A faint, dotted world map is visible in the background of the slide. A thick blue horizontal bar with a slight 3D effect is positioned above the main title.

# **Review of the AIRAC System – a Data-House View**

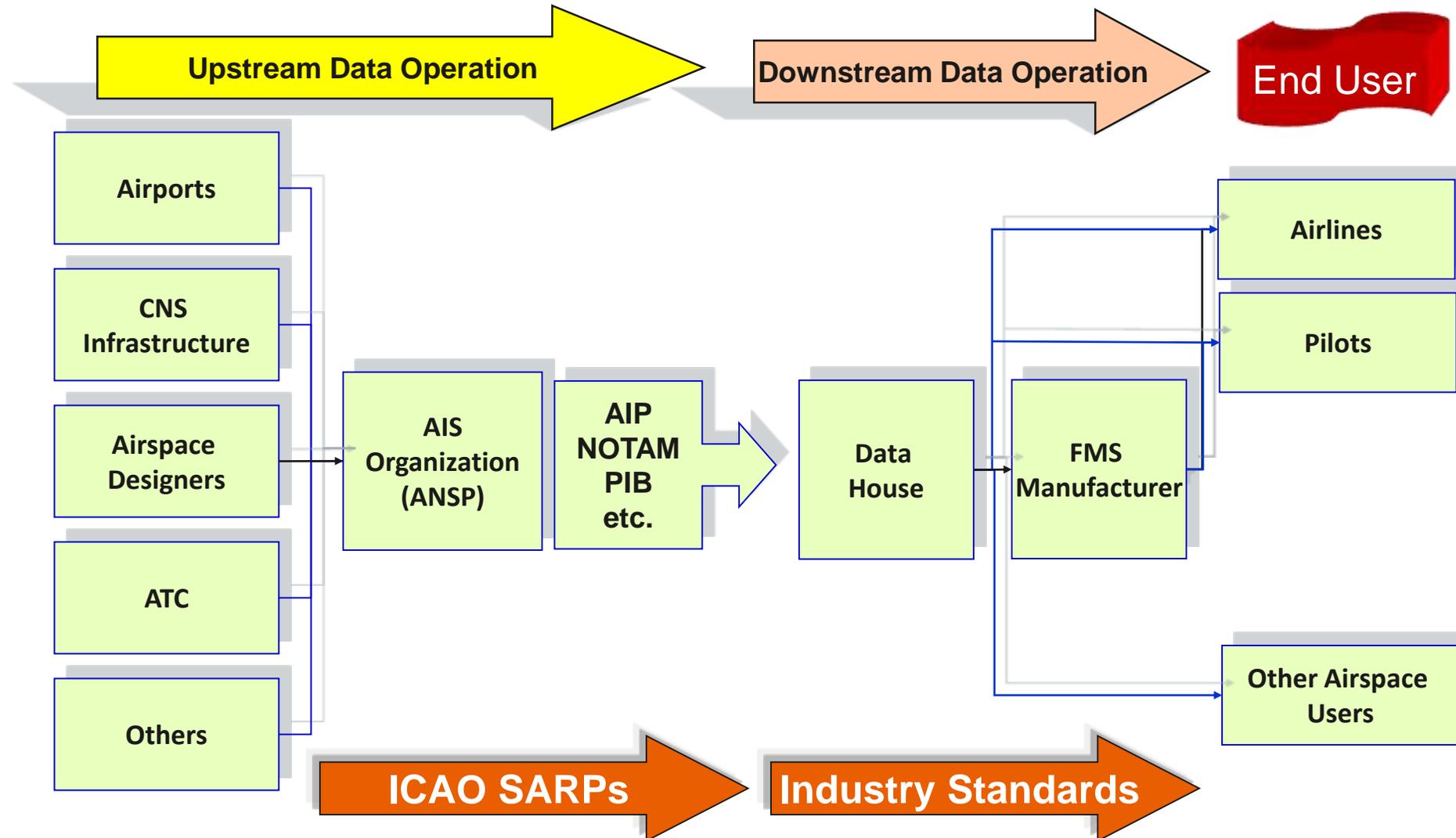
**ICAO WACAF NOTAM/SNOWTAM Workshop**

**Volker Meyer – Manager International Relations**

**23 June 2021**

# Aeronautical Data Supply Chain

Global Services



# Data Flow and Data Quality Requirements

Compiles Data and  
Designs Procedures



Packs and Delivers to  
User

Translates, Codes and  
Formats





## CHAPTER 2. AERONAUTICAL INFORMATION MANAGEMENT

...

### 2.2 Data integrity monitoring and assurance

...

*Note.— Guidance material in respect to the processing of aeronautical data and aeronautical information is contained in **RTCA Document DO-200B** and European Organization for Civil Aviation Equipment (**EUROCAE**) Document **ED-76A** — **Standards for Processing Aeronautical Data**.*

## CHAPTER 2. AERONAUTICAL INFORMATION MANAGEMENT

...

### 2.1.2 Processing

...

*Note 3. —Supporting data quality material in respect of data accuracy, publication resolution, and integrity of aeronautical data, together with guidance material in respect to the rounding convention for aeronautical data, is contained in Radio Technical Commission for Aeronautics (RTCA) Document DO-201A and European Organization for Civil Aviation Equipment (EUROCAE) Document ED-77 — Standards for Aeronautical Information (or equivalent).*

## 6.2 Aeronautical Information Regulation and Control (AIRAC)

6.2.1 Information concerning the following circumstances shall be distributed under the regulated system (AIRAC) ...:

