



ICAO AIM Implementation Strategy

Industry Perspective on AIRAC

Cairo, February 2018

Volker Meyer

Boeing Digital Aviation & Analytics

Jeppesen

Industry Challenge – Volume & Timeliness of State Source Changes

■ Statement of Issue

- State publication of major and normal changes – either late or in a heavy volume – can overload industry capability to process and provide users with current procedures and aeronautical information

■ Stakeholders

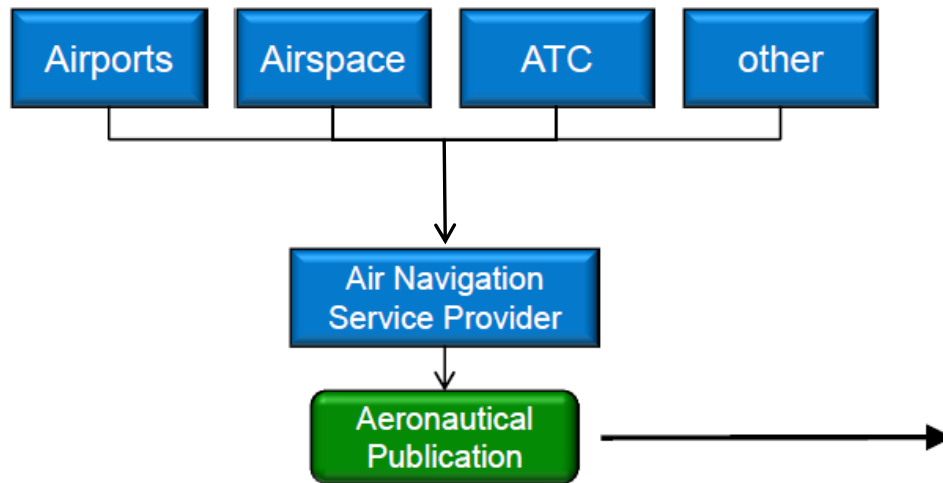
- State AIM and ATM, Industry, Civil/Military Users

