



**MANAGING SKIES  
SECURING LIVES**

# **Flexible Use of Airspace (FUA) ICAO-MID ASM WG1**



**BEYOND**

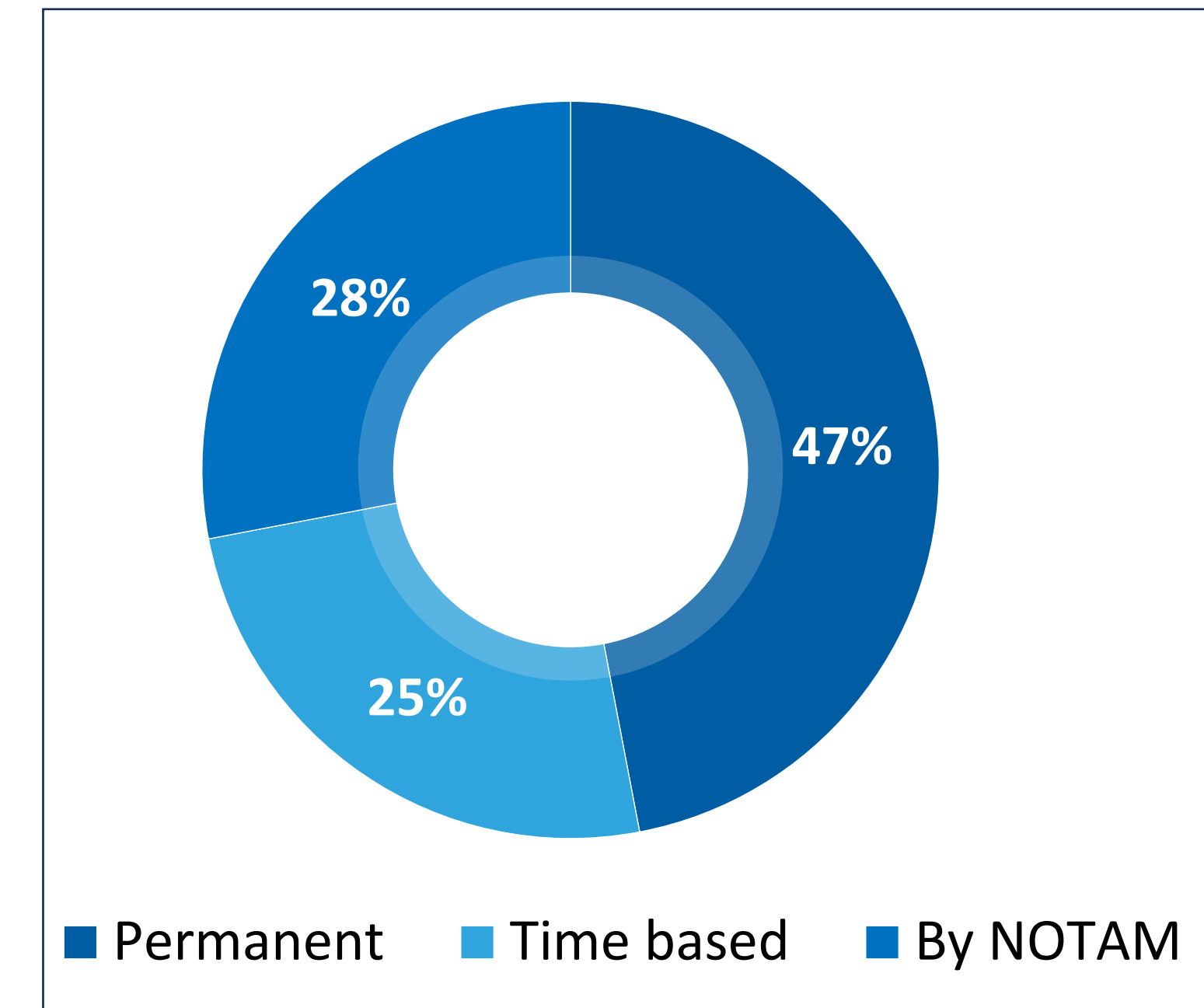
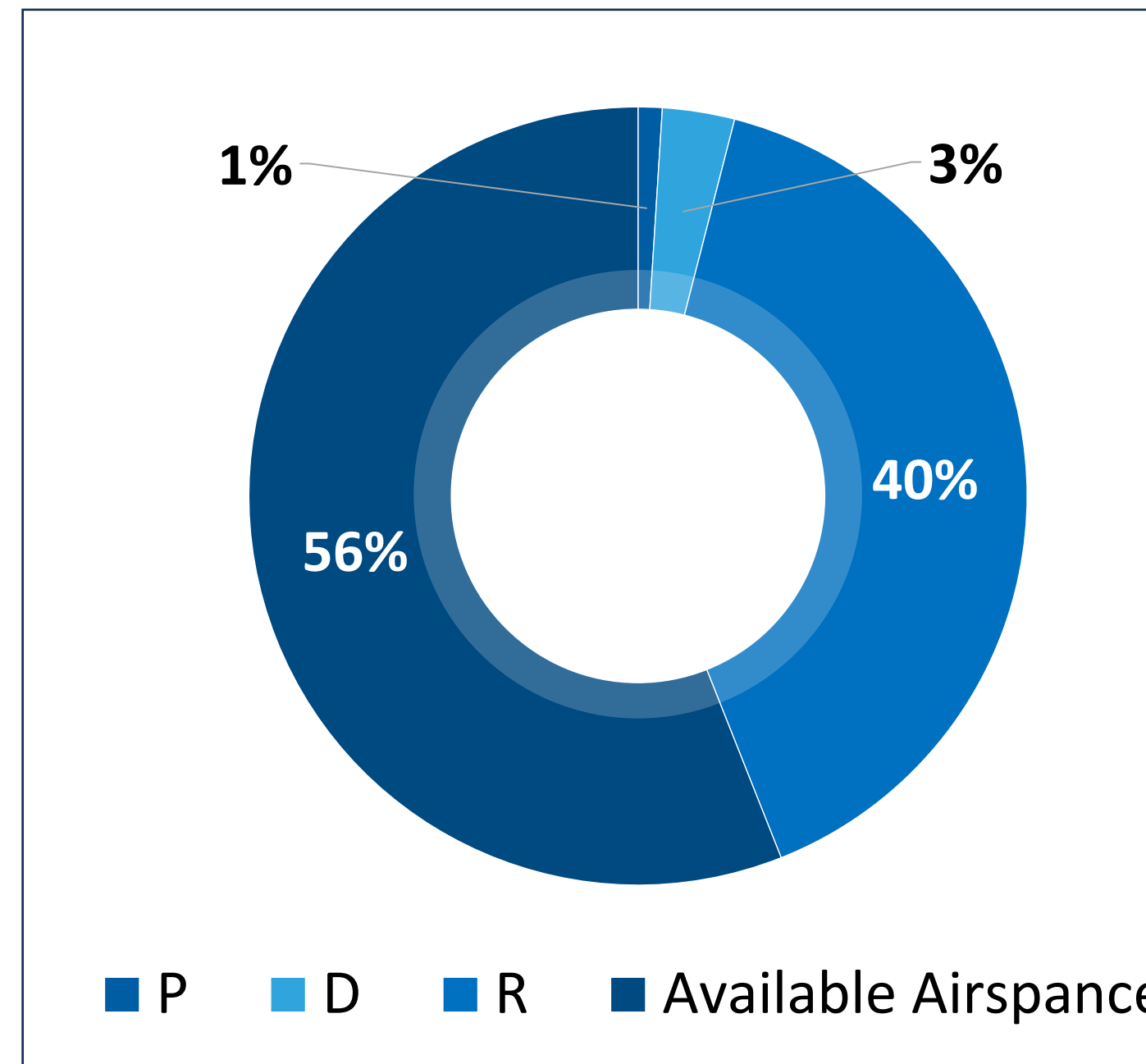
# Flexible Use of Airspace

