

Rules of International Towing Tank Conference (adopted by the 25th ITTC)

1. DESCRIPTION

The International Towing Tank Conference (ITTC) is a world-wide independent association of hydrodynamics research organizations that operate towing tanks or similar model test laboratories. ITTC members support the designers, builders and operators of ships and marine installations by giving advice and information regarding the performance, safety and environmental impact of ships and marine installations using the results of physical model tests, numerical modelling and full-scale measurements.

2. AIMS

The aims of the ITTC are:

- (a) To stimulate progress in solving the technical problems which are of importance to towing tank organizations and model test laboratories;
- (b) To stimulate research in areas in which a better knowledge is required in order to improve methods of predicting the full-scale hydrodynamic performance of ships and marine installations;
- (c) To stimulate the improvement of methods of model experiments, numerical modelling and full-scale measurements;
- (d) To recommend procedures for carrying out physical model experiments, numerical modelling and full scale measurements of ships and marine installations;

- (e) To validate the accuracy of full-scale predictions for quality assurance;
- (f) To formulate collective policy on matters of common interest;
- (g) To provide an effective organization for the interchange of information.

3. ACTIVITIES

The aims of the ITTC shall be pursued by:

- (a) Stimulating research into specific topics;
- (b) Organizing and encouraging meetings to review progress in this research;
- (c) Making such recommendations and decisions on joint action and policy as seem desirable to the members of the ITTC;
- (d) Establishing procedures and guidelines to help the member organizations to maintain their institutional credibility with regard to quality assurance of products and services, such as, performance prediction and evaluation of designs by either experimental or computational means;
- (e) Recording and publishing discussions taking place at ITTC meetings.

4. MEMBERSHIP

Membership of the ITTC shall be open to all

towing tank organizations or model test laboratories that carry out hydrodynamic work in support of the designers, builders and operators of ships and marine installations, and to other organizations that contribute to the aims of the ITTC.

Applications for membership shall be made to the Executive Committee through the ITTC Secretary. Each such organization shall satisfy the Executive Committee that it is eligible for membership.

Each member organization shall be represented by its director or other senior officer having the authority to bind the member organization in matters relating to the ITTC (the designated representative).

A membership fee shall be payable by all member organizations. The Executive Committee shall propose the fee for the next three years for approval by the Full Conference. The fee shall be payable on October 1st of the year in which the triennial conference (the Conference) is held.

A member organization, which has not paid the fee by May 31st in the year following the Conference, shall no longer be a member organization of ITTC and the name of the organization shall be removed from the membership list. The Executive Committee may extend this deadline if unusual financial or administrative circumstances delay the payment of the fee.

5. FULL CONFERENCE

5.1. The Full Conference comprises the designated representatives of member organizations eligible to vote and present at general sessions that take place during the Conference.

Roles and responsibilities

5.2. The Full Conference shall:

- (a) Determine the policies of the ITTC;
- (b) Approve changes to the rules of the ITTC;
- (c) Appoint the Chairman of the Executive Committee and the ITTC Secretary;
- (d) Appoint the Chairman and members of each technical committee or group;
- (e) Approve financial reports and plans and the ITTC membership fee;
- (f) Approve the host organization for the next Conference;
- (g) Approve terms of reference for technical committees and groups;
- (h) Approve recommended procedures and guidelines.

5.3. Only member organizations are eligible to vote. The vote shall be exercised by the designated representative of the organization and no organization shall be entitled to more than one vote. A designated representative who is unable to attend the meeting may choose to delegate the voting rights of the member organization to another employee of the organization. The designated representative must inform the Chairman of the Executive Committee of the name of the alternate before the start of the general session at which the vote will take place. Postal or email votes shall not be allowed.

5.4. Voting may be by secret ballot or a show of hands as determined by the Executive Committee. An affirmative vote of at least 2/3 of members present shall be required to carry a motion.

5.5. A record of the decisions of the Full Conference shall be published in the proceedings of the Conference.

6. EXECUTIVE COMMITTEE

Roles and responsibilities

6.1. The Executive committee shall:

- (a) Implement the decisions of the Full Conference;
- (b) Represent the ITTC between Conferences;
- (c) Replace members of technical committees or groups as necessary between Conferences;
- (d) Accept new member organizations to the ITTC;
- (e) Manage the income from the ITTC membership fees and any amounts transferred from the Advisory Council.
- (f) Approve the arrangements and associated costs and registration fees for the Conference;
- (g) Prepare a report on its activities for presentation at a general session of the Conference.

