

THE INSTITUTE OF NAVIGATION STRATEGIC PLAN

Approved by Council January 24, 2010

I. INTRODUCTION

This Strategic Plan represents the latest product of the ION strategic planning process initiated in 1993. The purpose of the Plan is to articulate the Vision, Mission, Goals and Objectives of the Institute. The ION can rightfully claim to have successfully identified and implemented a number of important programs and activities that came out of the strategic planning process. The Plan continues to be refined and modified in response to the changing environment.

The general strategy of the Institute is to be an organization with international membership that provides forums for the wide dissemination of technical information, and for discussion of the technical, social, and political aspects of navigation technology, theory, and practices. Although the members of the Institute will be the immediate beneficiaries of these services, the Institute will also provide technical support to the general public.

The current embodiment of the Strategic Plan describes the Vision, Mission, Goals and Objectives of the Institute. Figure 1 shows how the Goals and Objectives derive from the Vision.

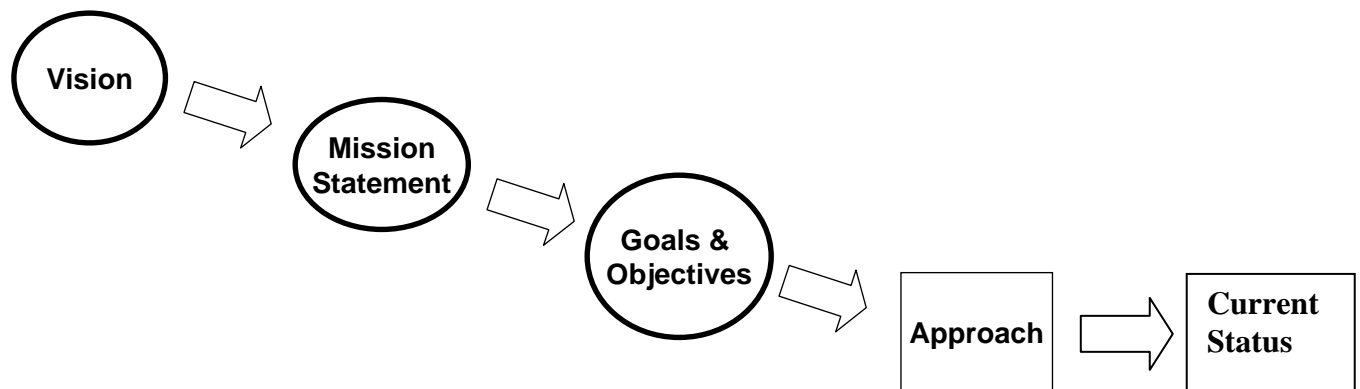


Figure 1. Strategic Plan Flow

As used in this document the terms have the following meanings:

Vision – A brief statement of the ideal towards which the Institute strives to progress.

Mission – A set of statements that broadly describe the activities that enable achieving the Vision of the Institute.

Goals – A set of qualitative and long-term targets the ION should meet in order to fulfill its Mission. Goals may be on-going and continuous, or they may be new or of limited anticipated lifetime.

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Objectives – A set of quantitative and short-term targets the ION should meet in order to fulfill its Goals. Each Objective is linked to a goal, in that achieving an Objective will support the achievement of a stated Goal in the Strategic Plan

Approach – The steps that describe how the ION can meet its Goals and Objectives.

Current Status - Describes actions assigned or in progress.

The Council of the Institute reviews and updates the Strategic Plan on even calendar years so that the Council always has an approved foundation for the management of the Institute.

II. VISION

The vision of the Institute of Navigation is to be the world's premier professional organization dedicated to the advancement of the art and science of positioning, navigation and timing (PNT).

