

PBN IMPLEMENTATION

**IN THE
ISLAMIC REPUBLIC OF IRAN**

PBN SG/2

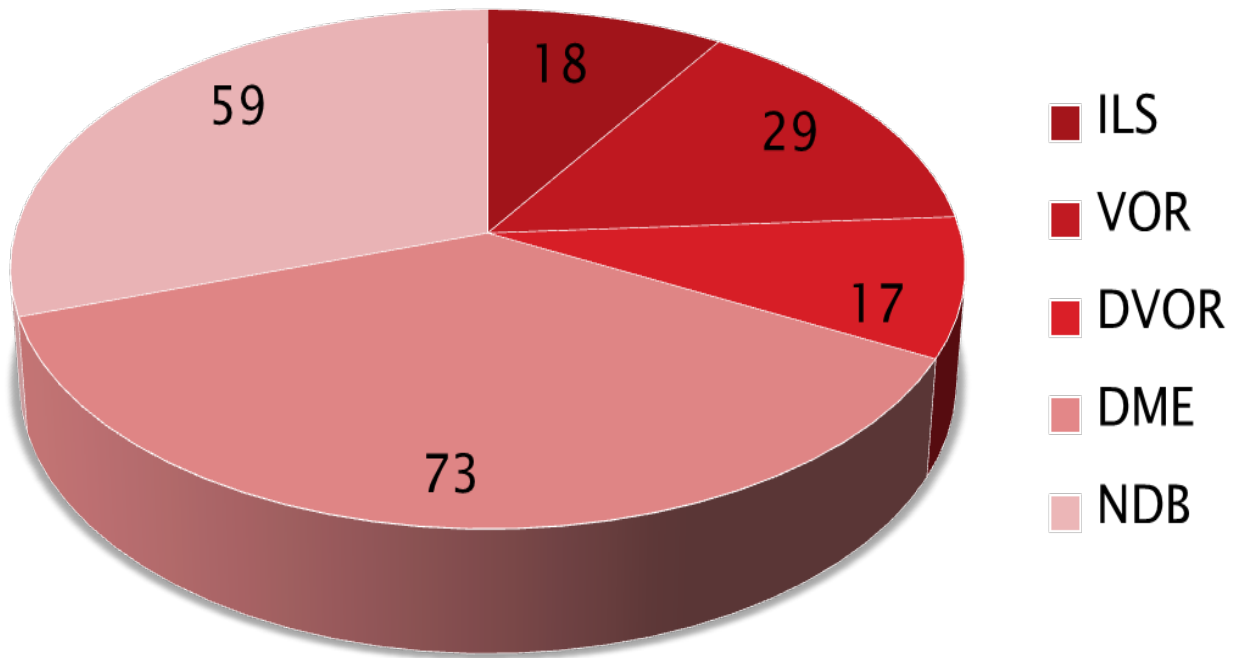
(Sharm El Sheikh, Egypt, 22-25 February 2016)