6.2. The Executive Committee shall propose the following for approval by the Full Conference:

- (a) The Executive Committee Chairman, ITTC Secretary and members and Chairmen of technical committees and groups;
- (b) The terms of reference of technical committees and groups;
- (c) Recommended procedures and guidelines;
- (d) The host organization for the next Conference;

(e) A financial plan and the ITTC membership fee.

6.3. In order to pursue the aims of the ITTC the Executive Committee may initiate formal interactions or collaborations between the ITTC and other organizations (for example the IMO or ISSC). The Executive Committee may require technical committees to carry out specific tasks in support of such interactions.

6.4. Votes by the Executive Committee may be by a show of hands or secret ballot at the call of the Chairman. A simple majority shall carry a motion.

6.5. The Executive Committee shall meet at least three times between Conferences.

Membership

6.6. The Executive Committee shall normally consist of seven full-voting members including the Chairman.

(a) There shall be one representative from each of the six geographic areas listed in Annex A. (the area representative). Where at all possible, the area representative shall represent a member organization of the Advisory Council. The Executive Committee may approve exceptions to the area representative being from a member organization of the Advisory Council. Each area representative shall normally serve for two terms of three years each. The area representatives shall be appointed at least one-half year prior to the Conference by the member organizations of that area. Each region shall decide on its own procedure for selection (election) of its area representative.

(b) The Chairman of the next Executive Committee shall be appointed by the Full Conference at the end of the Conference and act as Chairman until the end of the next Conference. The Chairman of the Executive

Committee is usually the designated representative of the member organization that will host the next Conference, but the Executive Committee may propose as its Chairman the designated representative of any member organization in the area where the next Conference will be held. The Vice-Chairman of the Executive Committee shall be elected by the Executive Committee from its members.

6.7. The following shall be ex-officio non-voting members of the Executive Committee:

(a) The Chairman of the Advisory Council

(b) The ITTC Secretary

(c) The past Chairman of the Executive Committee. If the past Chairman is the representative of a geographic area then that person shall be a full voting member of the Executive Committee.

(d) The Conference Organizer, if that person is not a member of the Executive Committee.

6.8. The Executive Committee Secretary shall be proposed by Chairman of the Executive Committee for approval by the Executive Committee and shall normally serve for the term of one Conference.

6.9. The Executive Committee Secretary shall work in support of the Executive Committee and carry out duties assigned by the Executive Committee. The duties may include work relating to the organization of the next Conference such as making detail arrangements for the Conference, editing and publishing the proceedings and communicating with member organizations concerning the Conference.

7. ADVISORY COUNCIL

Roles and responsibilities

7.1. The Advisory Council proposes to the Executive Committee the topics that should be

addressed by the ITTC, bearing in mind that the primary aim of the ITTC is to solve technical problems of importance to towing tank organizations. It proposes new specialist committees and recommends terms of reference for all technical committees based on input from technical committees, ITTC members at large and the expertise and priorities of Advisory Council members.

7.2. The Advisory Council proposes recommended procedures and guidelines to the Executive Committee based on proposals by technical committees and groups.

7.3. The Advisory Council may provide advice or recommendations to the Executive Committee on any other topics agreed by the Chairmen of the Executive Committee and Advisory Council.

7.4. The Advisory Council may set up mechanisms to support and monitor the work of Technical Committees. The Advisory Council may communicate with technical committees through the ITTC Secretary.

7.5. Votes on matters other than the appointment of the Chairman or vice-Chairman may be by a show of hands or secret ballot at the call of the Chairman. A simple majority shall carry a motion.

7.6. The Advisory Council shall meet at least three times between Conferences at times and places coordinated with meetings of the Executive Committee.