III. MISSION

Consistent with its 1967 Articles of Incorporation, the Mission of the Institute of Navigation is:

1. To facilitate the improvements made in navigation and related arts and sciences by the government, industry and the universities;
2. To support research in navigation and allied and related arts and sciences;
3. To promote and develop the highest quality of performance in order to ensure safety in navigation in all modes of navigation;
4. To publish a journal devoted to a review of progress made in navigation and allied and related arts and sciences;
5. To hold national and regional meetings where members of the Institute and all other persons who are interested in any of the aspects of navigation and allied and related arts and sciences may meet on a professional scientific basis and exchange information;
6. To recognize significant technical, managerial, or educational accomplishments of our members and eminent unaffiliated professionals;
7. To provide professional and technical services to the membership by broadening the organization's membership base;
8. To develop and promote programs to interest youth in navigation and allied arts and sciences;
9. To establish grants and fellowships in existing schools, colleges and universities for advanced study in navigation and allied and related arts and sciences; and
10. To provide technical expertise on navigation and related technologies to U.S. governmental organizations.

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IV. GOALS & OBJECTIVES

It is evident that the Mission of the ION requires efforts in several different areas, conducted by several different groups within the Institute. The members participate by attending conferences, chairing sessions, presenting and writing papers, and offering suggestions and criticisms to conference coordinators and ION officers. Conference coordinators oversee the selection of conference papers, and coordinate the sessions. The ION Council sets policy, and individual Council members run Committees that carry out functions of the Institute, such as Awards recipient selection and producing the Journal. ION officers in the Executive Committee identify issues that need policy guidance. The National Office staff members facilitate the meetings, maintain the finances, manage the operations, guide the business development, perform the logistical planning, and publish the Institute documents. All these activities support the Goals and Objectives of the Strategic Plan.

The Goals and Objectives of the Institute are grouped into the following activity areas:

1. Membership
2. Public Awareness - Outreach
3. Financial Planning
4. Publication
5. Meetings

Table 1 describes the Goals and Objectives of the Institute for the years 2010-2012. Each Goal is keyed to one of the activity areas. Each Objective is keyed to a particular Goal. In the final column, an Approach is identified for carrying out each Objective.

Table 1. Goals & Objectives of the Institute

Activity Area	Goal	Objectives	Approach	Current Status
1. Membership	1.1 Provide relevant membership-oriented services	1.1.1 Provide high-quality, cost-effective services	Council to propose and define these services; National Office to implement	On-going
		1.1.2 Maintain a jobs listing database	National Office to maintain jobs listing database	On-going
	1.2 Promote growth of the Institute	1.2.1 Grow ION membership by 2% per year or more	National Office to identify potential membership incentives for Council action.	Membership survey performed 2008. Premium level membership created 2008. ION’s mission statement was updated. A membership/marketing professional added to ION Nat’l. Office staff. ION continues “yellow badge campaign” and exhibit booth at ENC. Direct membership mailings and campaigns are on-going.
	1.3 Be a source of relevant and timely navigation information.	1.3.1 Maintain and expand an ION web site that provides valuable navigation products to members	Council to propose appropriate information; National Office to maintain	On-going ION GNSS panel discussion available on-line viewing. Basics of GPS tutorial product added.
		1.3.2 Look forward to new emerging technologies and new/recent trends current navigation technologies	Technical Committee/Technical Area Representatives to identify.	On-going Technical Committee met Sept. 2009. President requested Tech Area Reps fully participate in Conference Committee.
	1.4 Maintain a viable membership	1.4.1 Solicit participation and feedback from members	Meeting questionnaires and informal personal contacts	Conduct formal membership survey every five years. (Last done 2008.)

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Activity Area	Goal	Objectives	Approach	Current Status
		1.4.2 Establish and maintain ION sections in viable areas	Area VP's to find people to lead sections and provide encouragement	On-going. North Star section (MN) was formed 2009. Houston Section dissolved 2009.
		1.4.3 Established an active ION member biographical database	National office to maintain an active ION member biographical database to include offices held, offices for which they have been nominated and all ION committees on which they served	Implemented
		1.4.4 Maintain relationships with other related professional organizations	Outreach committee to maintain memoranda of understanding with related professional organizations, and identify new opportunities for collaboration with such organizations.	On-going. Existing MOU's with IEEE, JSDE, AIAA & ISPRS
	1.5 Maintain a diverse membership	1.5.1 Council responsive to members needs	Nominating Committee reviews the Council structure annually to ensure diversity, infusion of new members from various backgrounds, including technology, operations, and business, and best talent available.	A proposal to modify term of office from one year to two years for all Executive Committee members was presented in January 2009. Council determined possibility for two year terms exist in current structure and delegated responsibility for evaluation for length of term on an annual basis to the Nominating Committee.