Flexible use of airspace (FUA) is an airspace management concept based on the principle that airspace should not be designated as purely civil or military, but rather as a continuum in which all user requirements are accommodated to the greatest possible extent.



# Airspace Analysis and Planning

**P**rohibited **12**  
**D**anger **55**  
**R**estricted **60**



Owner

%

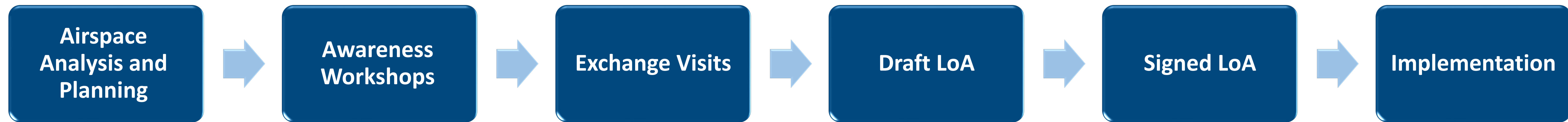
<b>Ministry of Defense</b>	<b>40.20%</b>
Ministry of Interior	1.08%
Ministry of National Guard	0.11%
Saudi Airlines Academy	0.52%
<b>Holy areas</b>	<b>0.10%</b>

<b>Air Forces</b>	<b>35%</b>
Ground Forces	4%
Navy	0.91%
Air Defense	0.29%

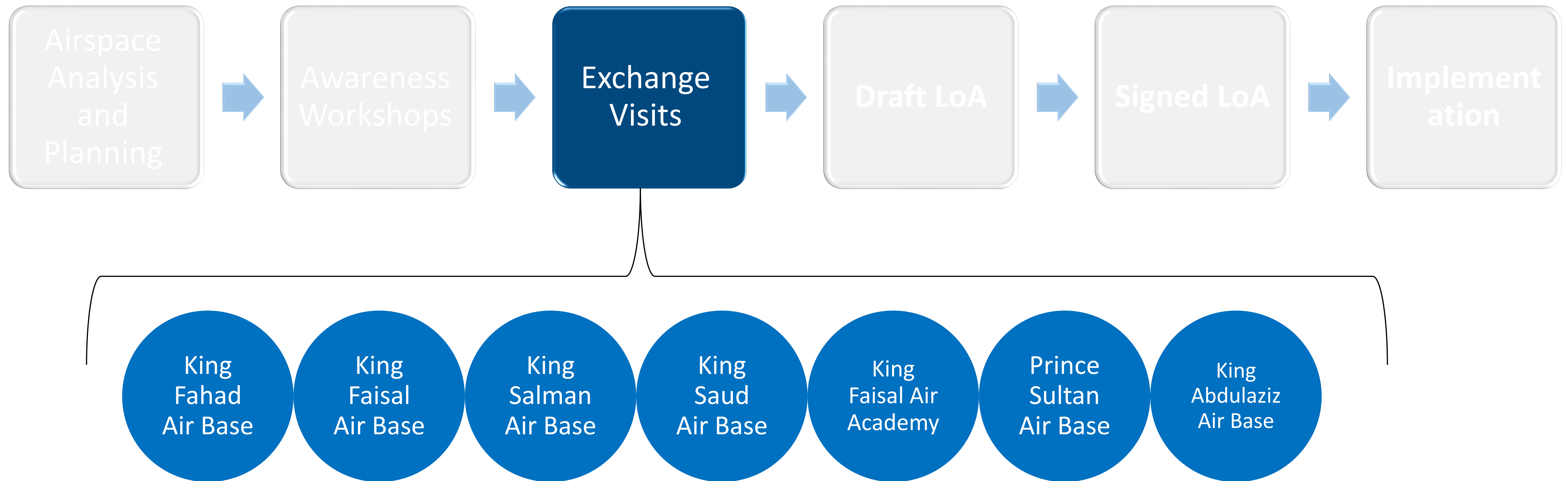


# Airspace Analysis and Planning

**As military as required, As civil as possible**



# Exchange Visits



# Exchange Visits

Airbase	Visit	Negotiation	Drafted LoA	Signed LoA	Implementation	Periodic Review
Khamis Mushait	Done	Done	Done	Done	Done	TBD
Taif	Done	Done	Done	Done	Done	TBD
Alkharj	Done	Done	Done	Done	Done	TBD
Riyadh	Done	Done	Done	Done	Done	TBD
KFAA	Done	Done	Done	Done	Done	TBD
Aljouf	Done	Done	Done	Done	Done	TBD
HFR	Done	Done	Done	Done	Done	TBD
Tabouk	Done	Done	Done	Done	Done	TBD
Dhahran	Done	80%	80%	TBD	TBD	TBD

External Meetings  
**18+**

Working Hours  
**600+**

# Agreements Levels

## Level 1

- Strategic agreement between Air Force Operations Authority and Saudi Air Navigation Services (SANS) to regulate airspace reservation, CNS and Automation systems, Investigations and operation references