Membership

7.7. The Executive Committee appoints members to the Advisory Council. Applications for membership shall be made to the Executive Committee through the area representative. Each such organization must satisfy the Executive Committee that:

(a) It carries out a substantial portion of its work for clients and is able to demonstrate a prior and ongoing responsibility for the prediction of performance of actual vessels and marine installations. Substantial portion of work means that a substantial portion of the income to their model test laboratories comes from contracts for clients. These clients may be commercial clients, government organizations, or other organizations within the same company;

(b) It has a long history of work in support of the ITTC as evidenced by membership of Committees and Groups, providing data in support of committee and group work, or making written contributions to committees and groups;

(c) It operates at least two model test facilities and has the capability of performing a variety of experimental and numerical investigations within the scope of the ITTC.

7.8. No limit shall be put on the total number of members. However, the Executive Committee shall confirm the membership of each member of the Advisory Council once every six years. In order to remain a member of the Advisory Council members must demonstrate to the Executive Committee that they meet the criteria (a), (b) and (c) and that in addition, they have had a record of regular attendance at meetings of the Advisory Council and the Full Conference and have made meaningful contributions to the Advisory Council. Half the Advisory Council member organizations shall be confirmed every three years. The Advisory Council shall recommend the process for confirmation to the Executive Committee.

7.9. Member organizations appointed to the Advisory Council shall be represented on the Advisory Council by their designated ITTC representative. In the event of the designated representative being unable to attend a meeting,

the member organization may send an alternate who shall be a senior technical member of the management of the member organization, able to contribute to technical discussions on hydrodynamic testing, numerical modelling and full-scale measurement.

7.10. Each member of the Executive Committee shall be an ex-officio member of the Advisory Council if he/she is not already a member in his own right as a representative of a member organization.

7.11. The Chairman and vice-Chairman of the Advisory Council shall be elected by its members between one year and one-half year prior to the next Conference. The election shall be by secret ballot, the candidate with the maximum number of votes shall be elected. The Chairman shall take office immediately following the end of this Conference.

7.12. Secretarial support to the Advisory Council shall be provided by the ITTC Secretary.

Advisory Council fee

7.13. Advisory Council members shall pay a fee to provide sufficient money to cover the cost of the additional workload on the ITTC Secretary of performing secretarial duties directly for the Advisory Council. The fee shall be approved by the Advisory Council and paid at the same time and under the same conditions as the ITTC membership fee. The Advisory Council shall be responsible for managing the income from the Advisory Council fee.

8. TECHNICAL COMMITTEES

Roles and responsibilities

8.1. The technical committees carry out the technical work of the ITTC defined in their terms of reference. The results shall be

documented in reports published in the proceedings of the Conference.

8.2. The technical committees shall consist of two types. One type on "general subject areas" (general committees), such as: Resistance, Propulsion and Manoeuvring, shall be continuing committees. The other type on "special subject areas" (specialist committees), such as Waterjets, where a specific technical problem needs to be addressed shall be of limited duration.

8.3. Technical committees shall develop detailed plans in accordance with their terms of reference. The work of all technical committees shall be directed towards the techniques and understanding of physical and numerical modelling as a means of predicting full-scale behaviour. While maintaining an awareness of progress, fundamental theoretical studies and fundamental aspects of numerical fluid computation shall be covered by other forums, such as the ONR Symposium on Naval Hydrodynamics or Conference on Numerical Ship Hydrodynamics.

8.4. Technical committees may contact member organizations to request assistance (for example, by completing a questionnaire, participating in comparisons of the results of experiments or calculations or providing other information) or accept offers assistance from member organizations or individuals to help them carry out their work. Written contributions to the program of work of a technical committee may be submitted to its Chairman by any member organization or individual. The technical committee may include a short abstract of any such contribution in its report, with an indication of the source from which the full document may be obtained. The conclusions and recommendations published in the committee report are the sole responsibility of the committee.

8.5. A technical committee may make informal contact with technical committees of other organizations which may be working in areas of interest to the ITTC committee.

8.6. The report of a technical committee shall reflect the opinion of the complete committee. If the committee is unable come to a consensus, the different opinions of committee members shall be published. The length, structure and format of the report shall be in accordance with guidelines set by the Executive Committee. The conclusions shall be structured into two separate parts:

(a) General technical conclusions;

(b) Recommendations to the Full Conference to adopt new or revised Recommended Procedures or Guidelines.

8.7. Technical committees may make proposals for future work in the subject area covered by the committee. Such proposals shall be communicated to the Advisory Council through the ITTC Secretary.

8.8. Reporting schedules for the technical committees shall be set by the Executive Committee and communicated by the ITTC Secretary.