- a) Limits (horizontal and vertical), regulations and procedures applicable to:
  - 1) FIRs; 2) CTAs; 3) CTRs; 4) ADZs; 5) ATS Routes; 6) restrictive airspace ...
- c) Holding and approach procedures, arrival and departure procedures, noise abatement procedures and any other pertinent ATS procedures.
- d) Transition levels, transition altitudes and minimum sector altitudes.

6.2.3 Information provided under the AIRAC system shall be made available by the AIS so as to **reach recipients at least 28 days in advance** of the AIRAC effective date.

*Note. — AIRAC information is distributed by the AIS at least 42 days in advance of the AIRAC effective dates with the objective of reaching recipients at least 28 days in advance of the effective date.*

6.2.7 **Recommendation.**— Whenever *major changes* are planned and where advance notice is desirable and practicable, information should be made available by the AIS so as to *reach recipients at least 56 days in advance* of the effective date. This should be applied to the establishment of, and premeditated major changes in, the circumstances listed below, and other major changes if deemed necessary.

- a) *New aerodromes* for international IFR operations.
- b) *New runways* for IFR operations at international aerodromes.
- c) Design and structure of the *air traffic services route network*.
- d) Design and structure of a *set of terminal procedures* (including change of procedure bearings due to magnetic variation change).
- e) Circumstances listed in 6.2.1 if the *entire State* or any significant portion thereof is affected or if *cross-border coordination* is required.

*Note.* — Guidance material on what constitutes a major change is included in Doc 8126.

