



Airspace Planning – Equipment Survey

Purpose: To collect and compile accurate data on airline avionic capabilities and future upgrades. This will allow airspace planners to develop realistic proposals for airspace improvements.

Directions: Please ask your flight engineering and flight operations support departments to fill out this survey. When you open the file please be sure to enable the macros. Below are further explanations to some of the specific questions in the survey.

1. Rows 16-23. Aircraft types you operate.

- Airlines are requested to answer the questions for each aircraft type in their fleet.
- If there are clear distinctions on the equipage of same aircraft types, e.g. an airline is only upgrading half of their B737-400's then list this as two separate aircraft types.
- If there are more than 6 aircraft types then please fill out two forms.
- Please include information for the future aircraft (firm orders).

2. Rows 16-23. Where you operate and frequency.

This asks for a rough estimate for each region your aircraft operates within and the frequency of operations. There are 3 simple answers in the pull down menu of 1-35; 36-70; or 71+. Another way of looking at this is to answer:

- 1-35, if you operate up to 5 flights per day in this region,
- 36-70, if you operate 6-10 flights per day, or
- 71+, if you operate greater than 10 flights per day in that given region.

3. Rows 28-65. Aircraft Equipment and Capabilities

- These are color-coded to the aircraft types in No. 1 above.
- All answers are by clicking on the pull down menu. Most (but not all) answers are yes, no, before (BF) 2010, BF2012, BF2015 or BF2018.
- Rows 47-54. The RNAV & RNP values are expressed in terms of ICAO Performance-based Navigation (PBN). If you are unfamiliar with these



values the attached PBN table provides comparisons to other types of navigation specifications and their PBN equivalents.

- Row 56. The RNP 0.xx question is asking for the most stringent RNP type operational approval your fleet has (with values from RNP 0.1 – 0.3). For example, if your B737-800 fleet has approval to use RNP 0.15 instrument procedures at a certain airport then click on 0.15.

4. If you have any further information to provide please use the yellow box labeled "Additional Information You Wish to Provide"

5. Please email the completed Excel file(s) to infrastructure@iata.org.

Thank you for taking the time for filling out this survey! If you have any questions or comments please send them to infrastructure@iata.org.

Best regards,

David C BEHRENS

Director

Infrastructure Strategy

Tel +1 (514) 874 0202 Ext.3705

Fax +1 (514) 874 2653

behrensd@iata.org

International Air Transport Association

800, Place Victoria, P.O. Box 113

Montréal, Quebec, Canada, H4Z 1M1

www.iata.org



PBN Values & Application

| Area of Application | Navigation Accuracy (NM) | Navigation Specification (current) | Navigation Specification (new) | Require performance monitoring & alerting |
|-------------------------------------|--------------------------|------------------------------------|--------------------------------|---|
| Oceanic & Remote | 10 | RNP 10 | RNP 10 | No |
| | 4 | RNP 4 | RNP 4 | Yes |
| En route – Continental | 5 | RNP 5 Basic RNAV | RNAV 5 | No |
| En route – Continental and Terminal | 2 | US RNAV type A | RNAV 2 | No |
| | 2 | N/A | <i>Basic-RNP 2 (TBD*)</i> | <i>Yes</i> |
| Terminal | 1 | US RNAV type B P RNAV | RNAV 1 | No |
| | 1 | N/A | Basic-RNP 1 | Yes |
| | <i>1</i> | <i>N/A</i> | <i>Advanced RNP 1 (TBD)</i> | <i>Yes</i> |
| Approach | 0.3 | RNP 0.3 | RNP APCH (RNP 0.3) | Yes |
| | 0.3-0.1 | RNP SAAAR | RNP AR APCH (RNP 0.3-0.1) | Yes |

* *To be Developed (TBD)*