8.9. Technical committees shall meet no more than four times between Conferences.

Membership

8.10. Each technical committee shall normally consist of not more than eight members, including the Chairman. The Chairman and members shall in all cases be selected for their personal contributions to, interest in, and ability to contribute to the subject area of that technical committee. Formal qualifications and a balanced geographic representation shall also be considered in the selection process. The organization sponsoring the candidate must have agreed to support the candidate financially

in carrying out his/her committee work and travel to committee meetings.

8.11. For general committees, each geographic area shall be allowed to present to the Executive Committee a "curriculum vitae" of only one candidate for each committee. Once the first six positions have been successfully filled, each geographic area that wishes to nominate an additional candidate may put a "curriculum vitae" of another candidate forward for the two remaining positions on that technical committee. For specialist committees each geographic area may nominate any number of candidates.

8.12. The membership of each technical committee shall be reviewed by the Full Conference at intervals of not more than three years. A person shall not serve on technical committees for more than a total of four three-year terms, and shall not be a member on any one technical committee for more than three terms.

8.13. A member of a technical committee who is unable to continue in committee work shall be replaced according to the following guidelines:

(a) Where possible a suitable candidate should be found from the geographical area of the member to be replaced;

(b) The Area representative for that area shall, after consultation with the Chairman of the technical committee, recommend the name of the replacement member to the Executive Committee;

(c) If a suitable replacement cannot be found from the area of the member to be replaced, the Executive Committee shall solicit proposals from other area representatives. The Executive Committee shall consult with the Chairman of the Technical Committee on the suitability of candidates for the work of the Committee;

(d) The Executive Committee shall appoint the new technical committee member.

9. GROUPS

9.1. The Executive Committee may establish groups to carry out specific non-technical tasks for the ITTC. Examples of groups are the Symbols and Terminology Group and the Quality Control Group. Groups may have fewer members than the technical committees. Membership on a group shall normally not exceed three terms of three years, but the Executive Committee may make exceptions. Groups shall be disbanded upon completion of their tasks. Groups shall meet no more than four times between Conferences.

10. SERVING IN MORE THAN ONE CAPACITY

10.1. No person shall serve in more than one official capacity, nor on more than one technical committee, at the same time. The official capacities are:

(a) Membership of the Executive Committee;

(b) Chairman of the Advisory Council;

(c) Chairman of a technical committee or group.

10.2. A member of the Executive Committee or the Chairman of the Advisory Council shall not also be a member of a technical committee or group except for short periods of time at the expressed recommendation of the Executive Committee.

11. ITTC SECRETARY

Roles and responsibilities

11.1. The ITTC Secretary shall undertake all administrative and secretarial tasks in support of the operation of the ITTC except those specifically assigned by the Executive

Committee to the Executive Committee Secretary.

11.2. The duties of the ITTC Secretary may include maintaining lists of ITTC memberships, publishing the ITTC Newsletter and maintaining the ITTC website. The ITTC Secretary provides secretarial support to the Executive Committee and the Advisory Council and is the primary point of contact for communications within the ITTC and between outside organizations and the ITTC.

11.3. The ITTC Secretary shall be responsible for the administration of ITTC funds. The ITTC Secretary shall:

- (a) set up a bank account for ITTC funds;
- (b) collect ITTC membership fees and Advisory Council fees;
- (c) make separate records of income and expenditure for the ITTC membership fees and AC fees;
- (d) prepare proposed budgets and financial reports for the Executive Committee and Advisory Council;
- (e) make authorized withdrawals from the account.

Selection of the ITTC Secretary

11.4. The ITTC Secretary shall be employed by or in the case of a retiree, directly supported by a member organization of the Advisory Council which undertakes to provide necessary services such as office space, Fax, email etc. (The host organization for the ITTC Secretary). The Secretary shall have experience as a representative on the Advisory Council or as a member of a technical committee.

11.5. The Advisory Council shall give the name of a qualified person willing to become ITTC

Secretary for the next ITTC period to the Executive Committee between one year and one-half year prior to the next Conference. The name shall be chosen by secret ballot and the candidate with the maximum number of votes shall be passed on to the Executive Committee. The Executive Committee shall propose the ITTC Secretary to the Full Conference for appointment.