## Level 2

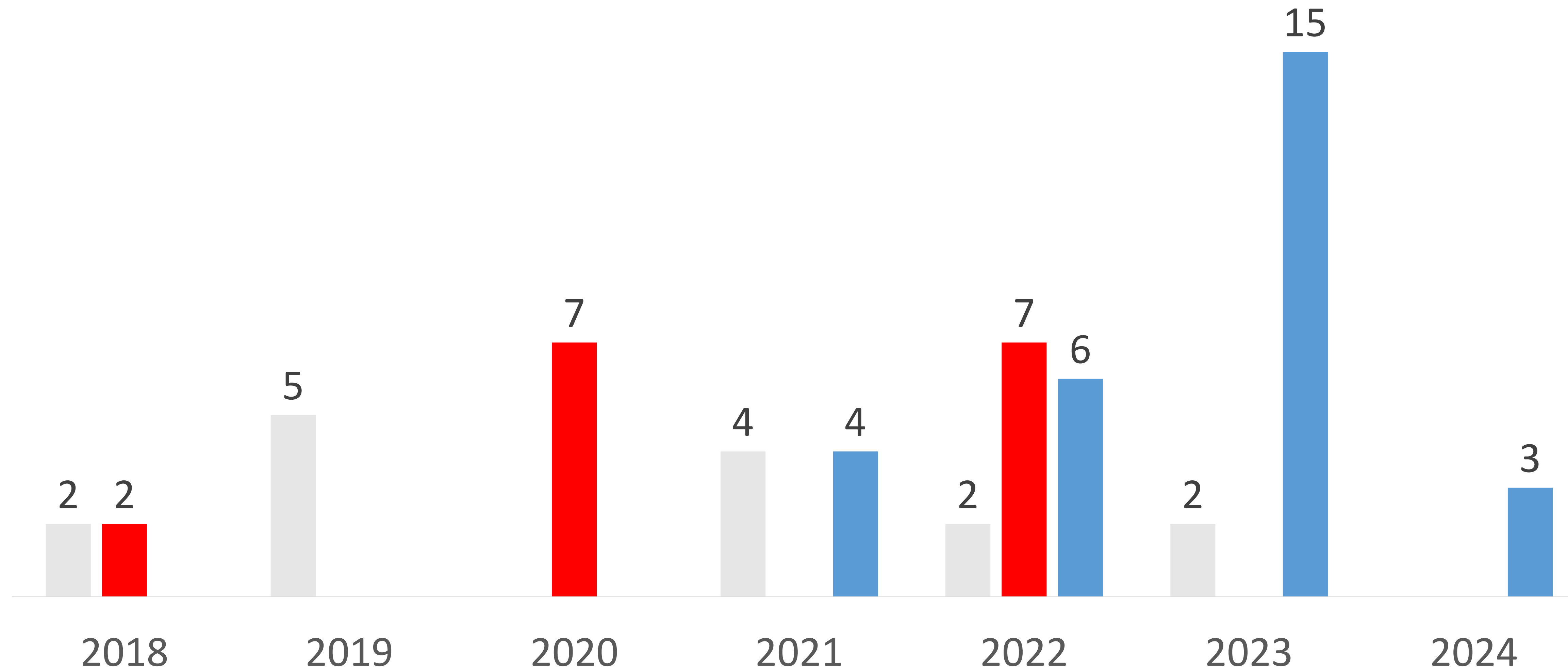
- Agreement between each Air base and SANS | ATM (Air Traffic Management) to regulate how to reserve the needed areas for operations, in addition to the coordination methods before, during and after the reservation

## Level 3

- Agreement between each controlling military unit and ATM | ATC Center/Unit to set procedures such as the movement to\from reserved areas and air bases.

