

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 6 Aeronautical navigation : issues

RECOMMENDATION FOR DISCUSSION WITH NEIGHBORING NATIONS PRIOR TO THE INSTALLATION OF SBAS

(Presented by the Republic of Korea)

SUMMARY

This paper raises the necessity of discussion with neighboring States prior to the installation of Satellite Based Augmentation System (SBAS) since compensation signals of SBAS can be received in the neighboring States as well.

1. INTRODUCTION

1.1 Navigational and landing system of the New CNS/ATM system will gradually replace the existing Ground Based NAVAIDS systems as the GNSS using the satellite system for position information.

1.2 Satellite Systems such as GPS which provides position information does not offer sufficient function for air navigation due to lack of integrity and precision. Therefore, appropriate augmentation system is needed for air navigation to be more efficient. Augmented Satellite Based Navigation System can provide more accurate and reliable navigation service to ensure safety of take-off and landing.

2. THE PRESENT DEVELOPMENT STATUS OF SBAS

2.1 At present, SBAS(Satellite Based Augmentation System) or GRAS (Ground-based Regional Augmentation System) is under installation or development to reinforce the capability of satellite providing position information. Several nations are developing it such as WAAS, EGNOS, MSAS and GAGAN.

3. INSTALLATION PLAN

3.1 The major characteristic of SBAS is that various kinds of data are transmitted to the center and calculated. Accordingly, depending on the location of the center or control ownership of complimentary data transmission medium, interest of each nation receiving SBAS signals might come into conflict. In that light, it is desirable to have sufficient discussion in advance with neighboring nations by each region before the installation of the system.

3.2 In addition, it is also desirable to prepare standard procedures and criteria, so that nations using the system would not have the conflict of interest which could occur in case of common use with neighboring nations.

4. ACTION BY THE MEETING

4.1 The meeting is invited to note the information contained in this paper.

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