11.6. The ITTC Secretary shall normally serve for two terms.

11.7. The remuneration for the ITTC Secretary shall be decided by the Executive Committee.

12. MANAGEMENT OF ITTC FUNDS

12.1. The Executive Committee shall be responsible for the management of income from ITTC membership fees and funds transferred to it by the Advisory Council. Income from membership fees shall be used to cover the costs of the ITTC organization, including the remuneration of the ITTC Secretary, part of the cost of producing the proceedings of the Conference and other costs approved by the Executive Committee.

12.2. The Advisory Council shall be responsible for the management of income from Advisory Council membership fees. Income from the Advisory Council fee shall be transferred to the Executive Committee to cover the cost of the additional workload on the ITTC Secretary of performing secretarial duties directly for the Advisory Council and the cost of any other activities approved by the Advisory Council for implementation by the Executive Committee.

12.3. Once each year the Executive Committee and Advisory Council shall review and approve budgets for the money for which they have responsibility. The budgets shall show actual income and expenditures to date, including any

balance or deficit remaining from previous ITTC periods, and income and expenditures planned for the remainder of the current ITTC period.

12.4. The ITTC Secretary shall set up a separate bank account for ITTC funds. The ITTC membership fees and Advisory Council fees may be kept in the same bank account (the ITTC Account), but the ITTC Secretary must maintain separate records of the income and expenditures of money from both sources. Withdrawals from the account shall be made only by the ITTC Secretary with the written authority of the Chairman of the Executive Committee or the Chairman of the Advisory Council as appropriate. Cheques must be co-signed by the senior financial officer of the host organization for the ITTC Secretary.

12.5. A financial report shall be included in the Executive Committee Report to the Conference. The Executive Committee shall also present an outline financial plan for the upcoming period including a proposal for the ITTC membership fee, for approval by the Full Conference. The financial reporting period for the ITTC is from October 1st in the year of the Conference to September 30th in the year of the next Conference.

13. THE CONFERENCE

13.1. The Conference shall be held at three-year intervals.

13.2. Invitations from organizations to host the Conference of the next interval must be sent to the Executive Committee, through the area representative, at least one year before the Conference of the current interval.

13.3. The Executive Committee and the Full Conference shall ensure a balanced rotation of the Conference venue among the six geographic areas. Each area shall decide on its

own procedure for the rotation of venue among the countries in the area.

13.4. The host organization for the Conference may be either an ITTC member organization or an association whose mandate or aims are relevant to the aims of the ITTC, such as the American Towing Tank Conference, the Society of Naval Architects of Japan or the British Marine Hydrodynamics Panel.

13.5. The host organization shall have overall responsibility for the organization of the Conference.

13.6. When the host organization is an ITTC member, the Conference organizer shall be the designated representative of the host organization. When the host is a local association, the Conference organizer shall be the designated representative of an ITTC member organization chosen by the association.

13.7. The Conference organizer shall be responsible for the detailed arrangements for the Conference including the preparation and publication of the Conference proceedings.

13.8. The arrangements, associated costs and registration fees for the Conference must be proposed by the host organization for approval by the Executive Committee.

13.9. Participation in the Conference is by invitation only. The host organization shall invite designated representatives of ITTC member organizations and members of technical committees and groups to the Conference. The host organization may also invite observers and seniors to attend. The names of observers shall be proposed by their area representative. Seniors are persons now retired who have had a long association with the ITTC and whose attendance is proposed by their area representative and endorsed by the Executive Committee. The host organization shall offer reduced registration fees to seniors.

Conference arrangements

The Conference shall include general and technical sessions

13.10. General sessions shall include discussion of the report of the Executive Committee and presentations of proposals from the Executive Committee for decisions by a vote of the Full Conference. The agenda and decision record of the general sessions shall be published in the proceedings of the Conference. General sessions shall be chaired by the Chairman of the Executive Committee.

13.11. Technical sessions shall discuss the reports and recommendations of the technical committees. No discussion shall be permitted that is not directly related to the report and recommendations under consideration. The Conference proceedings shall not be used as vehicles for disseminating technical papers. Technical sessions shall be Chaired by members of the Executive Committee or Advisory Council.