# FUA Implementation

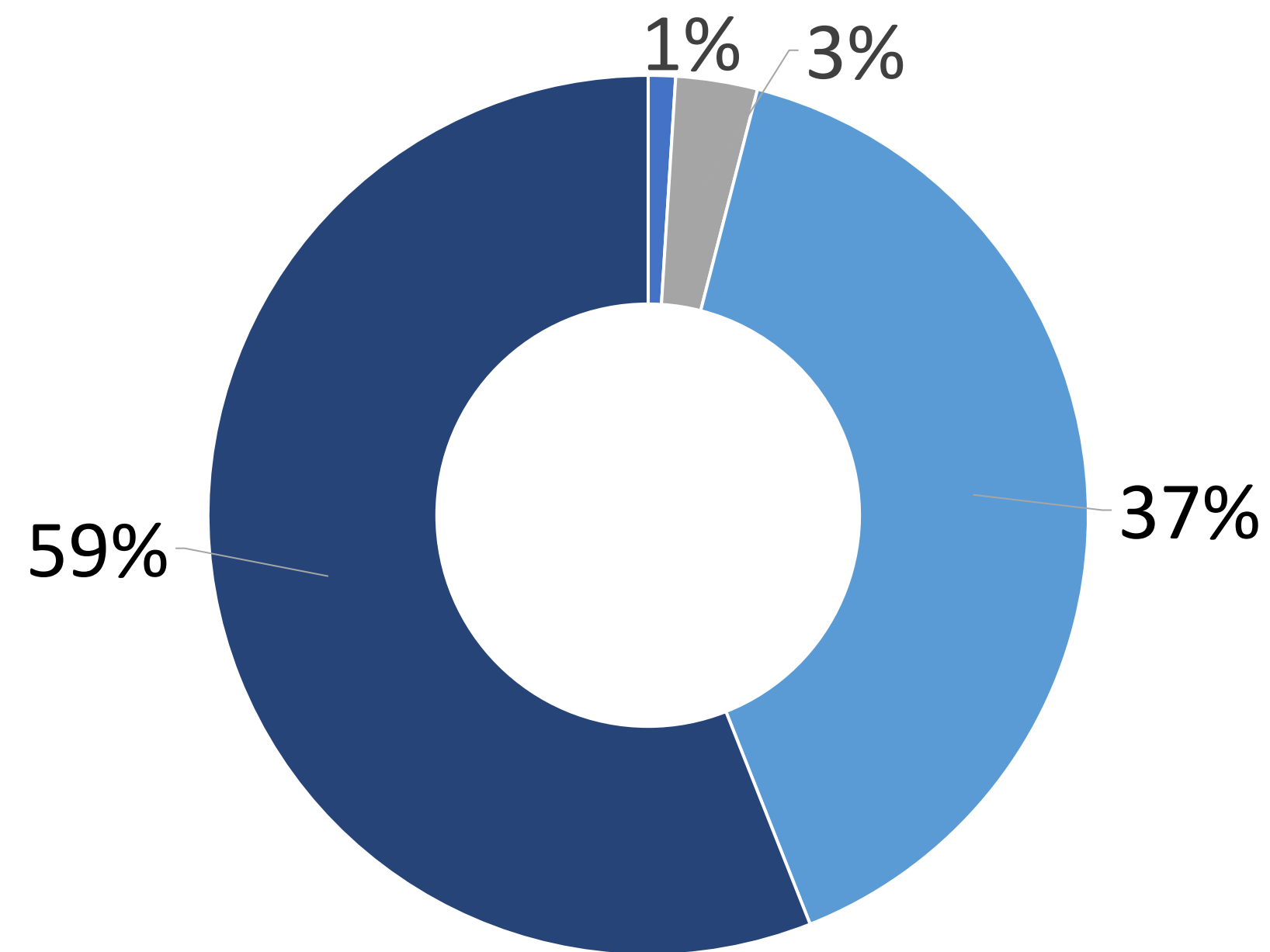