■ Potential Solutions

- AIRAC adherence and good communication and coordination

Standardizing Aeronautical Information

Boeing Commercial Airplanes / Flight Services | Jeppesen GmbH

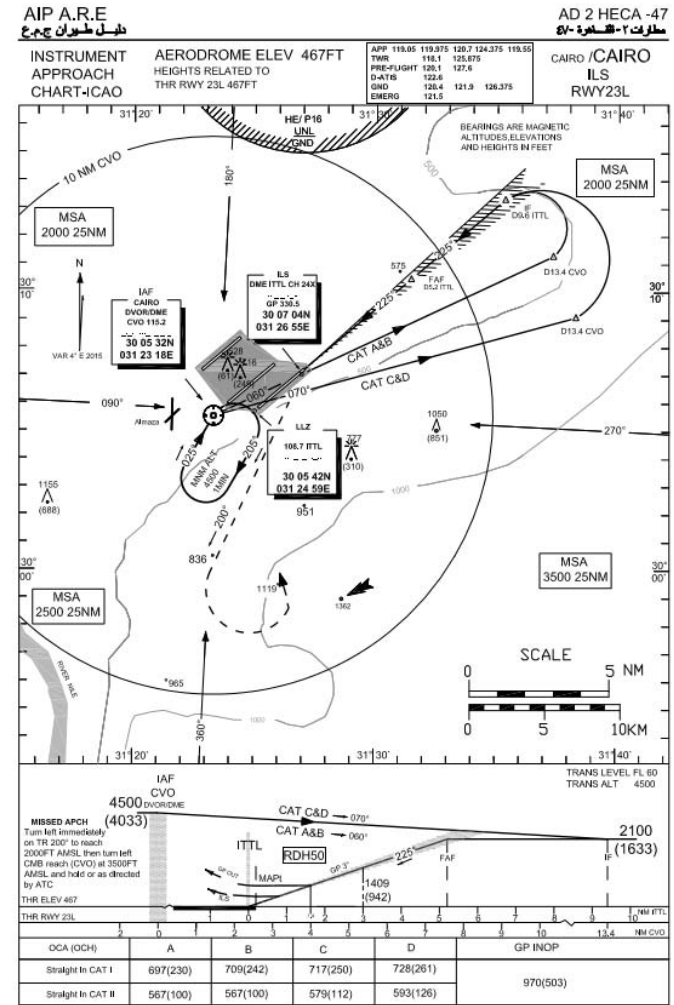
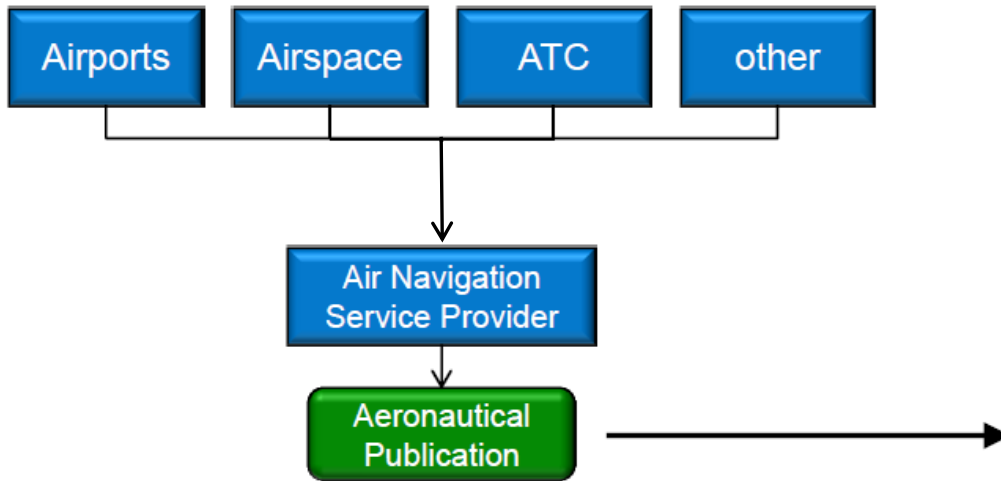


Annex 15:

3.1.1.2 Each Contracting State shall take all necessary measures to ensure that the aeronautical information/data it provides relating to its own territory, as well as areas in which the State is responsible for air traffic services outside its territory, is adequate, of required quality and timely.

