



International Civil Aviation Organization

**Fifteenth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/15)**

Bangkok, Thailand, 25 – 29 July 2005

Agenda Item 4: Consider problems and make specific recommendations concerning the provision of ATM/AIS/SAR in the Asia/Pacific Region

DESIGNATORS FOR ATS ROUTES

(Presented by the Secretariat)

SUMMARY

This paper presents the guiding principles in Appendix 1 to Annex 11 regarding ATS route designators. Current practice under which a suffix is added to ATS route designators to show a flight direction is not consistent with the principles in Annex 11. States are encouraged to review the practice and align with Annex 11 provisions.

1. INTRODUCTION

1.1 The practice of adding a suffix to the route name to indicate a flight direction, e.g. R460E and R460W, has long been used in some areas. Sometimes another suffix can be found to indicate a branch route, e.g. B465A and L301A.

1.2 The Revised ATS Route Structure, Asia to the Middle East and Europe, South of the Himalayas (EMARSSH) routes were implemented on 28 November 2002. The EMARSSH routes adopted the same practice, adding the suffix of “N”, “E”, “S” and “W”.

1.3 When the Regional Office proposed amendments to the *Air Navigation Plan – Asia and Pacific Regions* (Doc 9673), Volume I, Basis Air Navigation Plan regarding the EMARSSH routes, guidance was provided by ICAO Headquarters for States to follow Appendix 1 to Annex 11 – *Air Traffic Services*.

2. DISCUSSION

2.1 Appendix 1 to Annex 11 provides for the principles governing the identification of ATS routes other than standard departure and arrival routes. Paragraph 2.4 of the Appendix particularly provides for the suffixes of “F”, “G”, “Y” and “Z” as follows, but not for the “N”, “E”, “S” and “W”.

2.4 *When prescribed by the appropriate ATS authority or on the basis of regional air navigation agreements, a supplementary letter may be added after the basic designator of the ATS route in question in order to indicate the type of service provided or the turn performance required on the route in question in accordance with the following:*

- a) *for RNP 1 routes at and above FL 200, the letter Y to indicate that all turns on the route between 30 and 90 degrees shall be made within the allowable RNP tolerance of a tangential arc between the straight leg segments defined with a radius of 22.5 NM (e.g. A123Y[1]);*
- b) *for RNP 1 routes at and below FL 190, the letter Z to indicate that all turns on the route between 30 and 90 degrees shall be made within the allowable RNP tolerance of a tangential arc between the straight leg segments defined with a radius of 15 NM (e.g. G246Z[1]);*
- c) *the letter F to indicate that on the route or portion thereof advisory service only is provided;*
- d) *the letter of G to indicate that on the route or portion thereof flight information service only is provided.*

2.2 On the other hand, unilateral route systems have been in place in the North Atlantic, the North Pacific, the South China Sea and the Bay of Bengal, etc. With the introduction of reduced vertical separation (RVSM), more States establish unilateral routes to meet the requirement of passing frequency equal to 2.5 opposite-direction passing per aircraft flight hour. In light of above, the suffix indicating direction of uni-lateral track could be beneficial.

2.3 ICAO Headquarters advised that they could consider amending Annex 11, Appendix 1, but this would be a longer term solution which might be combined with other requirements. ICAO HQ are also seeking further input, to see if other parts of the aviation community share a similar view and would be supportive of a change. ICAO HQ also note that, even with the “E”, “S”, “N” or “W” included, having two routes right next to each other with the same numerical designator would not appear to take account of human factors principles.

3 ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) follow the principles provided in Appendix 1 to Annex 11;
- b) review the current practice to add a suffix; and
- c) encourage States to identify ATS route identifiers with suffix not consistent with Annex 11 and commence amendment action to change the route designators.