13.12. The Conference may also include group discussions, to provide opportunity for discussion of topics of current interest to members. The Advisory Council shall propose topics for group discussions to the Executive Committee. The Executive Committee shall choose suitably qualified individuals to organize and Chair the group discussions. A summary of the discussion shall be published in the proceedings.

13.13. Designated representatives, members of technical committees and groups, observers and seniors may participate in discussions at technical sessions (including submitting written discussion) and in group discussions. Designated representatives may submit written discussion on behalf of colleagues from their organization. Presentation of written discussion during the technical session shall be

at the discretion of the session chairman. Only designated representatives of member organizations may participate in discussions at general sessions.

14. COMMUNICATIONS

14.1. The Executive Committee shall regularly communicate with member organizations on activities relating to the work of the Executive Committee, the Advisory Council and technical committees and groups and other any the matters judged by the Executive Committee to be of concern to ITTC member organizations. The communications may be through the use of a web site, the publication of a newsletter or any other means chosen by the Executive Committee.

14.2. Member organizations may bring issues to the attention of the ITTC through their area representative. Members of the Advisory Council may do so at a meeting of the Advisory Council.

ITTC Website

14.3. There shall be only one ITTC web site. The ITTC Secretary shall maintain the site.

14.4. The ITTC website shall provide access to:

(a) Membership information, rules, procedures and guidelines, and the archive of Conference proceedings;

(b) Information relating to the upcoming Conference, including location, hotels, travel, technical and social programs, and committee reports, and other documentation for discussion at the Conference.

ITTC Newsletter

14.5. A newsletter may be used to communicate with member organizations. The

newsletter shall be published twice a year. It shall be edited and produced by the ITTC Secretary. The newsletter may be published in paper or electronic form.

ANNEX A

Geographic areas

Area	Countries Included
Americas	Argentina, Brazil, Canada, Chile, Ecuador, Mexico, USA, Venezuela
Central Europe	Austria, Belgium, Germany, The Netherlands, United Kingdom
East Asia	China, Korea
Northern Europe	Denmark, Finland, Norway, Poland, Russia, Sweden
Pacific Islands	Australia, India, Indonesia, Japan, Malaysia
Southern Europe	Bulgaria, Croatia, France, Greece, Iran, Israel, Italy, Portugal, Romania, Spain, Turkey

ANNEX B

Notes on the organization and operation of the ITTC

This Annex provides information to help new members of ITTC or members joining committees for the first time, understand the workings of the ITTC organization. It includes background information, explains some rules in more detail than is appropriate in the formal rules document and includes brief descriptions of current practice.

The Annex is supplementary to the Rules, and does not take the place of the Rules. In case of a perceived conflict between this Annex and the Rules, the Rules shall be followed.

Definitions

In previous versions of the Rules and colloquially, the words ‘International Towing Tank Conference’, its initials, ITTC, and shortened form, ‘Conference’ have been used to mean different things depending on the context. The present Rules attempt to avoid this confusion by using these words with specific meanings:

The four letters **ITTC** means the association of towing tank organizations which functions according to these rules.

The Conference means the tri-annual meeting of ITTC member organizations.

The Full Conference means the representatives of member organizations with authority to vote.

The name “**International Towing Tank Conference**” is not used in the Rules except as the title. In other documents it may be used to mean the organization (ITTC) or the tri-annual meeting (the Conference), depending on the context.

In addition the following three words are used in the Rules:

Shall: Conveys commitment to doing some-

thing. Of these three words, shall is used in the Rules in paragraphs which describe the operation of the ITTC.

Must: The action is mandatory; there are no alternatives; gives emphasis. Stronger than shall.

May: The action is optional; the choice is up to the person performing the action.

These definitions are also used in this Annex.

Brief history of the ITTC

In 1933 23 representatives of tanks from 10 countries including the superintendents of 9 tanks met in The Hague, to “confer in an open and confidential manner on their own methods and also on the manner of publication of tank results.” The program for the new Conference of Ship Tank Superintendents was focused on the everyday business of tanks. The conference appointed a committee to work out “in a more definite way the general conclusions.” This was the forerunner of the technical committees we have today. All decisions were made by all those present at the “the conference”.

This simple organization continued until 1948, when a Standing Committee of six regional members was formed to give continuity from one Conference to another. This later became the Executive Committee. Up until 1948 individual Conference attendees made presentations, but from 1948 discussions at the Conference were based on reports of the technical committees. This continues to be the structure of the ITTC Conferences.