Standardizing Aeronautical Information

Boeing Commercial Airplanes / Flight Services | Jeppesen GmbH

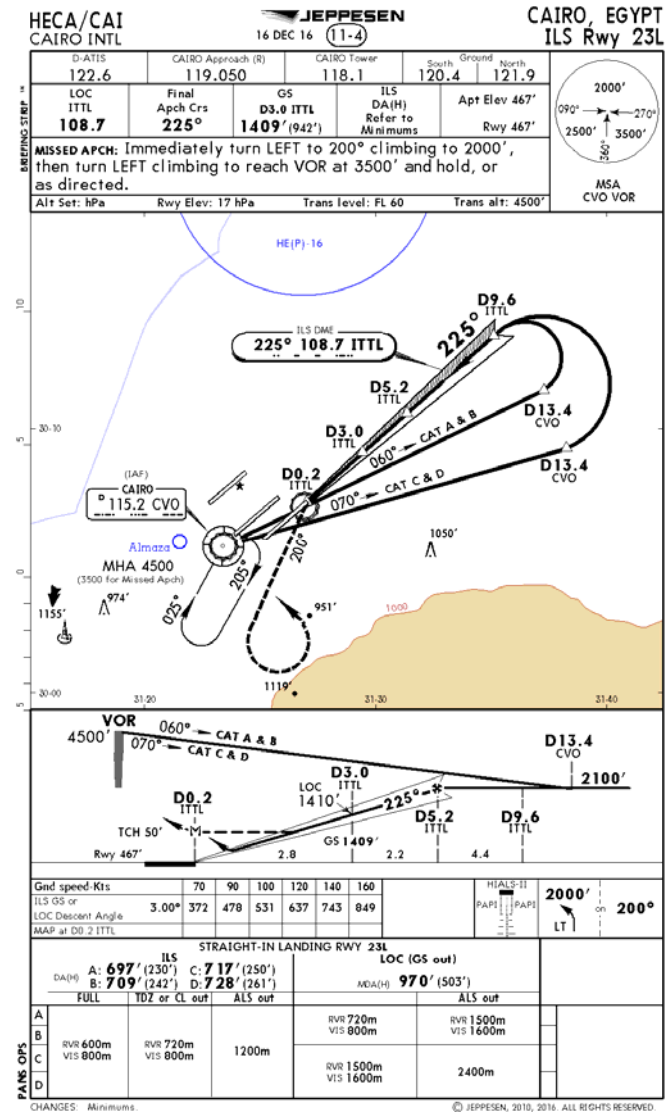
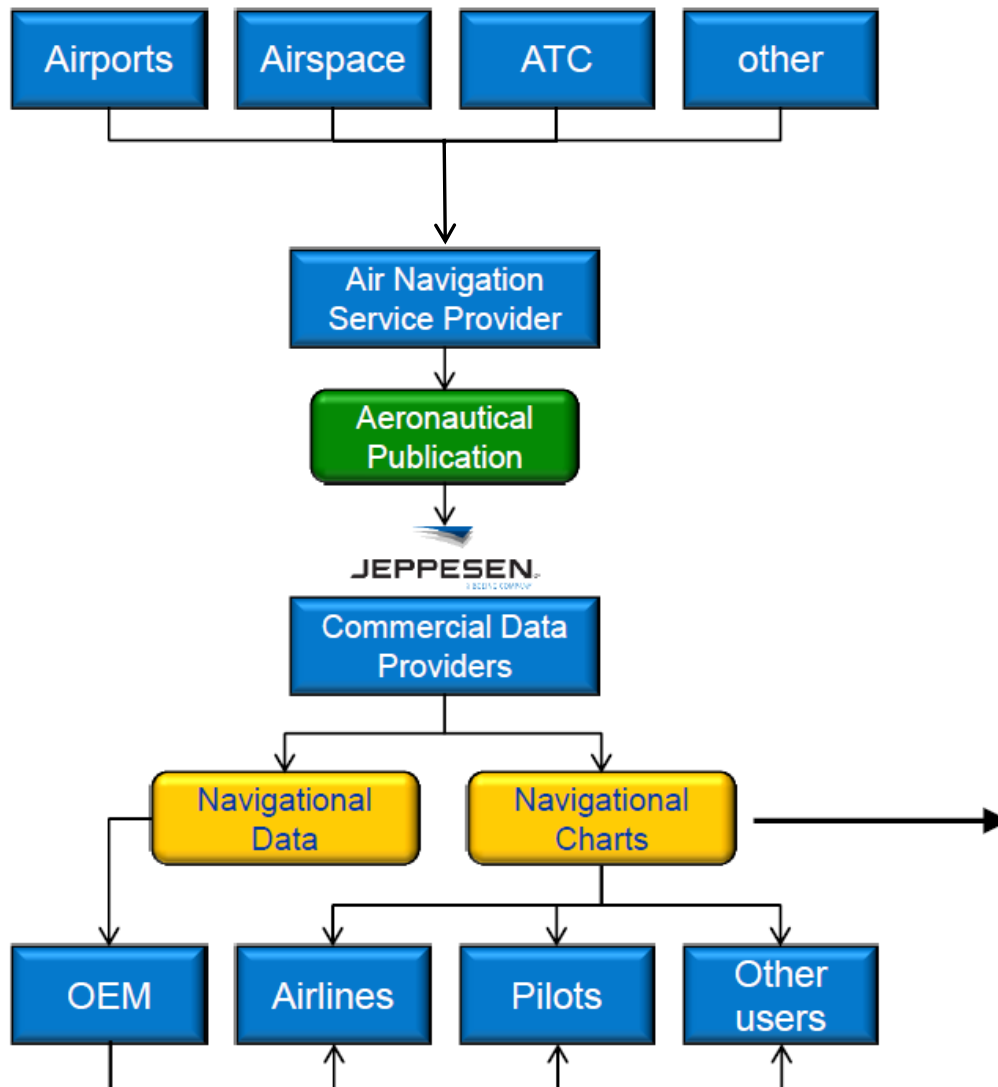