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Activity Area	Goal	Objectives	Approach	Current Status
		1.5.2 Maintain up-to-date and detailed descriptions of roles and responsibilities of Council positions	Annually update and maintain a description of Council position responsibilities, consistent with the abbreviated descriptions in the Bylaws.	Completed. Circulated Council January 2009.
		1.5.3 Provide ION benefits that attract and retain members of varying membership groups, including technology, operations, and business	Review benefits of ION for various membership groups, including surveying these groups for input, and implement new benefits to attract and retain these groups.	Membership survey completed. Business Plan approved by Exec Comm January 2008 and is being implemented.
2. Public Awareness - Outreach	2.1 Promote public awareness of navigation	2.1.1 Maintain information of interest to the public	National Office to maintain and update ION web site. Require Technical Area Reps. to write one newsletter column per year in their area of interest	On-going Technical Area Reps generally responsive.
		2.1.2 Support the Government Fellows program for 1 or 2 participant(s) per year	Council to appropriate funds; Government Fellows Committee to interview, select Fellows	Government Fellowship was not awarded for 2009.
		2.1.3 Support ION historian functions	Continue to provide history column in ION Newsletter	Implemented
		2.1.4 Grow the Virtual Navigation Museum (VNM)	VNM Editorial Advisory Board to identify and develop content	On-line for public viewing; on-going expansion of content.
		2.1.5 Support the Smithsonian navigation exhibit	Provide technical advisory support	Status based on Smithsonian's ability to acquire additional funding.
	2.2 Achieve and sustain an international presence	2.2.1 Conduct meetings with a strong international presence	Solicit papers, session chairs, and panelists from around the world on topics of international relevance	Implemented

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Activity Area	Goal	Objectives	Approach	Current Status
		2.2.2 Participate in the International Association of Institutes of Navigation (IAIN) activities	Support delegate to IAIN meetings	Executive Committee members and/or Technical Director to represent ION.
		2.2.3 Participate in other internationally recognized meetings	Support delegate's travel to meetings approved by Council	Executive Committee members and/or Technical Director to represent ION.
		2.2.4 Conduct or sponsor meetings or sessions in conjunction with related international meetings	Council to approve on individual basis	Currently the ION co-sponsors PLANS with IEEE and JNC with JSDE.
	2.3 Promote young people's interest in navigation	2.3.1 Sponsor awards to students who present outstanding technical papers	Maintain current programs	Implemented ION GNSS Sponsored Student Travel; ITM Sponsored Student Travel Grant; Graduate Student Awards Program & ION sponsored awards at military academies.
		2.3.2 Establish college scholarships	Maintain section scholarship program and section sponsored graduate student awards program	Implemented
		2.3.3 Develop in school curriculum/programs for K-12 education in navigation topics	Work to have navigation curriculum in the schools; Support Satellite Division efforts	Curriculum available on the ION website.

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Activity Area	Goal	Objectives	Approach	Current Status
		2.3.4 Promote Science Fair, or other extra-curricular, participation by ION members, among membership	Organized a national level high school competition Sections to implement on the local level	Mini Urban Challenge held 2009; scheduled and funded for 2010. Sections implement local level extra-curricular clubs and competitions.
		2.3.5 Promote college & university level competitions	Host a university competition.	The Satellite Division funds the Robotic Mower Competition with support from Dayton Section.
	2.4 Promote ION as a center of excellence and technical credibility	2.4.1 Annual Awards Program	Maintain current program	Implemented
		2.4.2 Annual Fellows Program	Maintain current program	Implemented
		2.4.3 Expand visibility of ION to government as a technical information resource and forum	Meetings provide a forum for technical discussions. Council to approve specific initiatives. Fellowship program to provide opportunities for ION/government interaction.	Implemented
3. Financial Planning	3.1 Establish and maintain a solid financial foundation for the Institute	3.1.1 Establish oversight of fiscal planning and financial health of Institute	Director of Operation/Business Development's responsibility; Council approves budgets and recommendations	On-going
		3.1.2 Establish an investment strategy for the Institute	Finance Chair to review existing policy on an annual basis	
	3.2 Maintain a reserve fund for special occasions and against unforeseen circumstances	3.2.1 Maintain Reserve Fund as defined by Reserve Fund Formula	Establish appropriate fee structure to generate adequate reserves	Council approved an investment strategy including guidelines for maintaining reserve funds in April 2007.
		3.2.2 Develop plan for uses	Strategic Planning Committee to	Council approved an

