#### TERMS OF REFERENCE

### INTERNATIONAL FORUM FOR GNSS

#### PREAMBLE

Global Navigation Satellite Systems (GNSS) have evolved from an early period of limited programs to a point where a number of systems and their augmentations are underway or planned. In the future, a number of international and national programs will operate simultaneously and support broad range interdisciplinary and international activities. Discussions taking place at the national, regional and international levels have underscored the value of GNSS for a variety of applications. The emergence of new GNSS and regional augmentations has focused attention on the need for the coordination of program plans among current and future operators in order to enhance the utility of GNSS services.

The representatives of GNSS system providers, GNSS system augmentation providers and the international organizations primarily associated with the use of GNSS,

AWARE of the overlap of GNSS mission objectives and of the interdisciplinary applications of GNSS services;

RECOGNIZING the advantages of ongoing communication and cooperation among operators of GNSS and their augmentations;

RECOGNIZING the need to protect the investment of the current user base of GNSS services through the continuation of existing services;

AWARE that the complexity and cost of user equipment should be reduced whenever possible;

CONVINCED that GNSS providers should pursue greater compatibility and interoperability among all current and future systems in terms of signal structures, time and geodetic reference standards to the maximum extent possible; and

DESIRING to promote the international growth and potential benefits of GNSS;

HAVE AGREED to establish an International Forum for GNSS for the purpose of promoting the use and application of GNSS.

The aim of the Forum is to facilitate the exchange of information among users and providers of GNSS services with the view to promoting GNSS applications on a global basis, without prejudice to the roles and functions of GNSS service providers and intergovernmental bodies such as ITU, ICAO and IMO.

## Objectives

The objectives of the Forum are to:

- benefit users of navigation services through consultations among members of the Forum;
- encourage coordination among providers of GNSS core systems and augmentations in order to ensure greater compatibility and interoperability;
- encourage and promote the introduction and utilization of satellite navigation services, particularly in the developing countries through assistance with the integration of GNSS services into their infrastructures;
- assist both the members of the Forum and the international user community by, inter alia, serving as the focal point for international information exchange related to GNSS activities;
- better reflect future user needs in the GNSS development plans and applications.

## MEMBERS AND OBSERVERS

National or international entities that are responsible for GNSS and their augmentations or are involved in promoting GNSS services and applications [and that] are eligible for membership or observer status in the Forum are: GNSS system providers - GPS (United States), GLONASS (Russian Federation) and Galileo (European Union);

GNSS augmentation system providers -GAGAN (India), EGNOS (European Union), WAAS (United States), MSAS (Japan) and other compatible systems;

International organizations and associations dealing with global GNSS service and applications may participate as members or observers. Potential members or observers could include United Nations Office for Outer Space Affairs (OOSA), International GPS Service, ICAO, IMO, IAIN, CGSIC and ITU.

The addition of members will be with the consensus of current members of the Forum.

#### ORGANIZATION OF WORK

The Forum will convene at least once every year in plenary session. Meetings of the Forum will be organized and chaired by the designated host organization. Each member should designate its principle representative and its point of contact and inform the Chairperson of the Forum of principal and point of any change.

The Forum may establish, as mutually agreed and on an ad hoc basis, special temporary Working Groups to investigate specific area of interest, cooperation and coordination and to report at subsequent Plenary meetings. Continuation of each ad hoc Working Group requires confirmation at each Plenary session.

Conclusions resulting from the Plenary sessions, or the finding and recommendations of ad hoc Working Groups will be decided on the basis of consensus. Decisions have recommendatory character but do not create legal obligations.

It is understood that members of the Forum would ultimately determine their activities. However, the Forum may consider undertaking the following activities.

Since compatibility and interoperability is highly dependent on the establishment of standards for service

provision and user equipment, adoption of common standards could be a topic that the Forum might need to address. However, the Forum itself would not set standards itself and should instead identify applications where no standards currently exist, such as land transport use of GNSS, and recommend possible organizations that could appropriately set new standards. Consultation with existing standard setting bodies such as the International Civil Aviation Organization, the International Maritime Organization, and the International Telecommunications Union would also be required.

The Forum could consider the establishment of User Information Centers by GNSS providers. The maintenance of a globally-focused web-site would be a major task of these centers. The United Nations through the Office for Outer Space Affairs could combine all the web-sites into a single site to act as a portal for any user of any GNSS service.

The Forum could organize and sponsor regional workshops in order to fulfill the objectives of the Forum.

The Forum could provide, as a matter of priority, needed assistance to national and regional authorities, particularly in developing countries in establishing mechanisms to identify and eliminate sources of electromagnetic interference that can degrade signals from GNSS and their augmentations.

The Forum could develop road maps and prepare technical reports for the introduction of GNSS services and provide training opportunities in GNSS, particularly in developing countries.

The Forum could consider and may make recommendations and agree on actions to promote appropriate coordination across GNSS programs. Furthermore, the Forum would encourage its members to maintain communication as appropriate with other groups and other organizations involved in GNSS activities and applications through the relevant channels within their respective governments or organizations.

# Forum STRUCTURE (to be refined)

Chairperson

Member Board

Executive secretariat (staff quarter)

Ad hoc working group

## Forum FINANCING (to be clarified)

Value of contribution of each Member for:

- permanent work of the secretariat
- implementation of recommendations