Ministry of Civil Aviation - Cairo.
 وزارة الطيران المدني - القاهرة

08 DEC 2016
 AIRAC 4/16

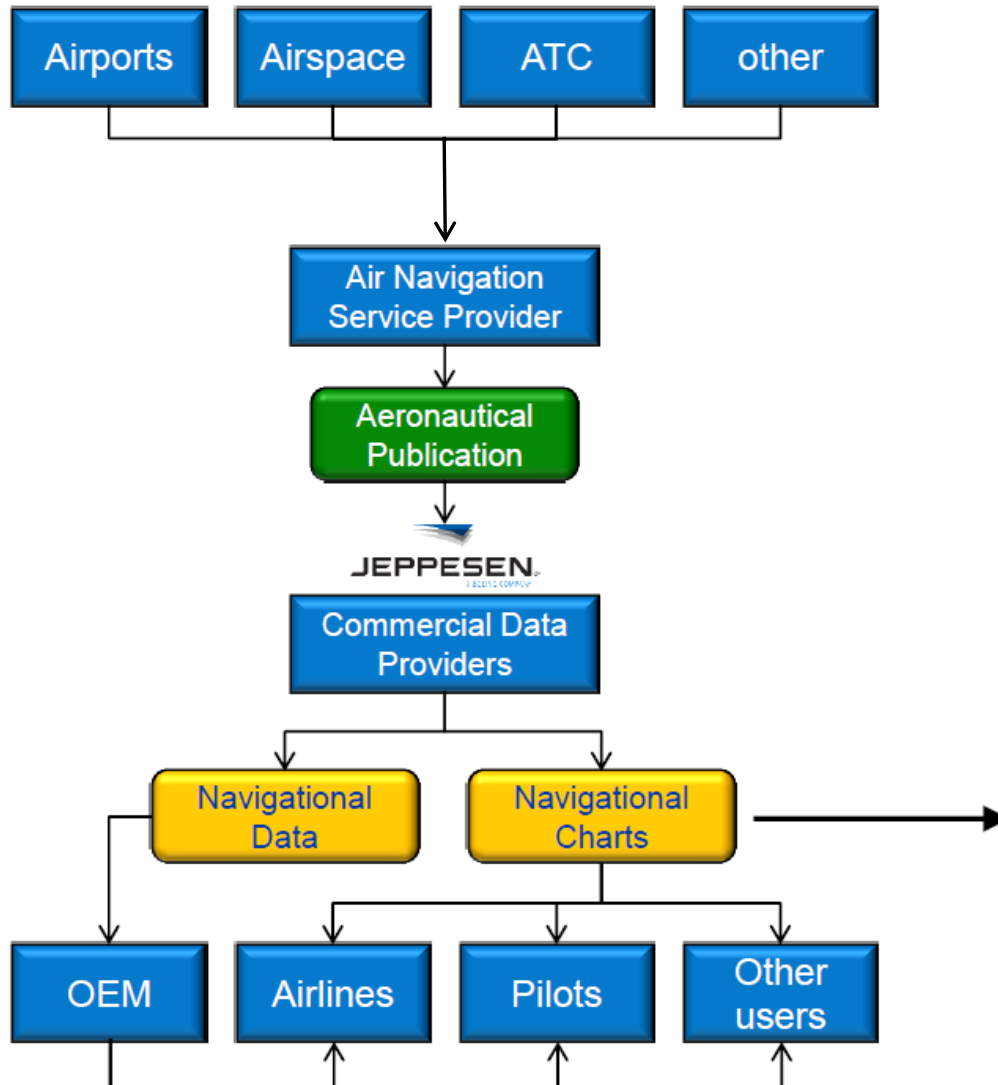
Standardizing Aeronautical Information

Boeing Commercial Airplanes / Flight Services | Jeppesen GmbH



Jeppesen NavData

Boeing Commercial Airplanes / Flight Services | Jeppesen GmbH



Terminal Procedure: @HECA: I23L APL APILD
Transition: Final

TRAN SEG A/CAT RSTR GRND MSA MAI

Show: All FMS Depiction **CI23L/T/HE**

U	Seq	Leg	Fix Desc
B	0010	IF	CI23L/T/HE
B	0020	CF	FI23L/T/HE
B	0030	CF	23L - Asphalt at Cairo Intl /H
F	0040	CA	
B	0045	CA	
B	0050	DF	CVO/VOR/E/HE
B	0060	HM	CVO/VOR/E/HE