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Activity Area	Goal	Objectives	Approach	Current Status	
4. Publications		of fund in excess of those required for reserves and operating expenses	recommend, Council to approve, New Initiatives Committee to follow up	investment strategy including guidelines for maintaining reserve funds in April 2007.	
	3.3 Diversify and increase ION revenue sources	3.3.1 Identify approaches ION can implement to diversify its revenue sources	Implement business plan that diversifies and increases ION membership, meeting attendance, and revenue sources	Business plan approved by Executive Committee January 2008 which is currently being implemented.	
	4.1 Produce high-quality publications	4.1.1 Publish a high-quality Journal	4.1.1 Publish a high-quality Journal	Support Journal Editor position; current National Office responsibility to publish. Achieve indexing of journal in SCI.	Application SCI declined January 2009. Working to resubmit. Looking at having out-sourcing journal to a university press to ensure SCI acceptance.
			4.1.2 Publish timely Proceedings on CD's after each conference	Current National Office responsibility to implement	Currently implemented 8-12 week schedule.
			4.1.3 Publish an interesting, timely, and relevant Newsletter four times per year	Current National Office responsibility to implement	Implemented
			4.1.4 Develop and publish new monographs	Responsibility of Publication Policy Chair.	Red book on Integrated Systems has been outlined. National Office to produce upon receipt.
	4.2 Develop navigation standards	4.2.1 Support proposals for formulation of navigation standards	Council to approve appropriate efforts proposed by members	As Needed	
5. Meetings	5.1 Plan and execute timely and attractive technical meetings	5.1.1 Plan and execute timely technical meetings	General Chair recommends next Program Chair, selection by President or Satellite Division Chair; Program Chair to work with Conference Committee; execution is primary National Office responsibility. Continue to partner with other	Continue to hold ITM, PLANS (with IEEE), JNC (with JSDE), ION GNSS and the GNC MAS Workshop.	

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Activity Area	Goal	Objectives	Approach	Current Status
			sister organizations in co-sponsoring existing meetings.	
		5.1.2 Obtain viable cosponsors for meetings that bring in participants in areas related to navigation	Meeting Chair to solicit proposals from sections and/or qualified organizations as defined by ION's co-sponsored meeting policy; Council to approve	Implemented Current co-sponsored events with IEEE, JSDE and AFRL.
		5.1.3 Support international participation in meetings	Provide invitation letters upon request to support Visa applications	Implemented
	5.2 Increase meeting attendance	5.2.1 Reach out to nontraditional groups to participate in our meetings	Approach other technological, operational and business groups and conferences to partner with ION on future meetings	Signed agreement with JSDE to bring in military operators. Facilitating FOUO workshop for AFRL.

Annex I. Institute of Navigation Strategic Plan History

January 2010	Council approves Strategic Plan.
November 2009	Draft of proposed changes/updates to Strategic Plan distributed to Council for review.
September 2009	Strategic Planning Committee formally reviewed and updated plan for presentation to Council prior to the January 2010 Council meeting with the goal of having the plan formally approved at that time.
January 2009	Strategic Plan reviewed.
January 2008	Draft updated incorporating some new objectives based on initiatives outlined in our Business Plan.
June 2005	Council votes and approves the updated Strategic Plan.
January 2005	Committee defers presentation of updated Strategic Plan to Council to June 2005. Committee reviews plan in detail. Action made to add a “current status” column to the plan to track progress of individual actions. Action taken to investigate feasibility/legality of adding international technical representative to the ION’s Executive Committee and/or Council.
June 2004	Consensus of committee to do review of current plan during 2004 and have an updated plan ready to send to the Council for approval January 2005. Action taken to have a draft code of ethics presented at January 2005 Council meeting. Discussion regarding revitalization of ION’s Annual Meeting.
June 2003	Committee decides two-year review cycle may be too frequent and discussed schedule for subsequent Strategic Plan updates/approvals by Council. Management style and investment risk tolerance reviewed.
January 2003	Committee discusses proposal to use new initiatives funds to fund scholarships or awards at university level.
June 2002	Council votes and approves the updated Strategic Plan and passes motions to reinsert the following objectives into the Strategic Plan: 1) list of curriculums related to navigation be developed; and 2) speakers database for ION section use be established.
September 2001	Committee reviews plans objectives, investment goals in relation to Strategic Plan, proposal to create two ION regions (east and west) and provides instructions to bylaws committee required changes.
June 2001	Committee recommends to Council that Strategic Plan be updated every even year. Council accepts recommendation with action to vote on updated Strategic Plan June