Current Status

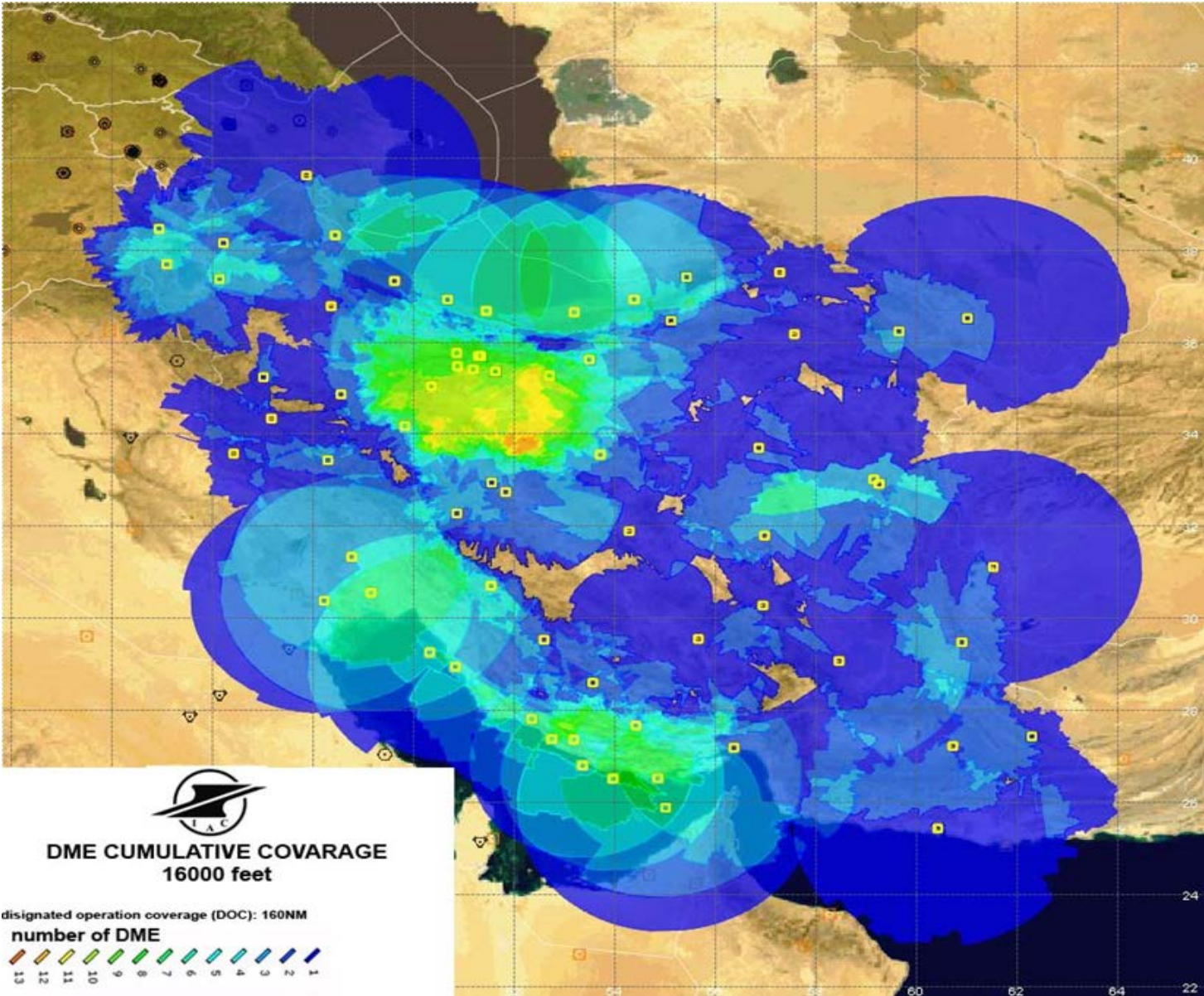
(Conventional SIDs/STARs/IAPs)

- 48 ILS CAT I IAP
- 1 ILS CAT II IAP
- 120 VOR/DME IAP
- 84 VOR IAP
- 51 NDB/DME IAP
- 96 NDB IAP
- 630 STARs
- 720 SIDs