As the size and number of topics considered by the ITTC increased, there was concern that the ITTC should not evolve into a diffuse organization loosely concerned with ship hydrodynamics. In addition, the member organizations whose primary business was model testing for clients were worried that they would be outnumbered by the tanks operated

by educational and research institutions which did not share the same responsibilities to customers. There was a possibility that ITTC might adopt procedures and policies that would be harmful to the relationships between the more commercial facilities and their customers. The Advisory Council was formed in response to these concerns. The purpose of the Advisory Council was (and still is) to recommend the subjects to be considered “bearing in mind the primary aim of the conference is to solve technical problems of importance to tank superintendents.” Organizations represented on the Advisory Council were selected from member organizations which met criteria chosen to show that their primary business was model testing for clients. In many ways the Advisory Council represents the community of Tank Superintendents which first met over 60 years ago.

Aims of the ITTC

The Aims of the ITTC written in the Rules have changed very little from the aims of the ITTC expressed in the first meetings over 70 years ago. Over the years they have been revised to keep them up to date by including numerical modelling and full-scale trials and work done by ITTC members on marine installations other than ships. The aims include stimulating relevant research in hydrodynamics, but the exchange of information concerning research in theoretical hydrodynamics and fundamental aspects of numerical fluid computations are not included. These are covered by other forums, such as the ONR Symposium on Naval Hydrodynamics or Conference on Numerical Ship Hydrodynamics. The ITTC establishes the need for research, encourages research and provides for coordination of research carried out by its members, but does not, as an organization, fund or carry out research. The aims are written to ensure that the ITTC continues to focus on its unique role of meeting the needs of its members for giving advice and information on full-scale performance to the designers, builders and

operators of ships and marine installations based on physical and numerical modeling.

The ITTC Organization

Members

Members of the ITTC are organizations that satisfy the Executive Committee that they meet the criteria for membership stated in the Rules. (The ITTC does not have individual memberships; people participate in ITTC activities as representatives of member organizations).

Designated representatives

Designated representatives are directors or senior officers of member organizations who have authority to bind the organization in matters relating to ITTC. Each member organization has one designated representative.

Full Conference

Decision making authority for the ITTC rests with its member organizations. The Full Conference is the collective name of the designated representatives from member organizations present at general sessions held during the Conference. Votes taken during general sessions at the Conference are recorded as decisions of the Full Conference.

Executive Committee

The Executive Committee is in effect, the 'governing body' of the ITTC. The Chairman is usually the organizer of the next Conference and members are representatives from each of 6 geographic areas. The Executive Committee implements decisions of the Full Conference and may take actions between Conferences. The agenda of the Executive Committee includes applications for membership of the ITTC, membership of technical committees, arrangements for the next Conference, financial matters and relationships with other organizations.

Chairman of the Executive Committee

The Chairman of the Executive Committee is the leader of the ITTC and Chairs general sessions at the Conference.

Advisory Council

The Advisory Council drives the technical agenda of the ITTC. It is comprised of about 30 of the larger member organizations whose primary business is model testing for clients and have had a long history of involvement with the ITTC. The Advisory Council identifies topics of importance to the ITTC, drafts terms of reference for the technical committees and groups and provides ongoing support and monitoring of the technical committees as they carry out the work. It reviews proposed recommended procedures in detail, and ensures they are appropriate for practical application in work for clients. It reviews annual progress reports from technical committees.

Advisory Council Working Groups

To do its work effectively, the Advisory Council has set up four working groups. Each working group has responsibility for a technical area of importance to the ITTC. Members of the working groups are members of the Advisory Council who have an expertise or particular interest in the subjects covered by the group. The working groups take the lead in dealing with technical matters in their area of expertise and report at meetings of the Advisory Council.

Technical Committees

Technical committees carry out the technical work of the ITTC. Members of the technical committees are chosen for their ability to carry out the work and to ensure a geographic distribution of membership. The Executive Committee chooses the Chairmen. The scope of work is defined in the terms of reference for the committee. There are two types of technical committee; general technical committees are concerned with areas of continuing long-term importance to ITTC

member organizations and specialist technical committees that address specific topics and are of limited duration. All the technical committees have equivalent responsibilities. There is no hierarchy between technical committees. The reports of technical committees primarily contain reviews of research relevant to ITTC members and are not comparable in format or content with publications in technical journals or at other conferences.

