Involves separate contracts • Usually shared specification as a minimum, but offers flexibility • Still not widespread across ATM industry, but for for example already done in FABEC (VCS and AGDL)	• Already considered within the Baltic FAB implementation plan as an important factor in reducing costs and optimizing operations (30% cost savings estimated) • Public Procurement Law for Poland and Lithuania are harmonized (EU legislation): ANSPs common procurement activities are possible • Oro Navigacija sharing the same system and support baseline for implementation, operation, training and maintenance with PANSA • Would allow to maximize the synergies and avoid gridlocks
Joint Procurement FAB Level	• Specification developed jointly • One procurement process and one contract • Focuses mainly on centralized solutions and must be supported by joint strategies • Joint Procurement initiatives have been explored in some FABs. For example in NEFAB (Norway, Finland, Latvia and Estonia)	• Joint Procurements for critical infrastructure can be seen as a legal issue but Baltic FAB already establishes its basis (Ex: Surveillance) • Most time consuming process due to the identification of the needs and the frameworks that have to be set up • PANSA only needs to upgrade its INDRA system while Oro Navigacija need to procure a new system: a single contract would probably be complex (very different approaches and costs)
Common/Joint Procurement Regional Level	• The Common/Joint procurement scenario could be extended to regional partners, especially in the case of small FABs with few members such as the Baltic FAB	• Due to the urgent need to procure a new ATM System within the Baltic FAB, this possibility would have to be explored in the future • An initial assessment reveals that ANSPs from NEFAB and FAB CE do not use INDRA ATM Systems: a joint procurement while keeping the Baltic FAB and SES objectives seems unrealistic


Procurement
Joint Procurement
Common Procurement
Individual Procurement
Funding
CEF – SESAR deployment for Baltic FAB
CEF –SESAR deployment for Oro Navigacija
EU /National Funding for Oro Navigacija
iTEC
Oro Navigacija New User
Oro Navigacija New Entrant in DFS System group
Baltic FAB New Entrant in DFS System group
Feasible scenarios

	Scenario 1 The integrated approach	Scenario 2 The intermediate approach	Scenario 3 The individual approach
Funding	• CEF –SESAR deployment for Baltic FAB	• CEF – SESAR deployment for Oro Navigacija	• EU/National Funding for Oro Navigacija
Procurement	• Joint procurement	• Common procurement	• Individual procurement
Access to iTEC	• Baltic FAB (Oro Navigacija & PANSA) → New Entrant + DFS	• Baltic FAB (Oro Navigacija & PANSA) → New Entrant + DFS	• Oro Navigacija as New User
Analysis	• Fully in line with the SES framework recommendations on the integration and exploitation of FAB agreements • Highest probability of a directly negotiated tender • Highest benefits exploited from FAB agreements • Due to the full integration of the projects at FAB level, requires a very strong framework → Risk of technical gridlock and delays	• Fully in line with the SES framework recommendations on the integration and exploitation of FAB agreements • Some probability of allowing for a directly negotiated tender • Very high benefits (Cost savings, schedule) exploited from FAB agreements • Allows for flexibility with regards to decisions at national level and at FAB level	• Low exploitation of FAB frameworks advantages, Higher costs. • High risk of not meeting SES targets in companion with PANSA (unless Indra is chosen). • Low probability of allowing for a directly negotiated tender • Due to the individual approach, Oro Navigacija would be less constrained with regards to project decisions

Political support

HEREBY TAKES THE FOLLOWING DECISION:

To approve the Road Map for technical solution of the Baltic FAB Common ATM System including the following items:

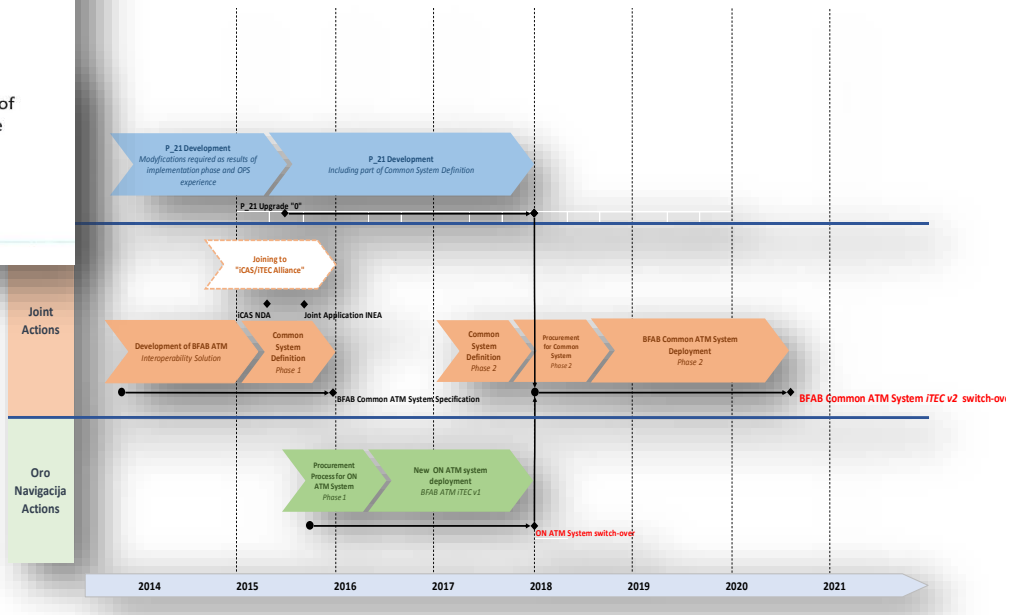
1. decision to join the iCAS/iTEC System Group;
2. prepare and submit join application to 2nd INEA Call for co-financing of the Baltic FAB Common ATM System deployment;
3. deployment of new SE "Oro Navigacija" ATM System aligned with iTEC Concept;
4. further PEGASUS_21 System development to be aligned with iTEC Concept;
5. joint deployment and further development of the Baltic FAB Common ATM System.