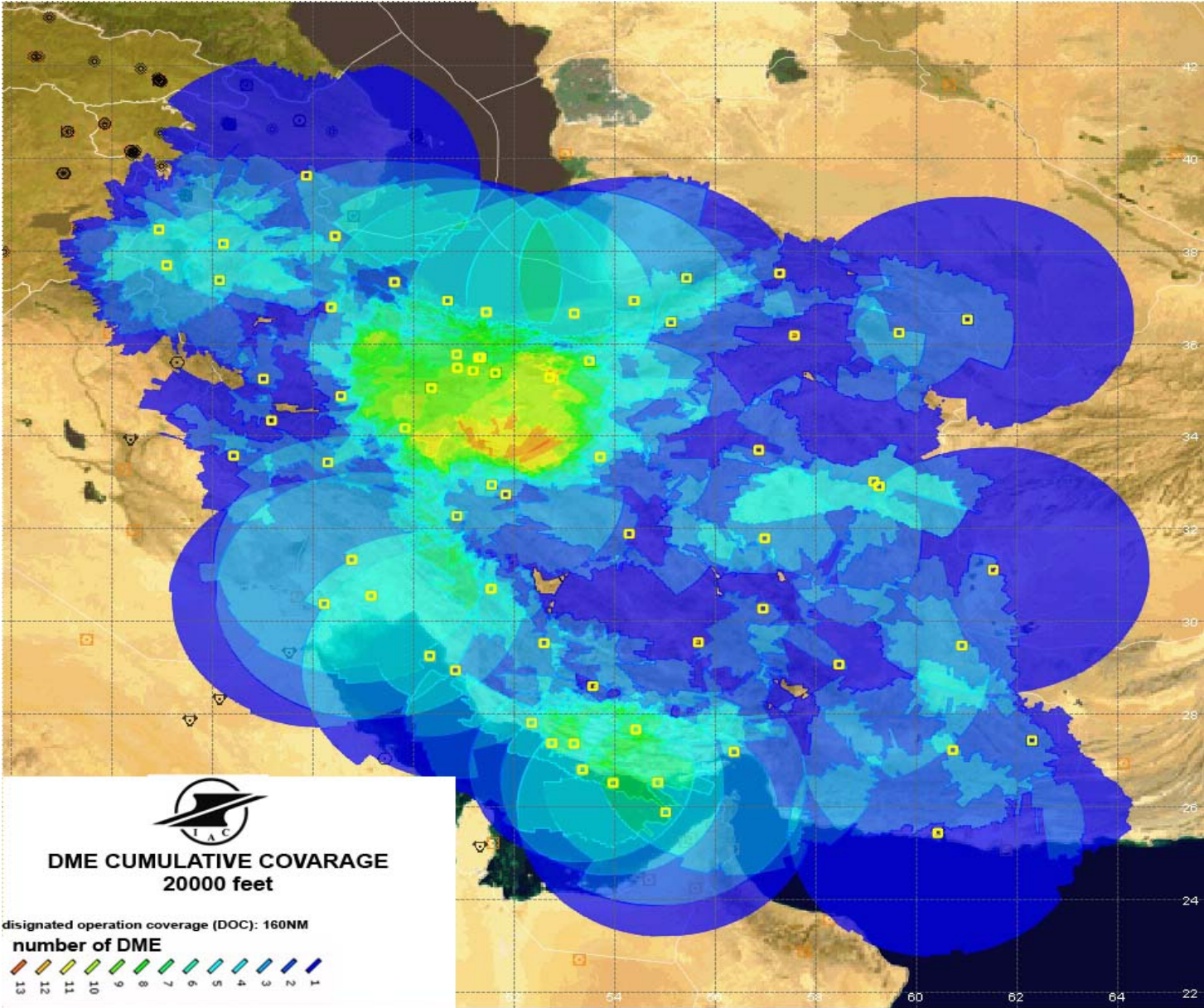
Navigation Infrastructure (Conventional NAV AIDs)