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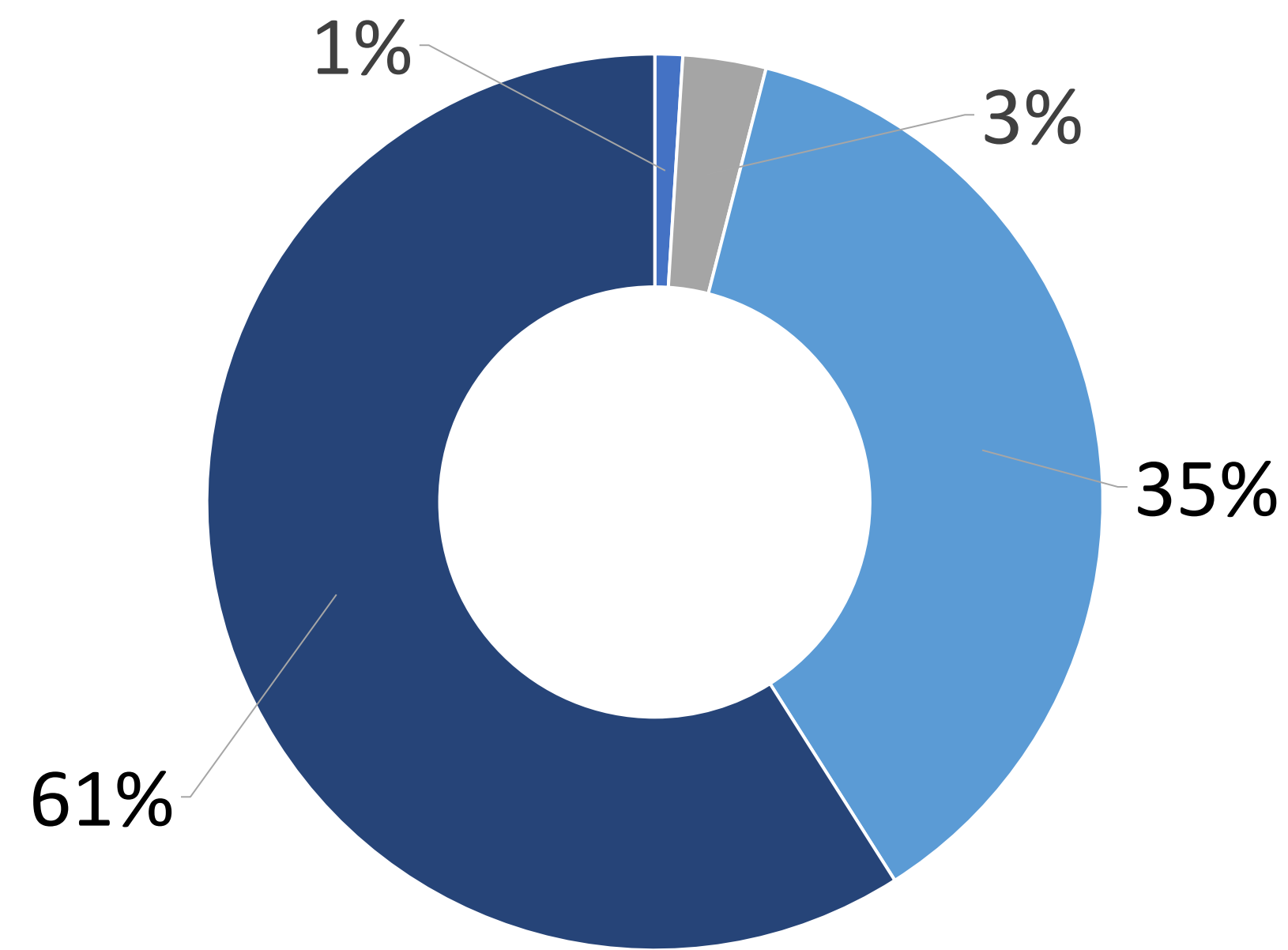