FIX CRS ALT

Fix Description: Jeppesen Usage:

Leg Type: Brg Type:

Fix Code:

Overfly-Last Seq. Trans/Rte:

Reporting Code at Fix:

Fix Approach Code: Fix Approach Code QAI:

First Leg of Missed Approach

Recommended Navaid

Description:

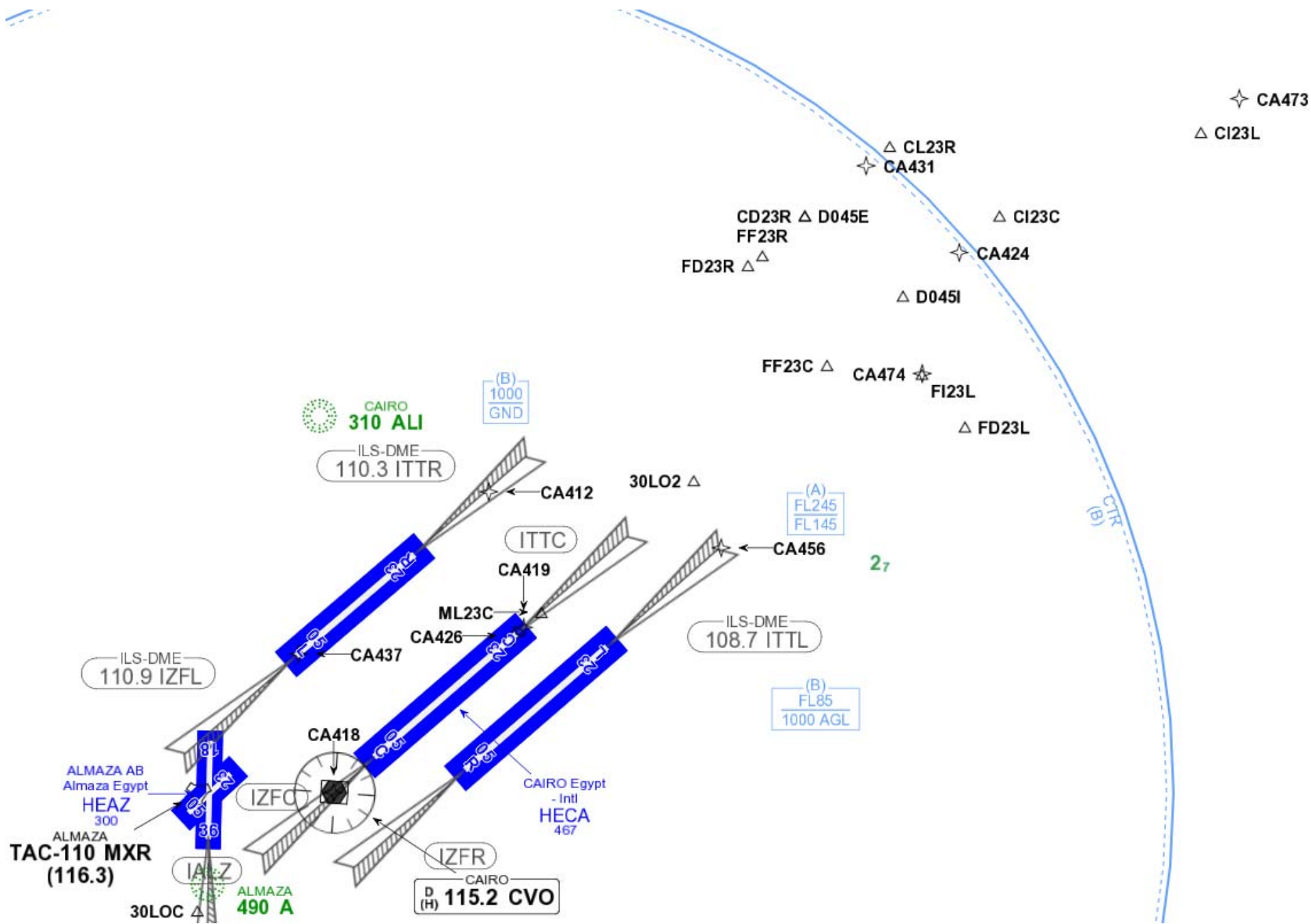
Dist From (nm): Dist QAI Code:

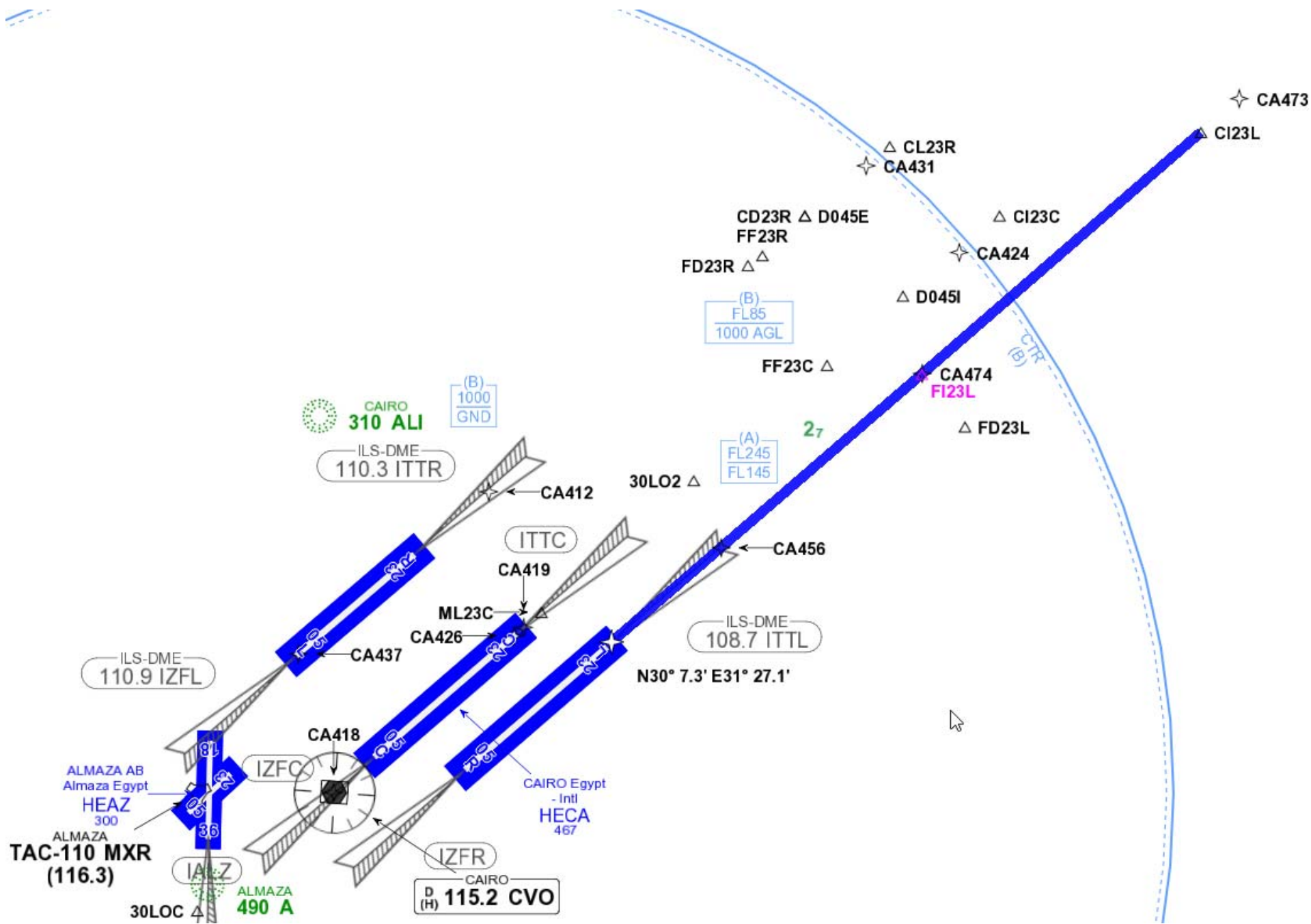
Brg: Brg QAI Code:

Derived Data

Bearing: (M) (T) Distance From (nm):

Speed Limit: Speed Limit Description:





Worldwide Data Challenge

- **Very large and growing**
- **Increasing difficulty in managing with required quality**

- 🌐 14,600 Airports
- 🌐 89,200 Airport Details
- 🌐 10,600 Airport Comms
- 🌐 28,600 Nav aids
- 🌐 4,600 ILS Approaches
- 🌐 6,300 VOR Approaches
- 🌐 3,600 NDB Approaches
- 🌐 7,100 RNAV Approaches
- 🌐 17,500 Departures
- 🌐 13,200 Arrivals
- 🌐 72,000 Terminal Waypoints
- 🌐 3,400 High Airways
- 🌐 3,000 Low Airways
- 🌐 2,800 High/Low Airways
- 🌐 22,600 Enroute Waypoints

Typical Aeronautical Data Problems

- **Late publication of information per AIRAC**
- **Late postponement of information per AIRAC**
- **Publications not received (nrs missing in sequence)**

A Result of Late State Source



!! URGENT !!

Date: 8 September 2017

Subject:

Multiple Procedures

AIP SUP 37/17 (effective 14 SEP 17)

Charts not updated

AIP SUP 37/17 (effective 14 Sep 17) was received after the date specified by ICAO for aeronautical information distribution. As a result, changes could not be processed for the 14 Sep 17 effective date. The charts will be updated as shown below:

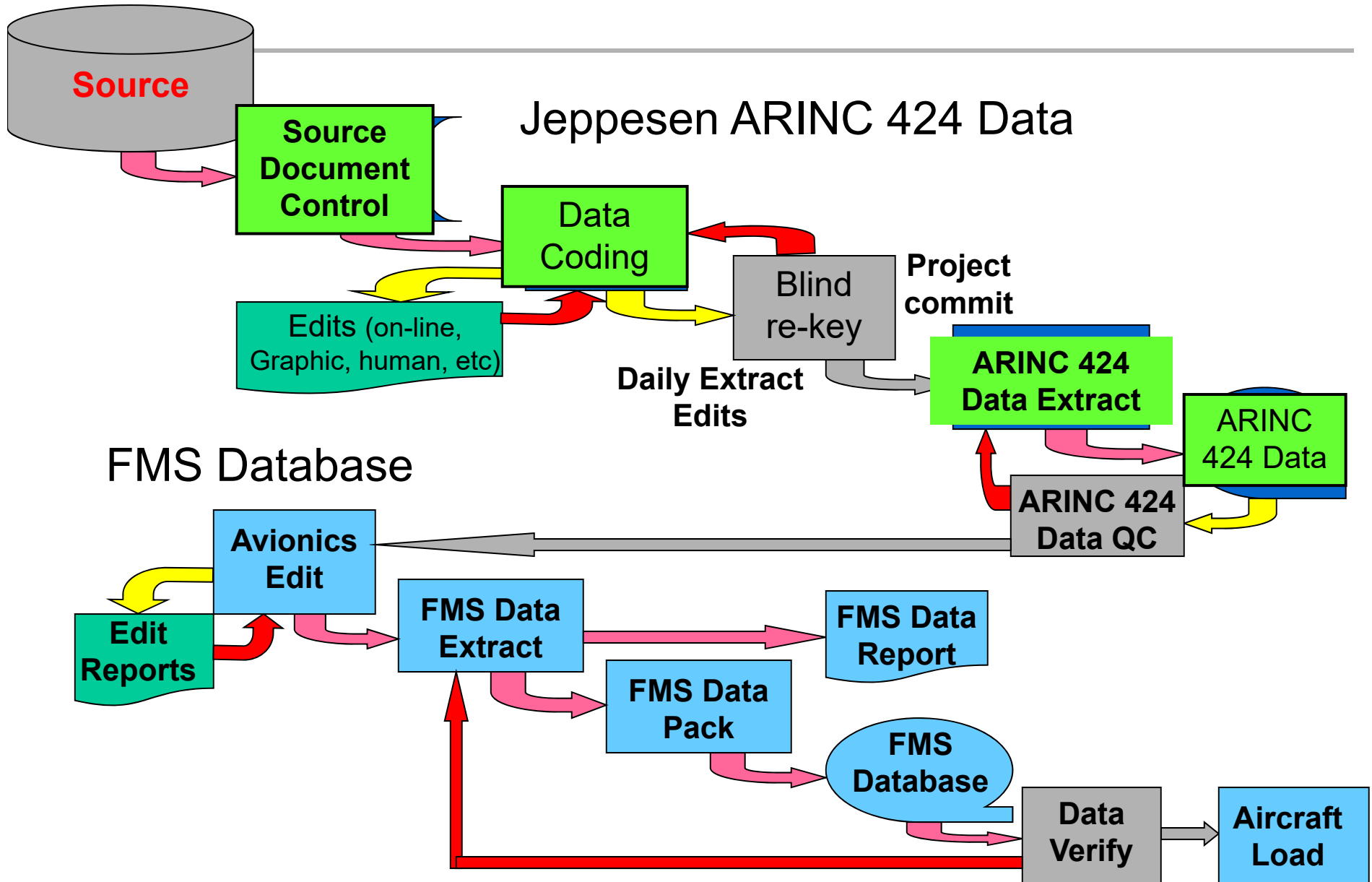
SID charts 10-3/10-3A/10-3B/10-3C	Revision 15 Sep 17
Approach & Airport charts update	Revision 22 Sep 17