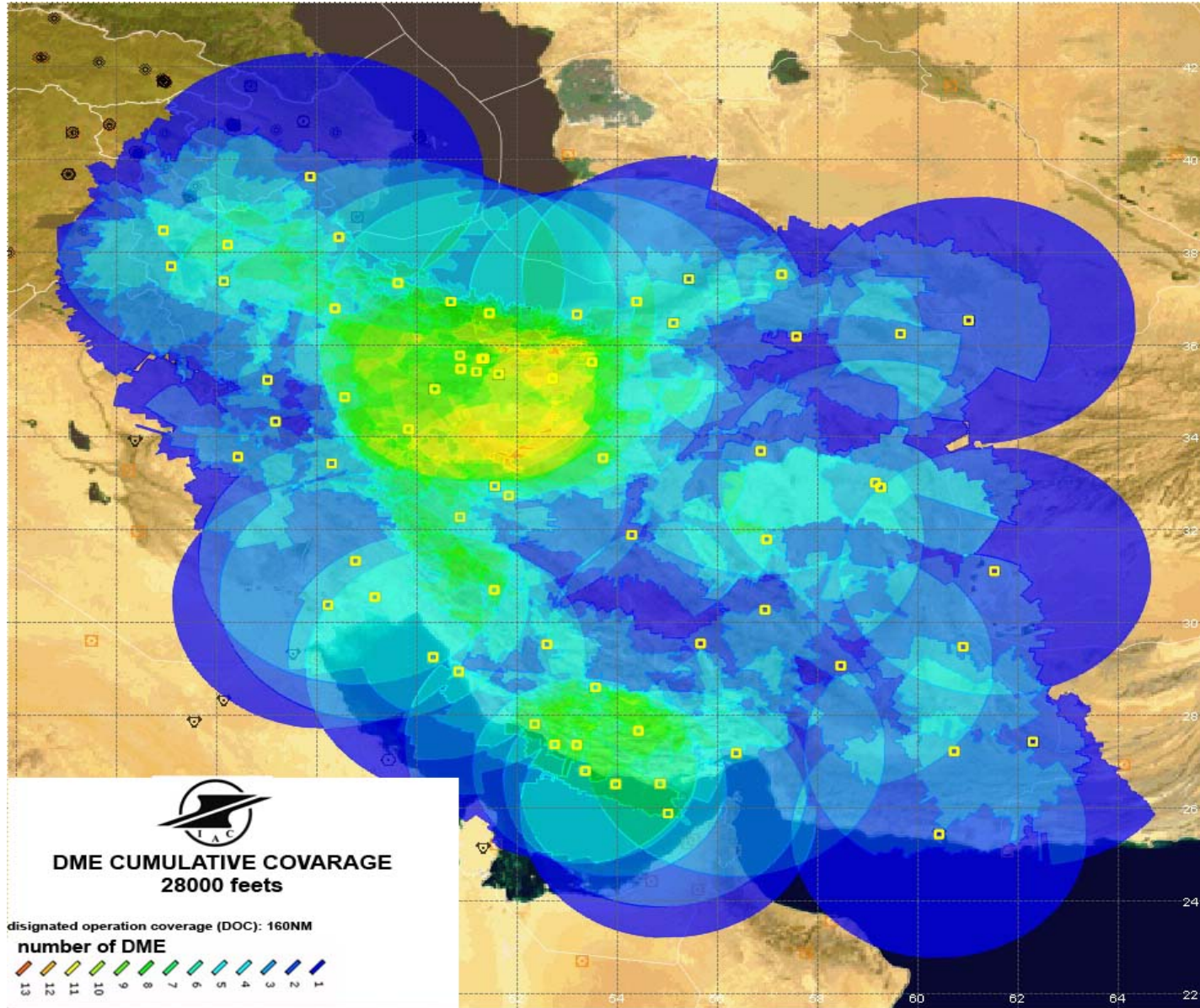
DME Coverage – 16000 FT



DME Coverage – 20000 FT



DME Coverage – 28000 FT



PBN Implementation

Current Status

Enroute

- **RNAV 5**
- **43 RNAV 5 ATS Routes Implemented**

- **RNAV 1**
- **5 RNAV 1 ATS Route Implemented**
 - M324 and M318 (already implemented)
 - M317, UL223 and UT36 (WEF 3 March 2016)

Approach

LNAV/VNAN in the International Aerodromes

- OIIE – Implemented
- OIII – 26 MAY 2016 RWY 29 L
- OIMM – 28 APR 2016
- OIFM – 21 JUL 2016
- OIKB – 28 APR 2016
- OISS – 23 JUN 2016
- OITT – 23 JUN 2016
- OIZH – 26 MAY 2016
- OIYY – 21 JUL 2016

OIE Baro-VNAV (Implemented)