The RoadMap for Project 2.2 of the Baltic FAB Implementation Programme at Annex to this decision.

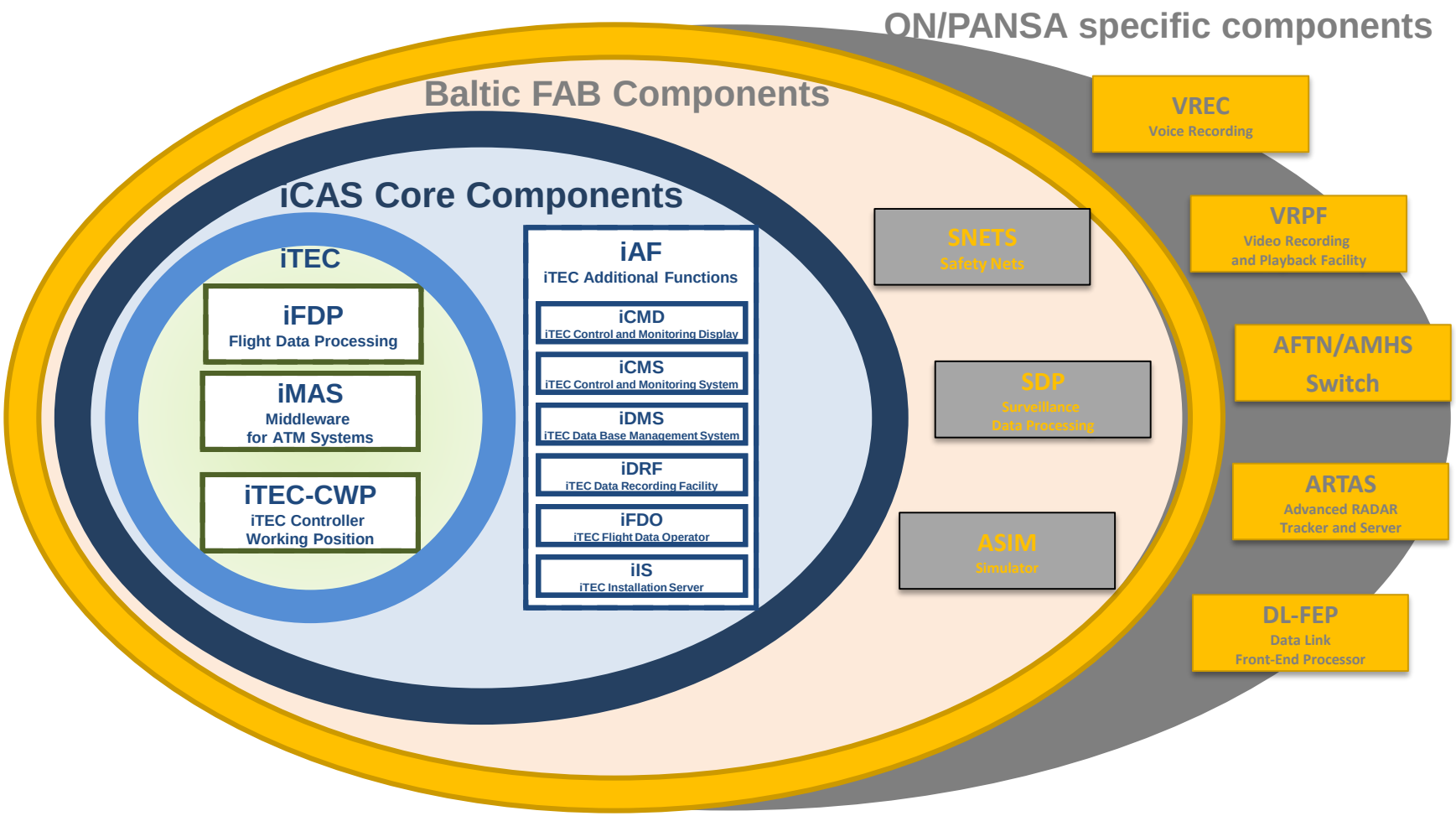
Done in Warsaw on 14th April 2015 in two identical copies in English.

Arijandas Šliupas
Vice-Minister of Transport and Communications
of the Republic of Lithuania

Sławomir Żałobka
Undersecretary of State in the Ministry of Infrastructure and Development of the Republic of Poland



Baltic FAB ATM System Components



Deadlines

Oro Navigacija	PANSA	Baltic FAB
May 2018 - A new ATM system shall be operational	**October 2015 –** An application for INEA	**2018 -** Implementation of the initial Baltic FAB ATM solution
February 2016 – An application for INEA	**2016 -** Pegasus 21 upgrade for iTEC	**2020 –** Contingency Service Provision
January 2016 – A call for Tender	**2017 -** Pegasus 21 upgrade for iTEC	**2020 –** Cross border Operations
	2020 - Pegasus 21 upgrade for iTEC	

ATM solution Development – Process