IMS Technical Advisory Board Policies and Procedures

Version 9.5
Draft for Comment

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Purpose of this Document

This document describes the policies and procedures by which the IMS Technical Advisory Board (TAB) conducts the chartering, development, and release of technical documents. It is intended to orient the participants in these activities to the general organization of the TAB and to the work processes of its various working committees. It serves as the reference document for answering questions about TAB procedure, and all IMS Contributing Members and all other parties participating in any technical meeting are subject to the policies and procedures in this document.

This document will be revised from time to time in response to the needs of the Technical Advisory Board and the Consortium as a whole. Support is provided on the IMS website for on-going comment and discussion of this document at https://www.imsglobal.org/forums/ims-contributing-member-forum-general-discussion

Technical documents typically consist of material created collaboratively by members of the Consortium. However, they may include material contributed to IMS, either by Contributing Members or by third parties. The copyright for all documents produced by working groups of the TAB belongs to the Consortium, so that specifications and related documents can be openly accessible and available to the public without restrictions that would inhibit their adoption and use.

IMS Global has a IMS Global Conformance Certification Process, Trademark Usage and Communications Policy available at https://www.imsglobal.org/sites/default/files/IMSGlobalConformanceCertificationProcessandTrademarkandCommunicationsPolicy2016.pdf that explains the IMS Global Conformance Certification Process and branding guidelines for use of the IMS conformance certification logo and trademarks.

The Consortium employs an Intellectual Property Rights policy to ensure that its products remain open and to minimize the possibility that using an IMS document or implementing an IMS specification will result in inadvertent infringement of the intellectual property of members of IMS or third parties. This document incorporates procedures which implement the IPR policy and govern the contribution of intellectual property. The Policy document, which is available at http://www.imsglobal.org/ipr/imsipr_policyFinal.pdf, takes precedence over this document.

Section 1 provides general context for the Technical Advisory Board's activities.

Section 2 describes the overall structure of the TAB and its working committees.

Section 3 discusses the mechanisms that the TAB uses to conduct its activities.

Section 4 provides details of the TAB's processes for chartering, development, and maintenance activities.

Section 5 describes how the TAB manages intellectual property rights.

Section 6 provides general guidelines and advice for conducting activities.

Appendices provide sample Charters, Use Cases, meeting agendas, minutes, team lead instructions, and lists of references and defined terms from the IPR Policy document.

Table of Contents

1 General Background

IMS is a member-financed, non-profit corporation with a Board of Directors, various standing and ad hoc committees of member volunteers, and a paid support staff. In organizational terms, the Technical Advisory Board is a standing committee of the Board in which representatives of all Contributing Members may participate. Each Contributing Member organization exercises one vote in formal decisions by the TAB.

The Technical Advisory Board oversees specification development and related technical activities. The responsibilities of the Technical Advisory Board fall into three general categories:

1) Chartering - Identifying and prioritizing requirements for proposed technical work
2) Development – Creating or revising specifications, including technical review and approval for public release of specification documents and related materials.
3) Maintenance – tracking problem reports and suggestions for revision that are reported to IMS by adopters and users of specifications.

Five general principles underlie the policies and procedures that have evolved from several years of experience by the members of IMS and the IMS staff.

1) Adequate technical quality: functional adequacy.
2) Real world utility: practical need and impact in use.
3) Efficiency and predictability: efficient use of participants' time and predictable delivery of results.
4) Open accessibility: systematically open participation in activities and dissemination of information.
5) Cross-domain interoperability: neutrality with regard to technical infrastructure and application domain.

While the policies and procedures of the IMS TAB are similar to those used by many other consortia, they sacrifice formality and detail in the interest of flexible participation and adaptability in the face of evolving technical trends and practical reality.

