

IVI-2: Operating Procedures

July 30 1998 Edition Revision 0.3

Important Information

Notice

The Operating Procedures (IVI-2) is authored by the IVI Foundation member companies. For a membership roster list, please visit the Foundation's Web Site at www.ivifoundation.org, or contact the IVI Foundation at 11500 N. Mopac Expwy, Austin, Texas, 78759-3504.

The IVI Foundation wants to receive your comments on this specification. You can contact the Foundation via email at ivilistserver@ivifoundation.org, via the Web Site at www.ivifoundation.org, or you can write to the IVI Foundation, 11500 N. Mopac Expwy, Austin, Texas, 78759-3504.

Warranty

The IVI Foundation and its member companies make no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The IVI Foundation and its member companies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Trademarks

Product and company names listed are trademarks or trade names of their respective companies.

No investigation has been made of common-law trademark rights in any work.

Operating Procedures Revision History	5
Introduction to the IVI Foundation	6
Formation	
Objectives and Charter	
Specifications	6
Terms	7
General Procedures	9
Membership	10
Voting Members	10
Process for Joining	10
Privileges	10
Responsibilities	
Process for Resigning	
Associate Members	
Process for Joining	11
Privileges	
Responsibilities	
Process for Resigning	12
Meetings	13
General Membership Meetings	
Agenda	
Chairperson	
Working Group Meetings	
Agenda	
Chairperson	
IVI Document Development Process	15
Lead Times	
IVI Document Guidelines	
2 . 1 2 of billions outdomines	

Voting Procedures	17
Formal Voting Procedure	
Formal FAX Voting Procedure	
Informal Voting Procedure	18

Operating Procedures

Operating Procedures Revision History

This section is an overview of the revision history of this document. Specific individual additions/modifications to the document between revisions are denoted with diff-marks, "|", in the right hand column of a line of text for which the change/modification applies.

Table 1. Operating Procedures Revisions

Revision Number	Date of Revision	Revision Notes
Revision 0.1	April 6, 1998	Original document.
Revision 0.2	July 10, 1998	2 nd draft.
Revision 0.3	July 30, 1998	Implemented additional comments and suggests from IVI Foundation members.

IVI Foundation 5 Operating Procedures

Introduction to the IVI Foundation

Formation

The IVI Foundation was formed on August 25, 1998. The founding members of the Foundation are end-users, system integrators, and tools suppliers concerned with developing an interchangeable instrument driver architecture. The IVI Foundation is an open organization: its membership is open to vendors, users and integrators of automated test software and instrumentation technology.

Objectives and Charter

The IVI Foundation is an organization whose members share a common commitment to test system developer success through open, powerful, instrument control technology. The IVI Foundation will focus on the areas of instrument interchangeability, execution performance, development flexibility, and quality assurance procedures for instrument drivers. The IVI Foundation will build upon formal IVI Foundation standards to define standard interfaces and models for creating, testing, and executing interchangeable instrument driver functions.

The charter of the IVI Foundation is to define standard specifications for programming common test instrument capabilities. The focus of the IVI Foundation is on the test system developer who must take off-the-shelf instrument drivers and build high-performance test systems, and maintain these systems into the future. Through this charter, the IVI Foundation will build on the standards supplied through IVI Foundation to deliver specifications for interchangeable, better performing, more easily maintainable instrument programming models. The IVI Foundation adds a common structure and implementation approach to the framework standards agreed upon by the IVI Foundation instrument vendors.

Specifications

The IVI Foundation produces a variety of specifications that outline programming interfaces for families or classes of instruments. To organize and keep track of these various specifications, the Foundation assigns a name to each specification. The identification designation for all specifications is IVI-X, where X is a unique name or number assigned to each specification. Specifications can be obtained through the IVI Foundation.

Terms

Associate Member. A company that has been accepted as an Associate Member of the IVI Foundation.

Associate Member Representative. The person that is identified by a particular Associate Member as the Official Representative to the IVI Foundation for that Associate Member.

Consensus. General agreement on a particular issue.

Formal Fax Vote. Is the method of voting via FAX or other electronic means as determined by the General Membership Chairperson that allows business of the IVI Foundation to be conducted between General Membership meetings. Formal Fax Vote can be used for any business, but must be used for approval of all IVI Documents.

Formal Fax Vote Quorum. The number of Voting Members that must respond to a Formal Fax Vote before the results of the Formal Fax Vote and considered valid. Quorum is defined as a majority of the Voting Members.