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2002. Committee asked to send reviews/updates in by September 2001. Committee begins to discuss idea of electronic journal.

January 2001

Council asks committee prepare recommendations goals and objectives of ION reserve fund.

June 2000

New roles and responsibilities for Technical Committee established. Idea session topics on the integration of GPS with other non-navigation functions discussed. Council asks Committee to 1) examine real cost of providing membership benefits verses dues structure; and 2) examine lease negotiations National Office space

June 1999

Web page development and congressional fellows program moved from Strategic Planning Committee to Council oversight. Committee adopts action to develop business plan for red book on international applications of GNSS. Discussions on proposed education modules/curriculum discussed. Requested plan from National Office to more evenly distribute the membership among the three ION regions. Technical Committee Chair given action to create list potential ION meeting topics.

June 1998

Council votes and approves the updated Strategic Plan. The Goals & Objectives from the 1998 Strategic Plan were reviewed and assessed. In general, it was apparent that the ION had achieved most of the specific objectives, and had made considerable progress in all of them. In those activities that are on going, the Institute can take pride in achieving a high level of excellence in the past four years.

Goals:

1. Membership oriented services.
2. Source of navigation system standards.
3. Public awareness of the importance of navigation.
4. Growth of the Institute.
5. International presence.
6. Young people's interest in navigation.
7. Source of navigation information.
8. High quality technical meetings.
9. Viable membership.
10. Reserve Fund.
11. Technical credibility.

Objectives:

1. Participation in the International Association of Institutes of Navigation (IAIN) activities.
2. Provide high-quality, cost-effective ION office services.
3. Provide required navigation products and services.
4. Plan timely technical meetings.
5. Grow ION membership 2 % per year.
6. Establish ION sections in viable areas.
7. Establish a jobs listing database.
8. Establish GPS test standards.
9. Establish navigation/reference algorithm interface (and other) standards.

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10. Develop a plan for, and publish, the navigation system monograph series.
11. Publish a quality journal, timely proceedings, and relevant newsletter(s).

April 1998 Strategic Planning Committee updates the Strategic Plan with approved objectives from Council motions/actions and the Council-approved Strategic Five Year Plan.

January 1997 Council requests the following objectives be added the Strategic Plan: 1) WAAS Red Book; and 2) investigate feasibility of IMU Interface Standards.

June 1995 ION Strategic Plan was distributed to Council for comments by George Lowenstein (This Plan was authored by Lowenstein and Stan Lewantowicz).

The following Council actions were suggested:

1. Specify a review and update cycle for the Plan
2. Consider whether the Plan should include action items, or, be left as a document of general guidelines the purpose of which would be to make it a thinking and planning tool rather than a document to be followed by the letter.

January 1994 Strategic Five Year Plan (updated in accordance with Council suggestions) was distributed to Council.

OBJECTIVES from January 23, 1994 Strategic Five Year Plan:

1. Investigate feasibility of selling certain navigation texts and publications.
2. Investigate feasibility of selling selected videotapes on navigation subjects.
3. Establish a speaker's bureau.
4. Prepare an Inertial Navigation Bibliography.
5. Prepare a list of curriculums related to navigation science/engineering.
6. Investigate member, associate and corporate member dues structure.
7. Attract new members through ION Section/Division activities.
8. Develop a Code of Ethics.
9. Develop a Scholarship Program that will interest students in studying the field of navigation.

January 1993 Council Approves the Strategic Five Year Plan prepared by David C. Scull. It contains the purpose of the Institute with comments, a list of goals and objectives; and a detailed list of action items with schedules.