The overall organization and voting rules of the TAB are specified in Section VI of the By-laws of IMS, which are available at https://www.imsglobal.org/sites/default/files/Bylaws2015Final.pdf

Many kinds of organizations and types of activity operate in parallel to create and apply a body of technical specifications. Therefore, the TAB seeks occasional involvement by representatives of other consortia and organizations that conduct adoption and implementation in its activities. Within IMS, Technical documents are planned and developed by relatively small Task Forces or Project Groups. Invited participants may be included with approval in these IMS-internal activities to ensure that industry experts with a deep understanding of the technical issues and business processes at issue are involved.

Broad participation by non-member organizations and individuals from the community at large is ensured by three mechanisms:

1) professional communication by individual Contributing Members with their colleagues;
2) drafts of Specifications for Affiliates and publication of near final documents for public comment, and;
3) a publicly accessible reporting mechanism for issues, bugs, and revision suggestions for all published specifications.

Non-Member participation is encouraged during the release of a Candidate Final Public Draft and after the release of final specifications. During the Project Group and Task Force phases of specification development and profile accreditation, technical materials and documents may not be shared with non-IMS members.

1.1 Strategic Documents

Ad hoc groups of member representatives and IMS Staff members have created various documents that provide

overall guidance for scoping and conducting development work, populating working committees, and integrating specifications. These are living documents that are intended primarily for internal use. They are updated as necessary to reflect changes in the requirements of IMS members, as well as evolving practices and technologies in the field at large.

Strategic documents include items such as:

- Abstract Framework – an abstract system model from which the scope and interoperability constraints of individual specifications can be determined.
- Use Cases – a set of implementable user interactions (courses, learning episodes, authoring scenarios, assessment sessions, etc.), drawn from application domains for IMS specifications.
- Spec Development Methodology – a tailored form of the Unified Modeling Language (UML).
- Guidelines for Profiling – a set of general procedures for extending specifications to adapt them for use in application domains.

These documents are posted either on the Public Website at http://www.imsglobal.org/ or the Members Only area of the website.

2 Project Groups, Task Forces, and Product Steering Committees

The work of the TAB is performed by volunteers - one person from each Contributing Member organization. The activities of the TAB are facilitated by the technical, managerial, and administrative resources of the IMS Staff. Organizationally the IMS Staff reports to a Chief Executive Officer, who in turn reports to the Board of Directors.

There are thwo types of groups inside of IMS GLC that conduct technical work: Project Groups (PGs) and Task Forces (TF) . All original specification work begins at the Task Force stage. Task Forces work on charters and/or best practice documents and are comprised of Contributing Members and specially invited guests.

Project Groups take over technical work after a Charter is approved by the TAB in order to work on the development of specification documents, and/or best practice technical documents. Project Groups are open to all Contributing Members. Members who wish to participate in a Project Group, are subject to the IMS GLC Project Group Participation Acknowledgement

Task Forces are small groups of IMS Contributing Members and Invited Guests that do development work on small defined subsets of a specification. Task Forces may be formed while a specification is still in its charter phase, or while a specification is under development .. Task Forces conduct work and bring it back to the Project Group for review and approval. Task Forces operate under the IMS IPR policy and are subject to the same participation agreement as Project Groups .

All parties who participate in development activities are subject to the IMS IPR policy, to the Bylaws of the Consortium and to the policies and procedures in this document.

2.1 Technical Advisory Board

The TAB operates as a committee of the whole to review and approve the activities of its various Task Forces and Project Groups which are the primary working bodies of the TAB for initial specification chartering and development.

Figure 1 - The organization of IMS technical work.

2.2 Task Forces

Task Forces serve two purposes. They serve as a forum to develop Charters for new work, as well as, act as a small development teams of Contributing Members delivering small work development products at the request of a Project Group. Task Forces provide a means for addressing topical issues and for maintaining continuity on topics of long term interest. Task Forces exist while they are continuing to make progress on their topic of interest.

Any Contributing Member representative may participate in a Task Force. Experts from non-member and prospective member organizations may be invited to participate in Task Force as appropriate and with written approval for the IMS CEO and COO, and the signing of an invited guest form.

