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Of I.R.IRAN

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# IRAN ASBU B0 Implementation

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Islamic Republic Of IRAN

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# ASBU



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## Before

- Where to start?!
- Where to stop?!
- When to stop?!
- Planning team composition?!
- Priorities?!
- Goals, CNS technologies or ATM benefits?!

## After

- B0 modules, MID priorities, less challenging modules.
  - By 2018 for B0.
  - Goals: Operational improvements
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# Planning Complexity



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## Before ASBU

- Two unknown equation:
  - Air navigation concepts ?!
  - Planning methodology ?!

## After ASBU

- One unknown equation:
  - Air navigation concepts ?!
  - Planning methodology

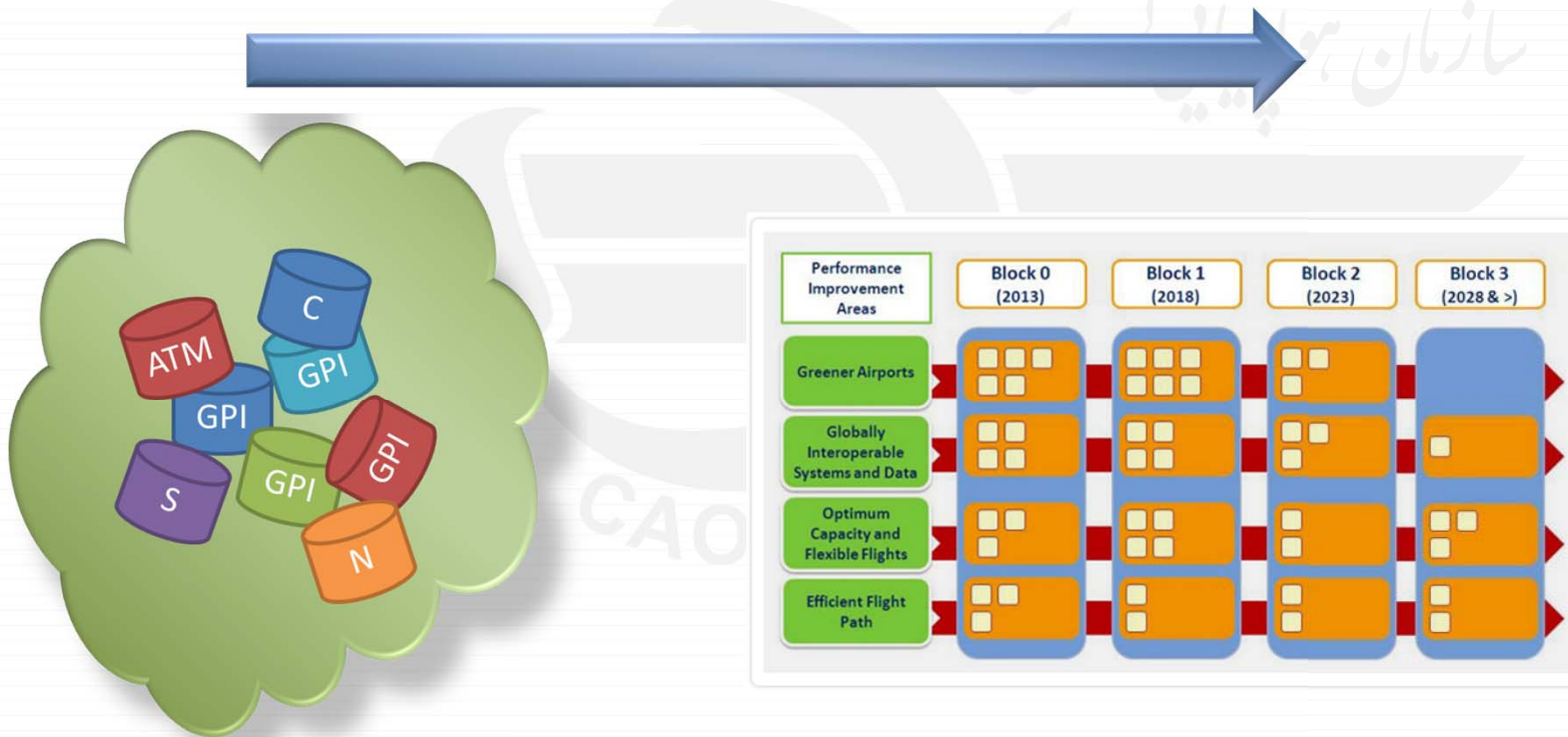
**Solved**

# Planning Complexity



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- Significant improvement



# ASBU implementation In I.R.IRAN



- Training
  - With thanks to ICAO MID Office
- Some Exercises
  - Small core planning team
- Team Build up
  - Flexible, based on subject
- National Framework Planning Method
  - Developing the procedures, documents, forms, etc.
- Analysis, Study and development of Air Navigation Plan