Formal Vote. A Formal Vote is the primary method of voting at a General Membership meeting of the IVI Foundation. In order to conduct a Formal Vote there must be a Formal Vote Quorum present. A Formal Vote cannot be used to approve a IVI Document.

Formal Vote Quorum. The number of Voting Members that must be present at a General Membership Meeting of the IVI Foundation before business can be conducted. Formal Vote Quorum is defined as four Voting Members present.

General Membership. The group of all Voting and Associate members of the IVI Foundation.

General Membership Meeting. A meeting of the General Membership of the IVI Foundation.

General Membership Chairperson. The person who is responsible for chairing the General Membership meetings.

Informal Vote. Are used in all meetings outside of the General Membership Meeting to determine the views of the members attending on a particular issue. The results of informal voting are not binding.

Invited Guest. An entity that a chairperson invites to a meeting.

Working Group. A group of Voting and Associate Members and Invited guests which is responsible for the generation and review of IVI Foundation documents.

Working Group Meeting. A meeting of a specific Working Group.

Working Group Chairperson. The person who is responsible for chairing a Working Group Meeting.

Voting Member. A Company that has been accepted as a Voting Member of the IVI Foundation.

Voting Member Representative. The person that is identified by a particular Voting Member as the Official Representative to the IVI Foundation for that Voting Member.

IVI Document. An official document approved by the Voting Membership of the Foundation. IVI Documents include objectives and charter documents, technical specifications, and procedures documents.

IVI Working Document. A draft version of an IVI Document.

General Procedures

Robert's Rules of Order will be used for each meeting of the IVI Foundation, unless superseded by IVI specific procedures described herein.

Membership

There are two classes of membership in the IVI Foundation: Voting Members and Associate Members.

Each class of membership has specific privileges and responsibilities as described below.

Voting Members

Process for Joining

- Submit a completed IVI Foundation Voting Membership Application to the IVI Foundation.
- Submit a paragraph describing the company and intent to produce IVI Foundation products or use IVI Foundation products in systems, and reason for wanting to join.
- The request for membership will be voted on.
- Notification of the results of the voting will be sent within two weeks after the vote to the official company contact named in the Voting Membership Application.
- Upon notification of acceptance, the proposed Voting Member must submit a \$500 initiation fee to the Foundation. This also covers the Voting Member dues until the next January 1st.
- Upon reception of the dues, the IVI Foundation membership roster will be updated to include the new Voting Member, and the new Voting Member will be notified.

Privileges

- Each Company that is a Voting Member has one vote at the General Membership Meetings for Formal Votes and one vote during Formal FAX Votes.
- Are notified of all General Membership Meetings and Working Group Meetings.
- Are able to attend all General Membership Meetings and Working Group Meetings.
- Have access to all approved meeting minutes.
- Have access to the list IVI Foundation contacts.
- Have access to electronic forums, including electronic copy of all approved IVI Documents.

Responsibilities

- On January 1st of each year, pay a \$500 fixed annual membership fee to the IVI Foundation.
- Shares equally in all costs of the IVI Foundation that exceed the annual membership fees in a timely manner. A vote by the IVI Foundation General Membership Meeting is required to approve the collection of additional funds. The additional funds shall not exceed \$1000 per Voting Member per calendar year.

- Actively attend Foundation meetings.
- Participates in all votes.
- Supports IVI Foundation promotional activities such as providing personnel to staff the IVI Foundation booth at trade shows on a volunteer basis
- Intend to develop and or use products and or tools which comply with IVI Foundation guidelines and specifications.
- Endorses the objectives, guiding principles, and list of core technologies in the IVI Foundation IVI-1: Charter Document.
- Identify and keep current the Voting Member Representative name, phone number, and address.
- Maintain access to electronic communication via the Internet and the World Wide Web, including an active e-mail address for the Voting Member Representative.

Process for Resigning

 Submit a letter of resignation to the IVI Foundation. No membership fees will be refunded.

Associate Members

Process for Joining

- Submit a completed IVI Foundation Associate Membership Application to the IVI Foundation.
- Submit a paragraph describing the who the proposed company or organization is and why they want to join.
- The request for membership will be voted on.
- Notification of the results of the voting will be sent within two weeks after the vote to the official contact named in the Associate Membership Application.
- Upon notification of acceptance, the proposed Associate Member must submit \$200 initiation dues to the Foundation. This also covers the Associate Member dues until the next January 1st.
- Upon reception of the dues, the IVI Foundation membership roster will be updated to include the new Associate Member, and the new Associate Member will be notified.