Task Forces are required to have at least two chairs, who must be Contributing Members and be approved by the IMS CEO or COO. To begin work in a Task Force, a written call for participation briefly explaining the reason for starting a Task Force and the proposed problem space must be circulated to members. Specific details on getting projects started can be found in the Team Lead Instructions in Appendix G.

2.3 Project Groups

Project Groups are small teams with at least five actively participating Contributing Members charged to carry out the specific development or coordination tasks described in an approved Charter.

Project Groups are organized for a specific time or work product specified in a Charter. The individual participants may choose to continue to explore the topic area concerned or monitor implementation and use of a specification as a Task Force. Any Contributing Member may participate in a Project Group. In addition, approved invited experts may participate. All participants are subject to the Project Group/TaskForce participation form. Once an Candidate Final document is published, the Affiliates may provide feedback. Project Groups are required to have at least two chairs, who must be Contributing Members and approved by the IMS CEO or COO. If a Product Steering Committee for the Project Group exists, at least one of the Project Group chairs must be a member of the associated Product Steering Committee (PSC) and oversee Project Group development priorities, release timing and product management topics on behalf of the PSC.

Project Groups recommend conformance certification requirements to the Product Steering Committee for approval (see document *IMS Global Conformance Certification Process.)*

2.4 Product Steering Committees

Product Steering Committees (PSC) are established to work with IMS Project Groups to coordinate activities to increase confidence in the timing and market acceptance of new and evolving specification releases. The Product Steering Committees serves in an advisory role to the Project Groups and is comprised of product management-charged persons from supplier Contributing Member organizations that are actively participating in the technical Project Groups. The PSC is responsible for setting product roll-out plans for the specification and will inform and support the technical Project Group activities. Technical decisions are the responsibility of the Project Groups, with product rollout and launch activities to increase specification adoption led by the associated Product Steering Committee.

Product Steering Committees will have a chair or co-chairs. The chair and co-chair will be appointed by the IMS CEO. A chair person's succession process should include a time period with a co-chair of approximately 90 days.

Product Steering Committees conduct their work in the IMS Project Group forum for which they are established and will hold regularly scheduled conference calls. The Product Steering Committee will develop and provide

product plans and feature requests for the Project Group. The Product Steering Committee will also liaise with the HED and K12 Innovation Leadership Networks and bring outputs of those discussions to Project Groups in written format.

2.5 HED and K-12 Innovation Leadership Networks

HED and K-12 Innovation Leadership Networks (ILN) are end-user groups comprised of IMS Contributing Members and Affiliates from Institutions. The goal of these groups are to exchange ideas, enhance collaboration, share exemplary practices, and help inform the IMS technical working groups. ILNs focus on particular domains active in IMS. These groups typically mirror the Technical Workgroups, but are non-technical in nature. Outputs from the ILNs include RFP guidance, best practice papers, use cases and other materials which will help other end-user organizations understand the value and benefits of using IMS standards.

The ILNs receive leadership and input from the HED and K-12 Institutional Executive Boards. The Institutional Executive Boards are comprised of one person from each Contributing Member end-user organization.

Innovation Leadership Networks and the Executive Boards typically meet monthly to share ideas and provide updates on current status.

2.6 Executive Boards and Committees

Executive Boards & Committees help provide strategic and business advice to IMS members and staff. Participation in Executive Boards and Committees are open to IMS Contributing Members and others outside the IMS Community. Participation is limited to individuals chosen and/or approved by the IMS CEO. Members of the Executive Boards and Committee serve one year terms but are able to serve multiple terms.