# ASBU Outcome?



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- **National Air Navigation Plan**
    - Defining Goals and implementation steps for:
      - Regulator
      - ANSP
      - Airlines
  - Issued as CAO.IRI CAD (Document)
  - Some high level regulation, same as parliament ratifications.
  - Air Navigation Plan, to be supported by different action plans.
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# ANP Location in regulation framework

ANS	Planning	Issuance the approvals	Oversight	Resolution/ Enforcement
Safety				
Security				
Sustainability	ANP			

# Planning Sessions



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# Planning Steps



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## 1. AIR NAVIGATION PLANNING FORM (ANPF)



National planning for ASBU Modules

### 2. REGIONAL/NATIONAL PERFORMANCE OBJECTIVE – **B0-FRTO**:

**Improved Operations through Enhanced En-Route Trajectories**

**Performance Improvement Area 3:**

To allow the use of airspace which would otherwise be segregated (i.e., special use airspace) along with flexible routing adjusted for specific traffic patterns. This will allow **greater routing possibilities**, reducing potential congestion on trunk routes and busy crossing points, resulting in reduced flight length and fuel burn.

### 3. ASBU **B0- FRTO**: Impact on Main Key Performance Areas (KPA)

	1-Access and equity	2-Capacity	3-Cost effectiveness	4-Efficiency	5-Environment	6-Flexibility
<b>Applicable</b>	Y	Y	-	Y	Y	Y
	7- Global interoperability	8-Participation by the ATM community	9- Predictability	10- Safety	11-Security	
<b>Applicable</b>	-	-	Y	-	-	

# Planning Steps



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4. ASBU <b>B0- FRTO</b> : Planning Targets and Implementation Progress				
5. Elements		6. Targets and implementation progress (Ground and Air)		
1. Airspace planning		Create Airspace Planning Team by Dec 2017		
2. Flexible Use of airspace		Create Airspace Management Cell by Dec 2018		
3. Flexible Routing		By Dec 2018		
7. ASBU <b>B0- FRTO</b> : Implementation Challenges				
Elements	Implementation Area			
	Ground system Implementation	Avionics Implementation	Procedures Availability	Operational Approvals
1. Airspace planning	CDM through Internet portal warning and alerts	Voice or FANS 1/A and ACARS	Y	Y
2. Flexible Use of airspace				