# AIC with AIRAC Publication Schedule

CYCLE NO.	DATE FOR RAW MATERIALS TO REACH THE AIS FOR MAJOR CHANGES	PUBLICATION DATE FOR MAJOR CHANGES	DATE FOR RAW MATERIAL TO REACH THE AIS FOR NORMAL CHANGES	PUBLICATION DATE FOR NORMAL CHANGES (THURSDAY)	CHANGES REACH CUSTOMER	EFFECTIVE DATE (THURSDAY)
2101	26 NOV 2020	03 DEC 2020	10 DEC 2020	17 DEC 2020	31 DEC 2020	28 JAN 2021
2102	24 DEC 2020	31 DEC 2020	07 JAN 2021	14 JAN 2021	28 JAN 2021	25 FEB 2021
2103	21 JAN 2021	28 JAN 2021	04 FEB 2021	11 FEB 2021	25 FEB 2021	25 MAR 2021
2104	18 FEB 2021	25 FEB 2021	04 MAR 2021	11 MAR 2021	25 MAR 2021	22 APR 2021
2105	18 MAR 2021	25 MAR 2021	01 APR 2021	08 APR 2021	22 APR 2021	20 MAY 2021
2106	15 APR 2021	22 APR 2021	29 APR 2021	06 MAY 2021	20 MAY 2021	17 JUN 2021
2107	13 MAY 2021	20 MAY 2021	27 MAY 2021	03 JUN 2021	17 JUN 2021	15 JUL 2021
2108	10 JUN 2021	17 JUN 2021	24 JUN 2021	01 JUL 2021	15 JUL 2021	12 AUG 2021
2109	08 JUL 2021	15 JUL 2021	22 JUL 2021	29 JUL 2021	12 AUG 2021	09 SEPT 2021

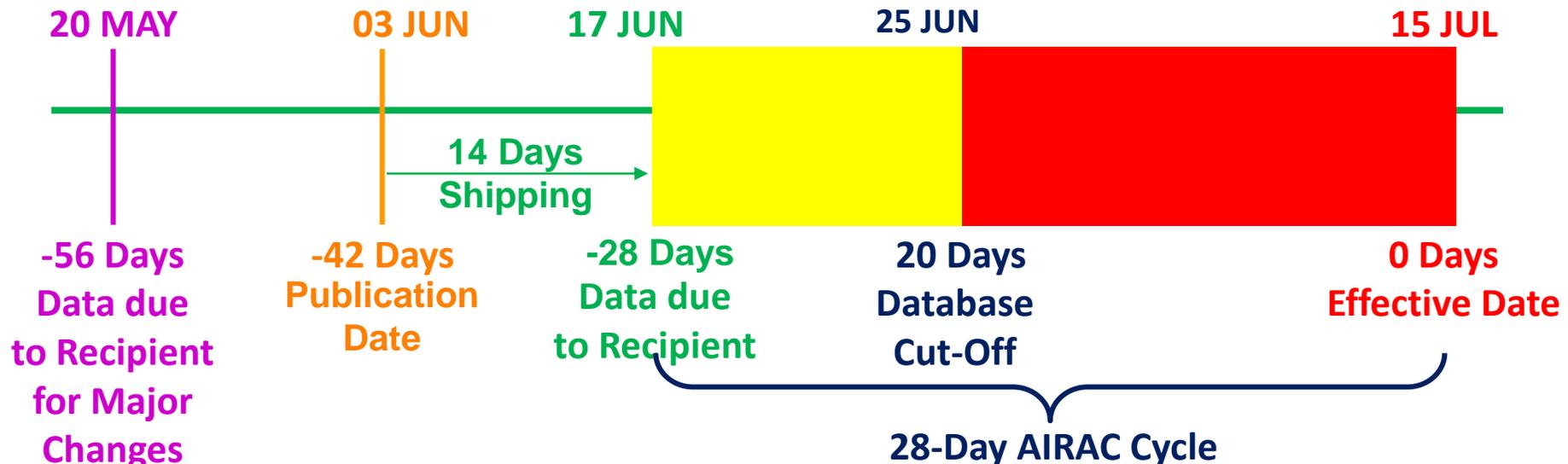
# AIC with AIRAC Publication Schedule

The latest date for submission of source data to the AIS	Publication date	Effective date
19.10.20	17.12.20	28.01.21
09.11.20	14.01.21	25.02.21
14.12.20	11.02.21	25.03.21
31.12.20	11.03.21	22.04.21
08.02.21	08.04.21	20.05.21
09.03.21	06.05.21	17.06.21
<b>05.04.21</b>	<b>03.06.21</b>	<b>15.07.21</b>
30.04.21	01.07.21	12.08.21
31.05.21	29.07.21	09.09.21
28.06.21	26.08.21	07.10.21
26.07.21	23.09.21	04.11.21
23.08.21	21.10.21	02.12.21
20.09.21	18.11.21	30.12.21