Groups

Groups are similar to technical committees except that their work is primarily non-technical (for example symbols, quality control).

The ITTC Secretary

The ITTC Secretary is a central point of contact for communications between ITTC members and to and from organizations outside the ITTC. The ITTC Secretary undertakes secretarial tasks in support of the operation of the ITTC except those undertaken by the Executive Committee Secretary. The duties of the Secretary include maintaining lists of memberships, the administration and collection of membership fees, publishing the ITTC newsletter, maintaining the ITTC website and preparing agenda and minutes of meetings of the Full Conference.

Executive Committee Secretary

The Executive Committee Secretary is primarily concerned with the organization of the Conference. These duties are common to the organization of any conference and include making physical arrangements, setting up the registration process and arranging for publication of the reports of technical committees and discussions. The Executive Committee Secretary also performs duties in support of the Executive Committee, such as preparing agenda and minutes of meetings.

The Conference

The Conference is held once every three

years, usually in September. The Conference agenda is based on the presentation and discussion of reports of technical committees, not presentations of papers by individuals. The plenary or general sessions are the opportunity for representatives of ITTC member organizations to discuss and for the Full Conference to vote on recommendations from the Executive Committee.

The Conference venue and host organization are chosen to ensure a balanced rotation between geographic areas. The host organization has overall responsibility for ensuring the Conference meets the requirements of the ITTC as described in the Rules and communicated by the Executive Committee. The detailed arrangements for the Conference are the responsibility of the Conference Organizer who is the designated representative of the host organization. The Executive Committee must approve the arrangements and associated costs for the Conference. The Conference Organizer is usually Chairman the Executive Committee. The rules are written to allow for the possibility that the Conference Organizer might have little experience of ITTC and that a different person might Chair the Executive Committee. Up to the 25th Conference this situation has never arisen.

Participation in the Conference is by invitation only. Invitations are sent to all designated representatives and members of technical committees and groups. In addition area representatives may propose observers and seniors to attend. Employees of ITTC member organizations who are neither designated representatives nor members of technical committees or groups may attend the Conference as observers. Observers may also be persons with an interest in the work of the ITTC who are not affiliated with ITTC member organizations. Examples are representatives from ship designers and builders, classifications societies or other marine research organizations. Representatives of

commercial companies with an interest in marketing to ITTC members may attend the Conference as observers, but no provision is made at most venues for the distribution of advertising material or product demonstrations.

Meetings

ITTC committees (including the Executive Committee and Advisory Council) meet three or four times between Conferences. The cost of attending these meetings is a significant cost to committee members' organizations and every effort is taken to minimize them. Meetings are often scheduled to coincide with major conferences likely to be attended by several committee members and the cost to the host is kept small by using in non-commercial facilities whenever possible. The high cost of long distance air travel is distributed among members by holding meetings in different geographic areas.

ITTC Fees

Member organizations pay a membership fee by which ITTC funds are raised. The ITTC funds are used to cover the cost of the ITTC organization, including paying for the ITTC Secretary and a proportion of the cost of publishing the proceedings of the Conference. (Conference proceedings are distributed to all members, whether they attend the Conference or not). Registration fees paid by Conference attendees cover the cost of the Conference and the remainder of the cost of the Proceedings.

Decision making process

The Full Conference is the decision-making authority for the ITTC. Decisions by technical committees, the Advisory Council and Executive Committee (other than those concerning only the internal operation of these committees) are made as recommendations for adoption to the next level on the organization as follows:

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| 3) Executive Committee |
| 4) Vote by the Full Conference |

For example, when a technical committee recommends the adoption of a procedure, the procedure is first reviewed in detail by the Advisory Council. (In doing this the Advisory Council will make use of the expertise in the corresponding Advisory Council working group). If the Advisory Council supports the recommendation it will pass the procedure to the Executive Committee for consideration. If the Executive Committee also supports the recommendation, (Rejection is unlikely because members of the Executive Committee are also members of the Advisory Council) it will recommend its adoption by the ITTC member organizations through a vote of the Full Conference.

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| 1) Technical committees or groups |
| 2) Advisory Council |