This Chart Alert is also posted on the Jeppesen Web site: [Notices and Alerts](#).

AIRAC Cycle and Industry Processing Timelines

AIRAC Cycle Number	ICAO Annex 15/PANS AIM			Jeppesen		Avionics	ICAO
	States Publish			Processing of Nav Data Extract Begins	ARINC 424 Data Set Deliveries to OEMs Begin	OEM Database Deliveries to FMS Begin	AIRAC Effective Date
	Major Changes (56 days in advance)	Normal Changes (42 days in advance)	Normal Changes to Reach Recipients (28 days in advance)				
1801	9 Nov 17	23 Nov 17	7 Dec 17	15 Dec 17	18 Dec 17	21 Dec 17	4 Jan 18
1802	7 Dec 17	21 Dec 17	4 Jan 18	12 Jan 18	15 Jan 18	18 Jan 18	1 Feb 18
1803	4 Jan 18	18 Jan 18	1 Feb 18	9 Feb 18	12 Feb 18	15 Feb 18	1 Mar 18
1804	1 Feb 18	15 Feb 18	1 Mar 18	9 Mar 18	12 Mar 18	15 Mar 18	29 Mar 18
1805	1 Mar 18	15 Mar 18	29 Mar 18	6 Apr 18	9 Apr 18	12 Apr 18	26 Apr 18
56 days							
42 days							
28 days							
20 days							
17 days							
14 days							

Downstream Data Process



AIRAC Adherence in New Annex 15

6.2.3 Information provided under the AIRAC system ~~in paper copy form~~ shall be ~~distributed~~ made available by the AIS unit ~~at least 42 days in advance of the effective date with the objective of reaching~~ so as to reach recipients at least 28 days in advance of the effective date.

Note.— AIRAC information ~~provided under the AIRAC system in paper copy form shall be~~ is distributed by the AIS unit 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 ~~provided in paper copy form~~ should be ~~distributed~~ made available by the AIS so as to reach recipients ~~unit~~ 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 ~~in Appendix 4, Part 3,~~ below, and other major changes if deemed necessary.*

THANK YOU