# Jeppesen Production Process in Sync with ICAO Publication Dates According to Annex 15

## Jeppesen Navigation Database

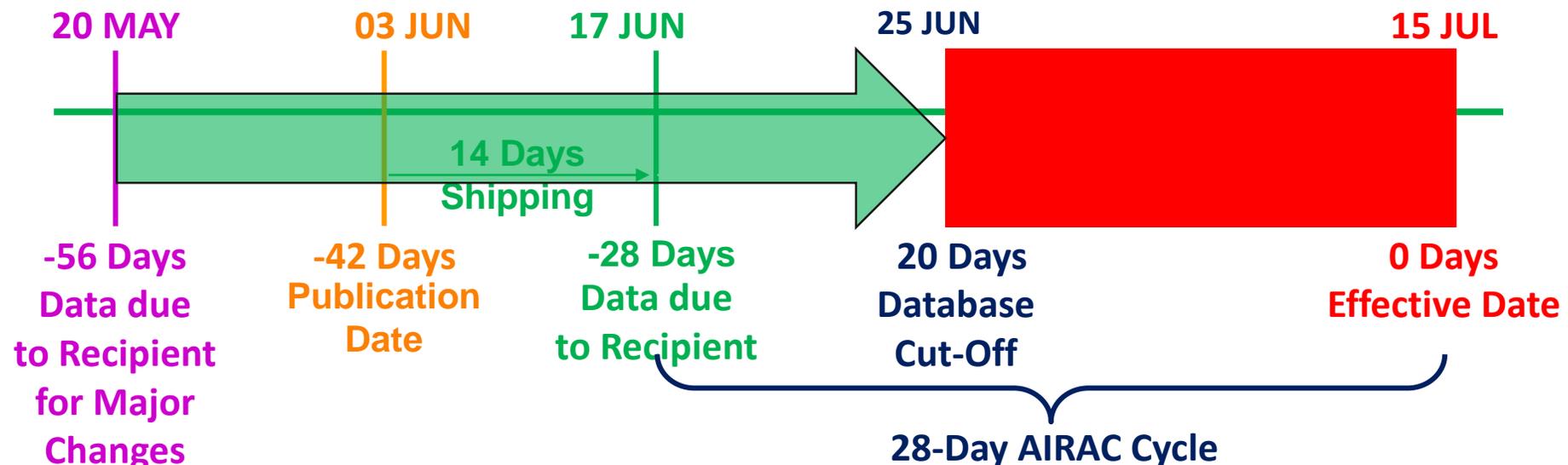
- Updated every 28 days (AIRAC system)
- No updates outside AIRAC system
- A change may not be in the database at the effective date if
  - the effective date is outside the AIRAC system
  - source was received late
  - the ANSP is not responding to clarification requests
- Cancellation/postponement of changes has to follow the AIRAC system as well
- Adherence to the AIRAC system should ensure that the change is in the database



# Jeppesen Production Process in Sync with ICAO Publication Dates According to Annex 15

## Jeppesen Navigation Database

- Updated every 28 days (AIRAC system)
- No updates outside AIRAC system
- A change may not be in the database at the effective date if
  - the effective date is outside the AIRAC system
  - source was received late
  - the ANSP is not responding to clarification requests
- Cancellation/postponement of changes has to follow the AIRAC system as well
- Adherence to the AIRAC system should ensure that the change is in the database



- Late source, no source
- Incomplete and erroneous source
- AIRAC changes published in a non-AIRAC Amendment
- Permanent AIRAC changes published by SUP or NOTAM
- Late cancellation/postponement
- Effective date outside AIRAC system
- Missing harmonisation between states
- No response to clarification requests
- Restrictive disclaimers on websites, manipulation of source online

**6.1.5 Recommendation.**— *The use of the date in the AIRAC cycle which occurs between 21 December and 17 January inclusive should be avoided as an effective date for the introduction of significant changes under the AIRAC system. (outdated)*

A faint, light gray world map is visible in the background of the slide. A thick blue horizontal bar with a slight 3D effect is positioned above the main title.

