MEMORANDUM OF UNDERSTANDING BETWEEN THE NORTH AMERICAN INSTITUTE OF NAVIGATION (ION) AND

THE INTERNATIONAL ASSOCIATION OF GEODESY (IAG)

1. Background

The International Association of Geodesy (hereinafter referred to as IAG) and the American Institute of Navigation (hereinafter referred to as ION) both recognize that each is an international organization with many complementary activities serving similar professional constituencies involving research, development and education into varied aspects related to navigation and positioning techniques, reference systems and frames, and space technology and applications. Although basically a national organization, ION's international membership, areas and scope of activities makes it an organization of international reach; ION is affiliated with the International Association of Institutes of Navigation.

IAG specializes in scientific areas, such as positioning, advanced space technology, determination of the gravity field, general theory and methodology and geodynamics. IAG furthermore coordinates the work of a number of international services such as the International GPS Service (IGS).

ION specializes in scientific, technical and professional areas, such as positioning, navigation, guidance, advanced space technology, such as Global Navigation Satellite System (GNSS). ION is dedicated to the advancement of the art and science of navigation and serves a diverse community including those interested in air, space, marine, land navigation, and position determination.

2. Objective and scope of this MOU

The objective of this Memorandum of Understanding is to provide a framework for a continuing liaison between the two organizations, for maintaining and increasing the opportunities for technical exchange between their members through a continuing program of cooperation, leading to mutual sharing of knowledge and expertise to the advantage of the membership of both organizations.

The motivation behind these collaborative efforts is the existing substantial overlap in the membership and the research and professional goals and objectives between ION and IAG, and the potential benefits that may include:

- Cross-advertising of professional meetings and regular information exchange
- Jointly sponsored meetings or sessions at professional meetings
- Joint professional workshops, schools and seminars
- Growth of the organizations' memberships and increased professional visibility.

3. Program of Activities

In accordance with the background, objectives and purpose, as described above, both organizations agree to endeavour to establish and promote their cooperation for mutual benefit. The proposed activates will include, but are not limited, to the following steps:

- 1. Regular contact should be established between the Councils/Executive Offices of both organizations and their elected leaderships to institute and maintain continuing liaison between the two organizations.
- 2. The organizations should inform each other about the structure of the established active entities, such as Commissions, Working Groups, Task Forces, Projects, etc., and invite representation from the other organization to each of these entities, where it is agreed that it would be appropriate and sensible.
- 3. The themes of mutual interests identified at the moment are:
 - Positioning, navigation, and relevant measurements and applications
 - Reference frames and coordinate systems
 - Space and airborne observing systems, sensors and platforms
 - Monitoring deformations, hazards and geodynamic phenomena
 - Geoid determination, height systems, vertical datums
 - Hydrographic surveying, marine geodesy, oceanography
 - Atmospheric studies
 - Theory and algorithms
 - Special applications of geodesy to engineering
 - Education and training
 - History of navigation, surveying and geodesy
 - Cooperation with other international organizations (e.g. UN, ISO (International Organization for Standardization))
 - Contributing to multi-disciplinary research and advisory teams
- 4. The program of proposed schools, seminars, workshops, etc. should be communicated to the other organization to enable consideration as to whether joint participation would be of mutual benefit. Final announcement of such events should be communicated to the members of both organizations either by e-mail or via a posting on the organization's web site under "activities of related/cooperative organizations."
- 5. Both organizations should investigate possibilities to organize, or co-sponsor existing, specialized joint seminars or workshops to serve broader professional communities. Specific joint undertakings require the establishment of a separate agreement in terms of joint meetings and the sharing of any revenues and/or expenses.
- 6. Decision on joint or co-sponsored activities will be made at a meeting between the ION and IAG Presidents upon receiving favourable recommendations from the ION and the IAG Councils and shall be represented by a signed memorandum of understanding.
- 7. Each organization should invite a representative from the other organization to attend their primary professional event (i.e., Congress, General Assembly, etc.).

8. If it is agreed that it would be appropriate and sensible, each organization should consider inviting a representative from the other organization to become a non-voting member (or representative) at each other's Council.

4. Financial Commitment

Recognizing that both ION and IAG are non-profit organizations, without access to external financial resources, the ION and IAG participation at jointly organized events or events organized either by ION or IAG should be funded by their respective organizations.

It is understood that neither organization can commit the other to any expenditure, save that from administering this agreement, without the specific written agreement of both organizations.

5. Intellectual Property Rights and Legal Status

- Intellectual property rights, in particular copyright, of material such as information, software and designs, made available by ION and IAG to be used to carry out the activities under this MOU shall remain with the originating party. Appropriate grants for use of such materials will be further described as specific activities and projects under this MOU are formalized.
- Copyright of the information, as well as rights to any other intellectual property, developed jointly by ION and IAG shall be jointly vested in both parties. Each organization shall have full rights to exploit such jointly owned works after informing the other organization without the need of approval of the other. Since the authors, not the ION, retain the intellectual property rights, but the authors give ION unlimited, commission free rights to distribute/sell their publications, the same rule will apply to the jointly owned work.
- This Memorandum of Understanding does not create any legal link between the two organizations, who will remain mutually independent entities.
- This Memorandum of Understanding is valid until ION or IAG proposes changes to it. Each organization has the right to propose changes to this Memorandum at any time. Any changes shall be subject to the agreement of both organizations.

On behalf of ION

On behalf of IAG

Prof. Penina Axelrad President of ION Prof. Gerhard Beutler President of IAG

Prepared by: Dorota Brzezinska, December 17, 2004