# Planning Steps



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سازمان هواپیمایی کشوری

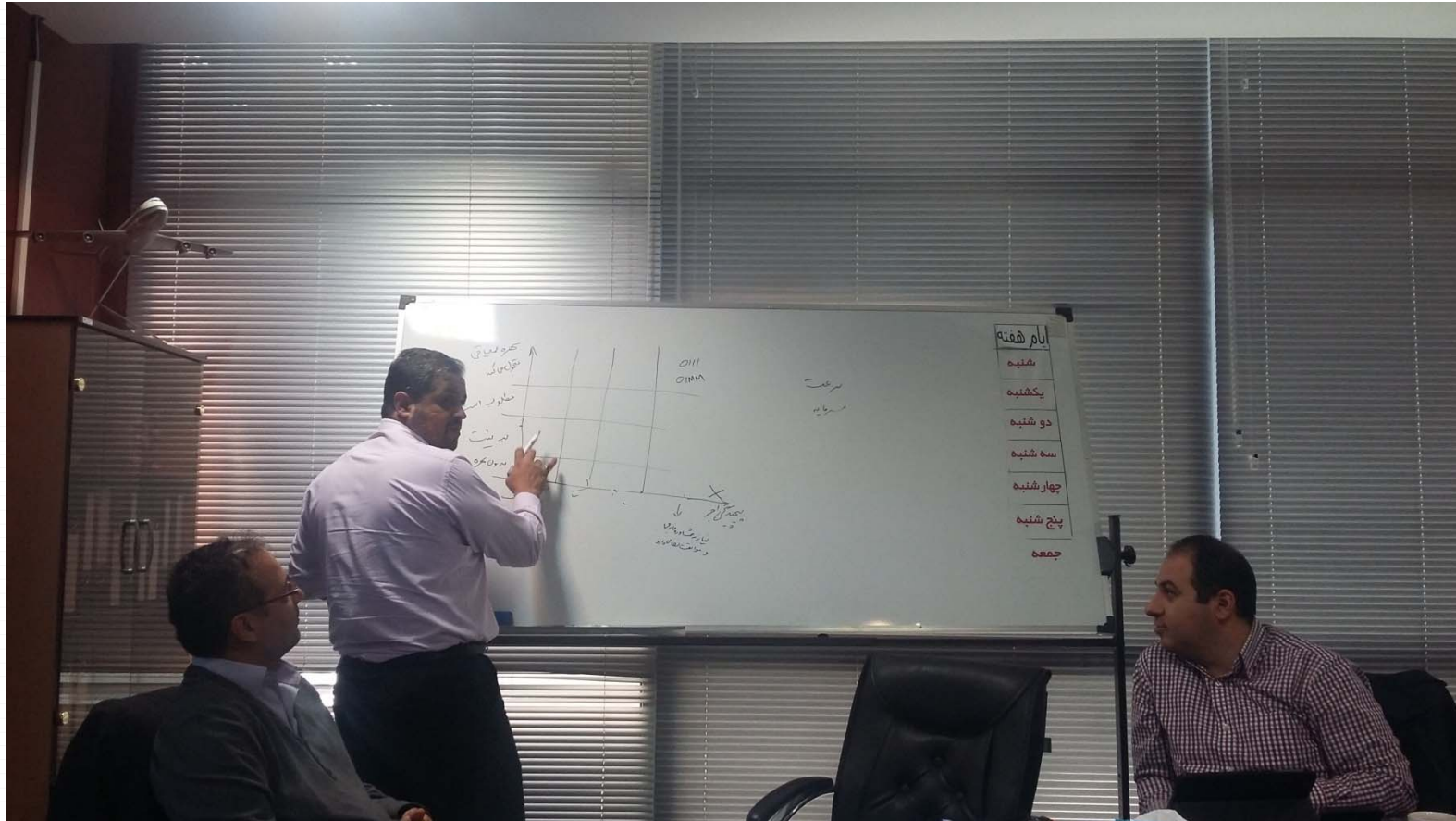
Implementation Steps	Applicability	Performance Indicators/Metrics	Milestone	Targets	Status	Responsible Body	Remarks
LNAV/VNAV Flight Procedure	OIII 29L/11R OIIE 29R/11L OIMM 31R/13L/31L/13R OIFM 26R/08L	Number of runway ends at International aerodromes with RNAV(GNSS) Approach Procedure (LNAV/VNAV)	Publication of LNAV/VNAV Procedure in AIP	50% by DEC. 2016 100% by DEC.2017	29 R OIIE Completed	IAC	
PBN PLAN	FIR	NA	Submission to ICAO MID	DEC. 2015	Draft PBN Plan developed by IAC waiting for CAO comment and approval	CAO	Fleet Assessment to be done
WGS84	FIR	Number of critical Points Identification	Publication of Coordinates in AIP tables	Completed	Completed	IAC	Resurvey in progress

Defining the Scope- Prioritization

# Prioritization Of Scope



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# Lessons We Learned



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- 
- Small core planning team with ASBU Knowledge
  - SMEs, even with no ASBU knowledge
  - Different team for different Modules
    - Keep the core team, invite SMEs
  - Reliance on current technologies for B0
-

# Lessons We Learned



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- 
- Have a look at B1 while planning for B0
  - Periodic meetings with senior managers/policy makers
  - Refer to ICAO global and regional guidelines/framework, but define your own priorities
    - Access?!, Capacity?!, Efficiency?!, Environment?!, Safety?!
  - Serious cost/benefit analysis will be required for B1,2
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# Challenges & Difficulties

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- Lack of common understanding in team
  - Some concepts are clear and straightforward,
  - Some concepts are not so clear
    - Elements are not definitive
    - Ambiguous milestones
  - Some modules need regional planning
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# Our Vision on Block 1



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- Training should be started now.
  - Internal studies should be matured, before participation in regional planning or decision making activities.
  - Deep and meaningful training to be offered by ICAO, with assistance of experts from successful projects (NextGen, SESAR, ...)
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**THANKS**