# **Impact of Promulgating AIRAC Related Information by NOTAM**

**ICAO WACAF NOTAM/SNOWTAM Workshop**

**Volker Meyer – Manager International Relations**

**23 June 2021**

## 6.3.1 AIP updates

6.3.1.2 **Permanent changes** to the AIP **shall** be published as **AIP Amendments**.

6.3.1.3 **Temporary changes of long duration** (three months or longer) and information of short duration which contains **extensive text and/or graphics shall** be published as **AIP Supplements**.

6.3.2.2 A **NOTAM shall** be originated and issued promptly whenever the information to be distributed is of a **temporary nature** and of **short duration**, or when operationally significant permanent changes or temporary changes of long duration are made at short notice, except for extensive text and/or graphics.

# Permanent AIRAC Changes Published by NOTAM Global Services

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## WHY?

**Permanent AIRAC changes published by NOTAM are in violation of ICAO SARPs.**

**Help to reduce the number of old and very old NOTAM by publishing permanent AIRAC changes in AIP Amendments only.**

# Permanent AIRAC Changes Published by NOTAM Global Services

Following the timelines for the publication of AIRAC changes:

- AIRAC effective date; and
- Receipt at least 28 days in advance; and
- No late postponement.

✓ **No problems with processing.**

## **Problems with:**

- NOTAM overload for the pilots; and
- Change not really incorporated in the AIP; and
- Hand annotations to AIP pages; and
- NOTAM Checklists cancelling the NOTAM without replacement; and
- Transferring the Changes to AIP AMDTs/SUPs; and
- Change incorporated in AIP, NOTAM not cancelled, and v. v.

# Permanent AIRAC Changes Published by NOTAM Global Services

**Not** following the timelines for the publication of AIRAC changes:

- Non-AIRAC effective date; or
- Receipt later than 28 days in advance; or
- Late cancellation/postponement.

It is not foreseen to publish AIRAC changes other than at an AIRAC effective date. That will cause all kinds of problems:

- Pilots' FMS will be outdated for a certain period;
- NavData Change Notices (hand amendments);
- Charts might be outdated for a certain period;
- Chart Change Notices (hand amendments).

## Late Postponement

A) XXXX B) 1905311551 C) PERM E) UPDATE  
 BULLETIN AIRAC AMDT NO 07/19 WEF 20 JUN 2019  
 IS POSTPONED UNTIL 12 SEP 2019

## SUP Cancellation / Postponement

2/19	flight infrastructure refurbishing works	AD	18 MAR/18 MAY 2019 EST	EXPIRED BY NOTAM /2019
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**E) 2019 May 23 00:00 C) 2019 Jun 05 23:59**

**E) TRIGGER NOTAM-PERM AIP AIRAC AMDT 4/19 EFFECTIVE DATE 23 MAY 2019**

- PUBLICATION OF NEW AERODROME LAYOUT
- IMPLEMENTATION OF NEW ILS RWY 04 AND DME 'IVRN'
- WITHDRAWAL OF ILS RWY 04 AND DME 'IVF'

**E) 2019 May 24 15:14 C) 2019 Jun 30 23:59**

**E) FLW AIP PAGES PUBLISHED WITH AIRAC 4/19 (EFFECTIVE DATE 23 MAY 2019) ARE SUSPENDED DUE TO POSTPONEMENT OF END VALIDITY OF SUP 52/19 (SEE NOTAM B3008/19) TO 30 JUN 2019:**

