



Agenda Item 6: Otros asuntos

MODIFICATIONS IN THE PANS-AIM

(Presented by Brazil)

SUMMARY

ICAO has published a State Letter informing on the changes to the PANS-AIM. Among the main changes, there will be an end to the concepts of Upper Airspace Route and Lower Airspace Route. This Working Paper aims to address the main modifications and discuss the possibilities of accommodation of these changes.

References:

- ICAO Doc 10066 – PANS AIM
- ICAO Doc 9869 – PBCS Manual
- ICAO State Letter SP 65/4-19/28

1. Background

1.1 ICAO has recently published State Letter SP 65/4-19/28 where, among other modifications, there will be changes in the concepts of ATS routes of the lower airspace and ATS routes of the upper airspace. It is known that SAM/IG is a group interested in the implementation of the modifications derived mainly from ICAO. The content of this State Letter will be effective in November 2020.

2. Content of the State Letter

2.1 The text addresses several modifications, which will take effect from November 2020. We can see that the old concept of lower ATS Routes has been abolished and replaced by the concept of Conventional Navigation Routes. Another interesting modification is that there will be a more direct connection between the concepts of ATS Routes and the concept of PBCS. This will clarify that for each route, an RCP and an RSP will be defined. Figure 1 has an extract from that State Letter that contains part of the changes that will take effect.

2.2 A striking issue is the lack of guidance on the implementation of the changes. Although the objective was to cancel the old concepts of the upper airspace route and the lower airspace route, it is clear that this change opens up new possibilities. As there will be no dependence on the portion of airspace (lower or higher), the new standard will allow airways to break the traditional FL245 limit. Thus, for example, there may be a conventional airway with the upper and lower vertical limits, respectively, levels FL150 and FL390. Such changes can provide greater flexibility in the structure of the route without worrying about the traditional limitation of FL245.

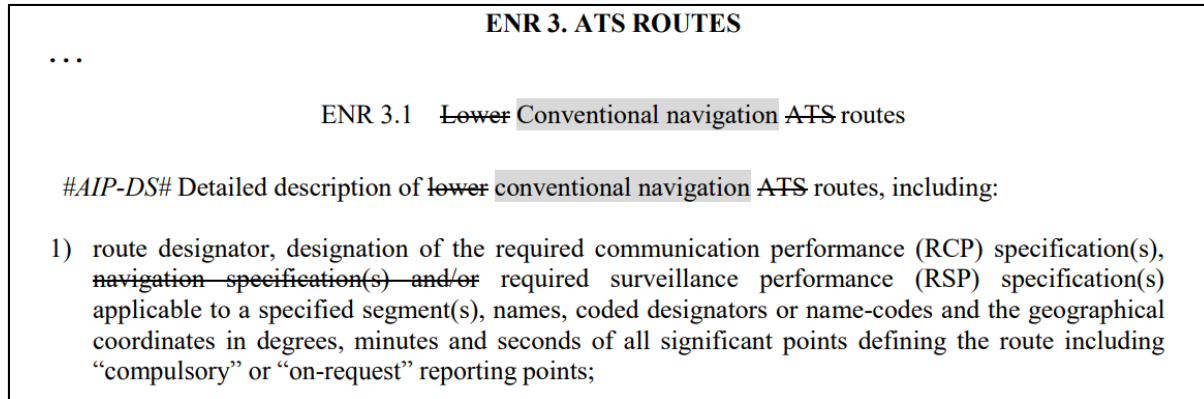


Figure 1 – New definitions and descriptions

2.3 In addition, the concepts were modified:

- a) Area Navigation Route: an ATS Route established for the use of aircraft capable of using area navigation.
- b) Conventional Navigation Route: an ATS route established by reference to ground nav aids.

We can see that in both concepts the old concept of upper airspace or the concept of lower airspace is not mentioned.

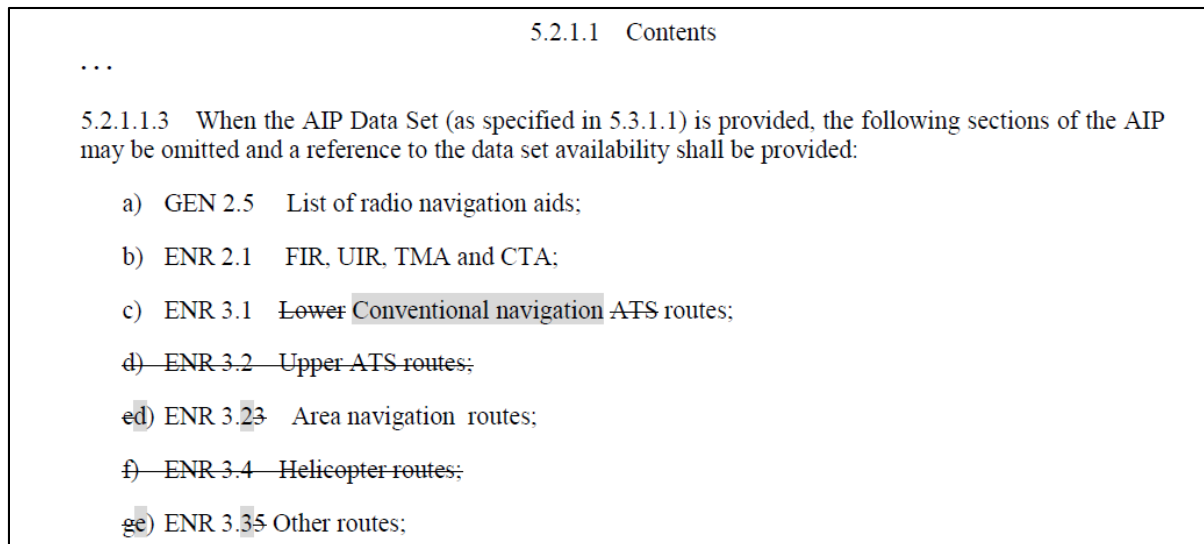


Figure 2 – Deletion of lower and upper

2.4 In Figure 2, the cancellation of the concepts Lower ATS Routes and Upper ATS Routes is evident. In addition, the Helicopter Routes concept will be also canceled.

3. New scenarios

3.1 These new rules generate new possibilities for the use of airspace. Under the old rule, the airways of the upper airspace could only consider FL250 or higher. Given the change, for example, levels below the FL250 could be considered.

3.2 It is also possible, for example, to consider the use of a single route network by canceling the current route network from the current lower airspace. Another change is the cancellation of exclusive helicopter routes.

3.3 Brazil is conducting studies that seek to extract the operational advantages provided by this change.

4. Conclusion

4.1 Recent modifications cancel the old concepts and leave room for airspace optimization without the old restrictions imposed by the old concepts of upper and lower airspace. The need to indicate the required communication and surveillance performance is also important to improve the information disclosed to users.

5. Suggested actions

5.1 The Meeting is invited to:

- a) Take note of the information presented in this Working Paper;
- b) evaluate the modifications; and
- c) evaluate the benefits that can be obtained by adopting these changes.