Privileges

- Are notified of all General Membership Meetings and Working Group Meetings.
- Are able to attend all General Membership Meetings and Working Group Meetings.
- Have access to all meeting minutes available.
- Have access to the list of company contacts of all the IVI Foundation members.

 Have access to electronic forums, including electronic copy of all approved IVI Documents.

Responsibilities

- On January 1st of each year, pay a \$200 fixed annual membership fee to the IVI Foundation.
- Endorses the objectives, guiding principles, and list of core technologies in the IVI Foundation IVI-1: Charter Document.
- Identify and keep current the Associate Member Representative name, phone number, and address.
- Maintain access to electronic communication via the Internet and the World Wide Web, including an active e-mail address for the Associate Member Representative.

Process for Resigning

• Submit a letter of resignation to the IVI Foundation. No membership fees will be refunded.

Meetings

There are two types of meetings conducted by the IVI Foundation - General Membership and Working Group meetings. Each type of meeting is operated according to the procedures described below.

General Membership Meetings

Agenda

- The agenda for General Membership Meetings is set by the General Membership Chairperson.
- Members wishing to have items placed on the agenda need to contact the Chairperson no later than 3 weeks prior to the meeting.
- The General Membership Chairperson shall send out an agenda 2 weeks prior to the meeting.

Chairperson

The General Membership Chairperson for the IVI Foundation is decided and approved by the IVI Foundation General Membership Meeting and must be a Voting Member Representative. The term for the General Membership Chairperson is two years and expires on the second January 1st after the chairperson is approved by the IVI Foundation General Membership Meeting.

A vote for a new chairperson occurs under the following conditions:

- The term of the existing General Membership Chairperson expires.
- The General Membership Chairperson resigns.
- The IVI Foundation General Membership Meeting votes to hold a new election.

The Chairperson is responsible for:

- Creating and distributing meeting agendas and minutes.
- Conducting the General Membership Meeting and any Formal Votes and Formal FAX Votes.
- Can approve expenses up to \$500. Expenses greater than \$500 require a approval at the IVI Foundation General Membership Meeting.

Working Group Meetings

Agenda

- The agenda for Working Group Meetings is set by the Chairperson of the Working Group.
- Voting or Associate Members or Invited Guests wishing to have items placed on the agenda need to contact the Chairperson no later than three weeks prior to the meeting.

- The chairperson has responsibility for distribution no later than two weeks prior to the meeting.
- Distribution of the agenda should be to all Voting and Associate Members.

Chairperson

The Chairperson for Working Group meetings is specified when a Working Group is created by the IVI Foundation. The Chairperson is responsible for:

- Creating a Working Group from the Voting and Associate Members.
- Inviting other appropriate guests to the Working Group Meetings.
- Scheduling and coordinating meeting dates and locations.
- Leading the Working Group Meetings.
- Creating and distributing meeting agendas and minutes.
- Conducting any Informal Votes.
- Generating any IVI Documents the group owns, including creating, updating, maintaining, and posting these documents in formats decided upon by the Foundation.
- Generating a report at the Working Group meetings. The report shall contain a progress report and a roster of attendance.
- Delivering the report to the General Membership Chairperson for distribution

IVI Document Development Process

One of the major tasks of the IVI Foundation is the generation of IVI Documents. There are primarily two groups involved in the generation of a IVI Document: the General Membership of the Foundation and a Working Group (WG). Each group has specific responsibilities as described below.

- A General Membership Meeting creates a IVI Document title, sets the objectives, defines the scope and timeframe for completion.
- A General Membership Meeting assigns a Voting Member Representative as the chairperson for the WG.
- Voting and Associate Members assign representation, if any, to the working group.
- The chairperson creates the IVI Document with the support of the Working Group membership.
- The chairperson of a WG shall perform revision control for the documents under his or her control. This includes, but is not limited to, maintaining a master copy of the last approved version of the IVI Document, along with any interim drafts the WG is using.
- The chairperson of a WG shall give a reproducible, updateable, machine-readable copy
 and a paper copy of all approved documents to the General Membership chairperson.
 The General Membership chairperson shall maintain an archive of all approved IVI
 Documents as a backup.
- The General Membership chairperson is responsible for keeping a list of current document revision numbers.
- The date on all approved IVI Documents shall be the date the documents were sent out for Formal FAX Vote.
- All *unapproved* IVI Documents shall be so indicated with the word "DRAFT" on the front cover.
- Changes to *approved* IVI Documents can only be made to fix defects or significant ease-of-use issues. Exceptions require specific, in advance, approval by the General Membership meeting.