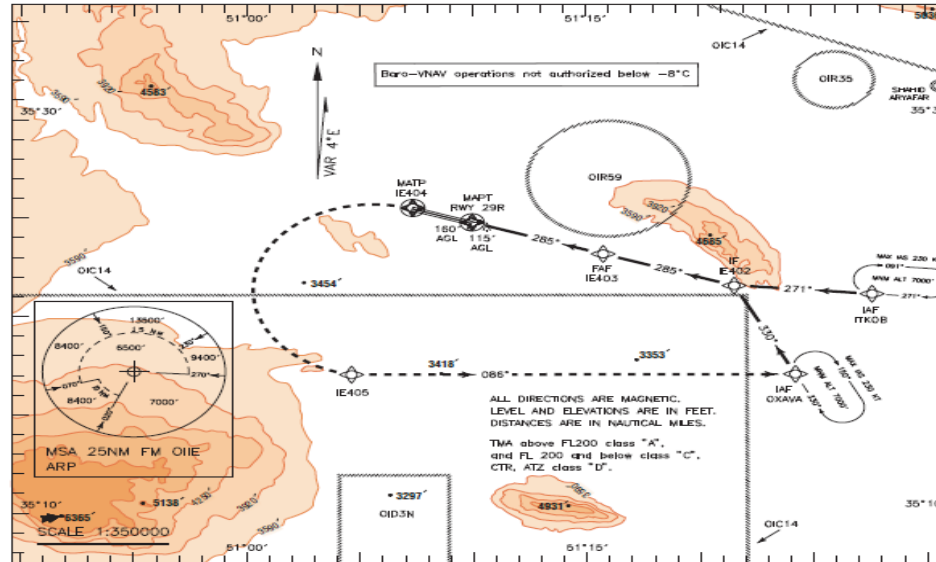
AIP
ISLAMIC REPUBLIC OF IRAN

AD 2 OIE IAC 0-1
WEF 18 SEP 14

INSTRUMENT APPROACH CHART-ICAO
AERODROME ELEV. 3305 FT
HEIGHTS RELATED TO THR RWY 29R ELEV. 3256 FT

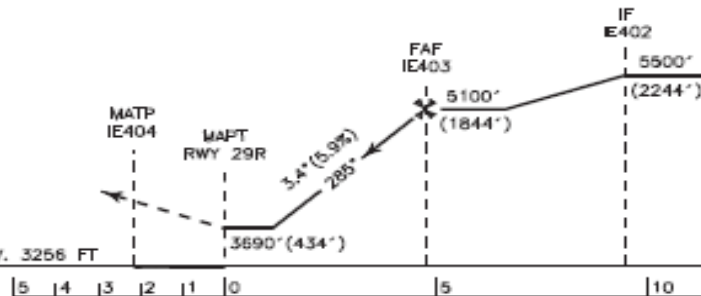
APP 119,700, 125,100
RADAR 119,700, 125,100
TWR 119,700
GND 121,600, 121,825
ATIS 127,200

TEHRAN/IMAM KHOMAINI
RNAV(GNSS) RWY 29R
CAT A/B/C/D



MISSED APPROACH: Climb straight ahead to IE404, turn left via IE405 to OXAVA, climb to 7000FT.

TRL FL 110
TA 9000'



WAYPOINT COORDINATES		
WP	LATITUDE	LONGITUDE
OXAVA	351702.93N	0512413.26E
ПКОВ	352106.63N	0512737.59E
IE402	352132.94N	0512132.09E
IE403	352310.27N	0511544.88E
МАРТ	352447.33N	0510957.43E
IE404	352531.22N	0510719.91E
IE405	351702.85N	0510437.12E

5 14 13 2 1 0 5 10 15 NM FM THR RWY 29R

SID / STAR

International Aerodromes

- OIIE – Implemented
- OIII – 26 MAY 2016
- OIMM – 28 APR 2016
- OIFM – 2 1 JUL 2016
- OIKB – 28 APR 2016
- OISS – 23 JUN 2016
- OITT – 23 JUN 2016
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- OIYY – 21 JUL 2016

Iran PBN Implementation Plan

Near Term (2013 – 2018)

Phase of Flight	Navigation Specification	Places
En - route	RNAV5 & RNAV1	Tehran FIR (Above FL 200)
TMA	RNAV1 in Surveillance Environments RNP1 in Non- Surveillance Environments	Int. Airports
Approach	RNP APCH with Baro-VNAV	Int. Airports

Mid Term (2018 – 2023)

Phase of Flight	Navigation Specification	Places
En - route	RNAV5 & RNAV1	Tehran FIR (At or Above FL 200)
TMA	RNAV1 in Surveillance Environments RNP1 in Non- Surveillance Environments	Domestic Airports
Approach	RNP APCH with Baro-VNAV	Domestic Airports
	In case of operational benefits, commencement of RNP AR study phase	Int. Airports

Long Term (2023 – 2028)

- **Enroute:**
RNAV 5 & RNAV 1 at or above FL160
- **TMA:**
Fully completed
- **Approach:**
GLS for Int. Airports

Training

- **ATC:** Under planning
- **Procedure Designers:** 3 officers were trained in SAA

Challenges

- Data gathering
- Data validation
- Flight Validation