# FUA Implementation

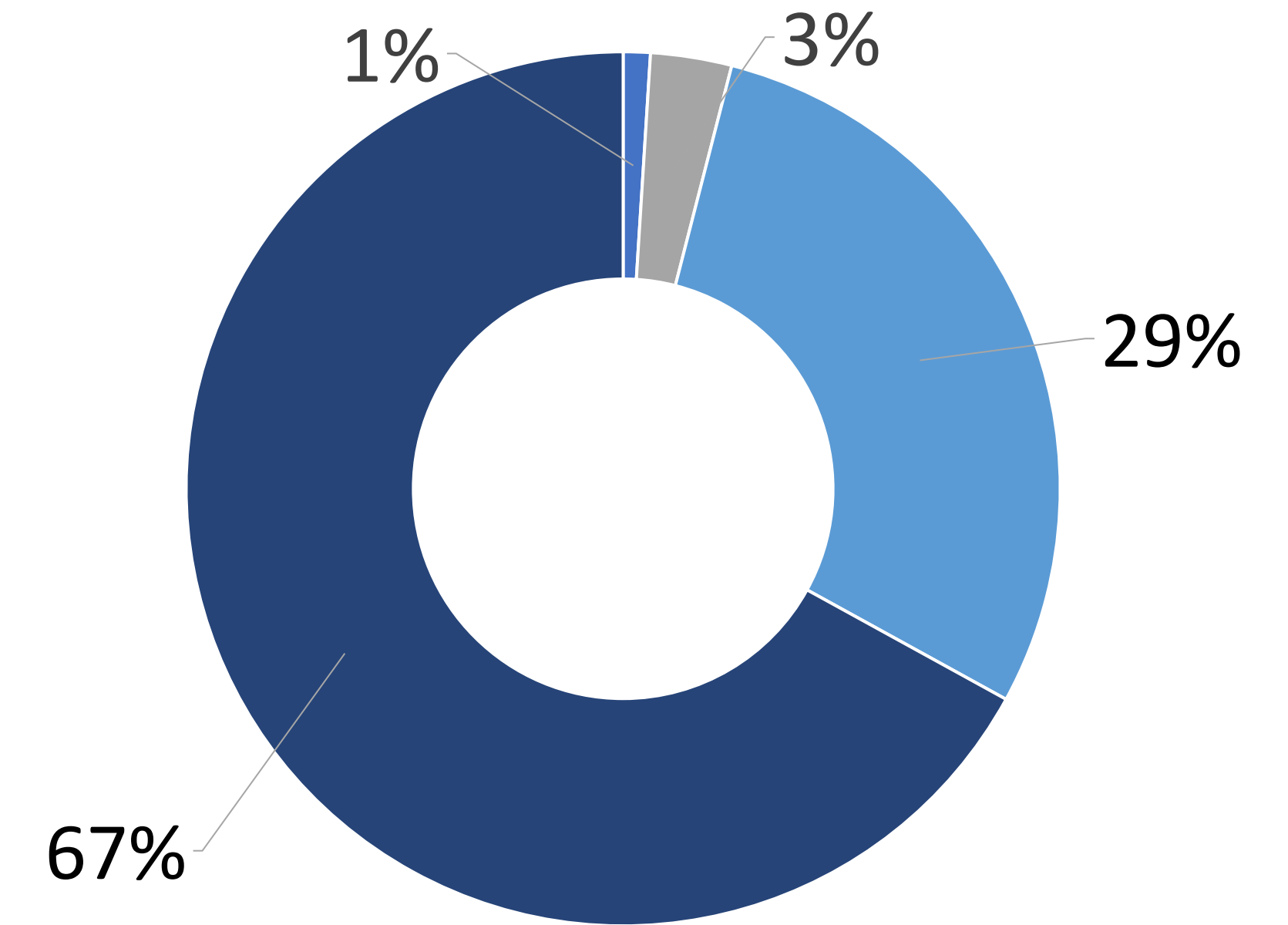
**2021**



**2022**



**2023**



■ P ■ D ■ R ■ Available Airspace

Recaptured 3.6% 2021 = FUA 24%

Recaptured 5.6% = FUA 27%

Recaptured 7.1% = **FUA 33%**

## Benefits

### Airlines

- increase of route options.
- Minimize en-route extensions.
- Reduce fuel consumptions.
- Improve flight efficiency.

### Military

- Satisfy their operational needs.
- Adequate volumes for the missions.
- Flexibility of planning and timing.

### ANSPs

- Improve efficiency
- Reduce controllers workload
- Reduce complexity
- Maintain high level of safety
- Increase capacity
- Utilization of civil/military airspace structures
- Stability of the planning and predictability

1. Historical background and Definitions
2. Flexible Use of Airspace (FUA) concept
  - Enhanced Civil-military cooperation
  - Basic FUA
  - Advanced FUA
3. FUA Concept Implications

#ندير الأجواء لبلادكم

عقدت شركة خدمات الملاحة الجوية السعودية ورشة عمل بعنوان  
**الاستخدام الأمثل للمجال الجوي**  
وذلك خلال يومين متتاليين بمشاركة القطاع العسكري ووفود من :



**بهدف**

التعاون بين مستخدمي المجال الجوي لتفعيله بالطريقة الأمثل  
تبادل الخبرات وتعميق العلاقات بين الوفود المشاركة

تعزيز فعالية استخدام المجال الجوي

SANS.COM.SA | SAUDI AIR NAVIGATION SERVICES | SANS\_KSA



الهيئة العامة للطيران المدني  
General Authority of Civil Aviation



**SANS**

خدمات الملاحة الجوية السعودية  
Saudi Air Navigation Services

THANK YOU

BEYOND 