- AD 2 'AERODROME CHART - ICAO' 23 MAY 19 (A4/19)
- AD 2 'HOT SPOT MAP' 23 MAY 19 (A4/19)
- AD 2 'LOW VIS PROC CHART' 23 MAY 19 (A4/19)
- AD 2 'ACFT PRKG DOCKING CHART - ICAO' 23 MAY 19 (A4/19)
- AD 2 'AD OBST CHART ICAO TYPE A' 23 MAY 19 (A4/19)
- AD 2 'PRECISION APCH TERRAIN CHART' 23 MAY 19 (A4/19)
- AD 2 'STAR RNAV RWY04' 23 MAY 19 (A4/19)
- AD 2 'STAR RWY07' 23 MAY 19 (A4/19)
- AD 2 'VISUAL APCH CHART' 23 MAY 19 (A4/19)
- AD 2 4 'INSTR APCH CHART-ILS RWY04' 23 MAY 19 (A4/19)
- AD 2 6 'INSTR APCH CHART-RNAV (GNSS) RWY04' 23 MAY 19 (A4/19)
- AD 2 23 MAY 19 (A4/19)
- AD 2 'INSTRUMENT APCH CHART-VOR RWY04' 23 MAY 19 (A4/19)
- AD 2 'SID RNAV 1 RWY04' 23 MAY 19 (A4/19)
- AD 2 'INITIAL CLIMB PROC AND SID RWY04' 23 MAY 19 (A4/19)
- AD 2 'INITIAL CLIMB PROC AND SID RWY22' 23 MAY 19 (A4/19)

**E) 2019 May 23 06:44 C) 2019 Jun 30 23:59**

**E) AIP SUP 52/19** FLIGHT INFRASTRUCTURES REFRUBISHING WORKS' IN FORCE FM 18 MAR WITH EXPIRY DATE POSTPONED TO 30 JUN 2019.

FLIGHT CREWS ARE STRONGLY REQUESTED TO CONSIDER WHAT FOLLOWS:

- OPERATIONAL RESTRICTIONS/LIMITATIONS/CHANGES ARE IN FORCE AS DESCRIBED IN RELEVANT PAGES OF MENTIONED SUP. ACCORDING TO THE SPECIFIC WORKING PHASE ACTIVATED
- STARTING FM 18 MAY HR 0400 THE PUBLISHED CLOSURE OF RWY04/22 WILL NOT TAKE PLACE UNLESS NECESSARY. IN THIS CASE IT WILL BE MANAGED ON TACTICAL BASES AND ANNOUNCED ISSUING SPECIFIC NOTAM
- THE DESCRIPTION OF WORKING PHASES IN ENGLISH LANGUAGE CONTAINS TWICE 'PHASE 5'. THE LAST ONE SHALL BE READ AS 'PHASE 6' INSTEAD. CURRENT STATUS OF WORKING PHASES:
- PHASE 1: COMPLETED
- PHASE 2: COMPLETED
- PHASE 3: COMPLETED
- PHASE 4: COMPLETED
- PHASE 5: ACTIVATED
- PHASE 6: NOT ACTIVATED YET

## Extensive Text

**B)201112150000 C)PERM E)VOR PROC**

ALL RDL AND DIST ARE FM VOR 116.6 VSP UNLESS OTHERWISE SPECIFIED HLDG PROC 1.1 VOR 116.6 VSP :: ONE MIN RIGHT HAND PATTERN INBD TR 113 DEG M. MNM HLDG ALT 4000FT. 1.2 ABTOX 098/14D:: ONE MIN LEFT HAND PATTERN INBD TR278 DEG M. MNM HLDG ALT 4000FT. NOTE: SIMULTANEOUS HLDG AT VOR ? ABTOX NOT AUTHORIZED AT SAME LEVEL 2.PROC ALL ACFT SHALL CHANGE OVER FM ENR VOR 114.0 VVZ TO TVOR 116.6 VSP AT 25 DME VVZ. THE RDL SPECIFIED IN THE PROC ARE RELATED TO VOR 116.6 VSP. 2.1. FM VOR :: PCD OUBD ON TR 107 DEG M. R-107 FOR CAT- A/B AND ON TR 115DEG M. R-115 FOR CAT- C/D TIL 10 DME VSP DES TO 2200FT.COMMENCE LEVEL BASE TURN LEFT TO INTERCEPT FINAL APCH TR 278 DEG M. AT FAF 7.3 D DES TO MDA/H. //SPEED RESTRICTED TO 200KT IAS MAX// 2.2 FROM ABTOX R-098/14D :: DES IN THE HLDG PROC TO 3000FT. THEN INTERCEPT FINAL APCH TR 278 DEG M. R-098 DES TO 2200 FT.AT FAF 7.3D DES TO MDA/H. 2.3 FM ATS RTE A465 R-207/W47 R-236 /W29 R-254 :: AFT PSG IAF16D ON RESPECTIVE VOR RDL TURN RITE TO FLY DME.ARC OF RDL 14 DME DES TO 4000FT.CROSSING