Lead Times

All proposals to be discussed at Working Group meetings shall be made available to all Voting and Associate Members at least one week before the Working Group meeting. This requirement is to allow adequate time for member review prior to the actual meeting.

IVI Foundation 15 Operating Procedures

IVI Document Guidelines

All source for IVI Documents shall be in Microsoft Word Version 6.0 or greater. The IVI Document must be self-contained, including all pictures, graphs, etc. In addition, PDF and HTML versions must be created for all approved IVI Documents.

The intent of the PDF file is for electronic distribution of printable documents. The intent of the HTML file is for on-line electronic viewing. The intent for Microsoft Word is for a reasonable shared mechanism to create those two.

Voting Procedures

There are three mechanisms for voting within the IVI Foundation. There are two binding vote processes (Formal Vote and Formal FAX Vote) and one non-binding vote process (Informal Vote). Voting on IVI Documents requires a Formal FAX Vote. All other voting can use either binding process.

Formal Voting Procedure

The procedure for conducting a Formal Vote at General Membership meetings is as follows:

- A Formal Voting Quorum is needed before a Formal Vote can be taken.
- A Formal Voting Quorum is four or more Voting Members of the IVI Foundation.
- A passed Formal Vote is signified by greater than 50% of the Voting Members present at a General Membership Meeting voting for the measure.
- Voting Members get one vote per company. Associate Members do not participate in Formal Voting.
- If a voting member is not in attendance, they may issue in writing ahead of time to the General Membership Chairperson how they vote on specific issues up for vote at the meeting

Formal FAX Voting Procedure

A Formal FAX Vote is a procedure for voting using either a FAX or other electronic distribution mechanisms as approved by the General Membership Chairperson. The procedure for conducting a Formal FAX Vote is as follows:

- The scope of a Formal FAX Vote is a single issue. The definition of a single issue is decided by a General Membership meeting or by the General Membership Chairperson.
- A Formal FAX Vote on a single issue shall be sent to the General Membership Representative of each Voting Member.
- A Formal FAX Vote shall specify the date that the vote will conclude. This shall be two weeks after the date the Formal FAX Vote is sent to the Voting Members.
- A Formal FAX Vote response shall be counted once per Voting Member, with the following responses as valid: YES, NO, ABSTAIN.
- Associate Members do not participate in Formal FAX Voting.
- All Formal FAX Vote responses shall be counted as long as they arrive on or before the
 vote conclusion date. All Formal FAX Vote responses received after the vote
 conclusion date shall not be counted.
- A Formal FAX Vote is considered valid as long as the Formal FAX Vote Quorum is met. A Formal FAX Vote Quorum is met when greater than 50% of the Voting Members respond before the vote conclusion date. If greater than 50% of the Voting Members do not respond before the vote conclusion date, the vote is considered invalid.
- A Formal FAX Vote that meets the Formal FAX Vote Quorum shall be considered to
 pass as long as more YES votes than NO votes arrive. ABSTAIN votes count towards
 quorum, but not towards the passing of the measure.

IVI Foundation 17 Operating Procedures

- A vote is not considered official until two Voting Members tally the received Formal
 FAX Votes for correctness. One of the Voting Member representatives is the General
 Membership Chairperson. The other Voting Member shall be assigned prior to the vote
 either by the General Membership Chairperson, or at the General Membership meeting.
- Once the Formal Fax Vote is considered official, the results shall be communicated to all members. Any member can request to receive details of the Formal Fax Votes.

Informal Voting Procedure

IVI Foundation Working Groups do not formally vote. All informal votes of the Working Groups are non-binding. The purpose of Informal Voting is to gather consensus within the Working Group. Informal Voting is not used at General Membership Meetings. The mechanism for conducting an Informal Vote is as follows:

- Working Groups are expected to operate by gaining consensus of the members present.
- Hand-raised voting for consensus gathering is acceptable.
- During informal voting, individual members present may consensus vote. This may result in more than one vote per company.
- The definition of what constitutes a consensus is under the discretion of the Working Group Chairperson.
- Individuals at technical meetings who have objections may only discuss objections if they have an alternate proposal.
- Once a final draft of a Working Group IVI document is complete and ready for Formal
 Fax Vote, the Working Group Chairperson shall request that the General Membership
 Chairperson conduct a vote. This vote shall be a Formal FAX Vote (not a Formal
 Vote), as defined earlier in this section.