# SUP Cancellation / Postponement

2/19	flight infrastructure refurbishing works	AD	18 MAR/18 MAY 2019 EST	EXPIRED BY NOTAM [REDACTED] 2019
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B) 2019 May 23 00:00 C) 2019 Jun 05 23:59

**E) TRIGGER NOTAM-PERM AIP AIRAC AMDT 4/19 EFFECTIVE DATE 23 MAY 2019**

- PUBLICATION OF NEW AERODROME LAYOUT
- IMPLEMENTATION OF NEW ILS RWY 04 AND DME 'IVRN'
- WITHDRAWAL OF ILS RWY 04 AND DME 'IVF'

B) 2019 May 23 06:44 C) 2019 Jun 30 23:59

E) AIP SUP S2/19 [REDACTED] : FLIGHT INFRASTRUCTURES REFURBISHING WORKS' IN FORCE FM 18 MAR WITH EXPIRY DATE POSTPONED TO 30 JUN 2019.

FLIGHT CREWS ARE STRONGLY REQUESTED TO CONSIDER WHAT FOLLOWS:

- OPERATIONAL RESTRICTIONS/LIMITATIONS/CHANGES ARE IN FORCE AS DESCRIBED IN RELEVANT PAGES OF MENTIONED SUP, ACCORDING TO THE SPECIFIC WORKING PHASE ACTIVATED
- STARTING FM 18 MAY HR 0400 THE PUBLISHED CLOSURE OF RWY04/22 WILL NOT TAKE PLACE UNLESS NECESSARY, IN THIS CASE IT WILL BE MANAGED ON TACTICAL BASES AND ANNOUNCED ISSUING SPECIFIC NOTAM
- THE DESCRIPTION OF WORKING PHASES IN ENGLISH LANGUAGE CONTAINS TWICE 'PHASE 5', THE LAST ONE SHALL BE READ AS 'PHASE 6' INSTEAD.

CURRENT STATUS OF WORKING PHASES:

- PHASE 1: COMPLETED
- PHASE 2: COMPLETED
- PHASE 3: COMPLETED
- PHASE 4: COMPLETED
- PHASE 5: ACTIVATED
- PHASE 6: NOT ACTIVATED YET

B) 2019 May 24 15:14 C) 2019 Jun 30 23:59

**E) FLW AIP PAGES PUBLISHED WITH AIRAC 4/19 (EFFECTIVE DATE 23 MAY 2019) ARE SUSPENDED DUE TO POSTPONEMENT OF END VALIDITY OF SUP S2/19 (SEE NOTAM B3008/19) TO 30 JUN 2019:**

- AD 2 'AERODROME CHART - ICAO' 23 MAY 19 (A4/19)
- AD 2 'HOT SPOT MAP' 23 MAY 19 (A4/19)
- AD 2 'LOW VIS PROC CHART' 23 MAY 19 (A4/19)
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- AD 2 'INITIAL CLIMB PROC AND SID RWY04' 23 MAY 19 (A4/19)
- AD 2 'INITIAL CLIMB PROC AND SID RWY22' 23 MAY 19 (A4/19)

# Questions?

Global Services