2.7 Participation Guidelines for IMS Project Groups, Task Forces, Boards, Committees and Innovation Leadership Networks

As a collaborative organization where much work is done in a virtual environment, participants should:

- Strive to attend all meetings and arrive on time
- Prepare for meetings by reading agendas and relevant forum posts prior to the meeting
- Participate fully in the meeting by listening to others while keeping an open mind, contribute positively to discussions and try to be concise and not derail discussions.
- Expose any potential conflicts of interest that may arise
- Abide by the IMS Policies and Procedures.
- Fulfil any responsibilities assigned to you and be prepared to report back progress at the next meeting.
- Abide by the Project Group/Task Force Participation Acknowledgement - https://www.imsglobal.org/ims-glc-project-group-participation-agreement

3 Open Developers Community

Open Developer Communities may be created to share work in progress on specification development in an effort to increase the adoption of IMS specifications and conformance certifications. Open Developer Communities will be determined by IMS staff based upon the needs of the marketplace.

Open Developer Communities require a minimum of three IMS Contributing Member Community Liaisons. The Community Liaisons are responsible for supporting the public community and providing weekly written reports to the Project Group on the community related issues and possible resolutions.

Once Community Liaisons have been established, IMS will set up public repositories to maintain specification documents and code libraries. The public repositories will be viewable by the public but maintained by Project Group Code Committers and overseen by IMS . The ability to participate in code development is limited to IMS Contributing Members and Invited Guests and requires the submission of a signed IMS Contributors Agreement. Completed Contributors Agreements should be sent to the IMS COO. Invited Guests must be approved by the IMS CEO or COO. Invited guests are required to sign the Invited Guest form which indicates that they will abide by IMS Policies and Procedures.

Specification Development and code development is done according to IMS process inside the Project Group. Project Groups may wish to have an open update call to inform the public of current decisions.

4 Mechanisms: Voting, Meetings, Forums

4.1 Voting

Technical Advisory Board comment, review, and voting assures the quality and value of technical work and starts the process of disseminating specifications within the IMS community. Documents are posted for review on the Member Website, and voting is conducted electronically to ensure that all Contributing Members are able to participate, regardless of their location and timezone.

4.1.1 Technical Advisory Board

Specification documents and associated technical documents—developed in Task Forces and Project Groups—that are intended for external publication as IMS GLC documents must be submitted to the TAB for review. Project Groups developing a specification produce at least two drafts: a Base Document for internal Project Group review and a Final Release, which must be submitted for approval by the TAB.

Charters for Projects and the Final Release versions of specifications must be approved by a formal vote. The By-Laws of IMS GLC require:

1) Two weeks prior to a vote, a Vote Request will be sent via email to the Technical Advisory Board Member from each Contributing Member organization to ask whether or not they want to vote on that specific work.
2) To be eligible to vote, each organization must have participated in at least two-thirds (2/3) of the last three (3) votes in which they elected to participate.
3) If an organization fails to vote in more than one-third (1/3) of the votes in which they elected to participate, the organization's voting privileges are suspended until the next calendar year.

If an organization has elected to vote by responding to the Vote Request email, they must vote "yes" or "no". No votes must be accompanied by a constructive explanation of what must be changed in order to achieve a "Yes" vote, otherwise it will not be counted as a valid vote.

A resolution or work shall only be deemed approved if 1) the number of valid "Yes" votes is at least two-thirds (2/3) of the total number of valid "Yes" and "No" votes cast; and 2) the total number of valid votes cast is at least the lesser of ten (10) or one-third (1/3) of the number of Contributing Member organizations.

Once a resolution or work is accepted, it will be presented to the Chief Executive Officer (CEO) for approval and implementation. The CEO shall present a report of all TAB decisions to the Board of Directors (BOD) periodically, and the BOD shall have the right to make the final determination of whether or not to follow the advice of the TAB.

The following outcomes of a vote are possible:

1) Approved – all quorum requirements are met and a supermajority votes “Yes”.
2) Not Approved – all quorum requirements are met and a supermajority votes “No”.

4.1.2 Subcommittees

Unless otherwise specified, decisions by Task Forces and Project Groups, require a simple majority of all registered participants in the decision, whether they participate in person or electronically.

4.1.3 Voting in Task Forces, Project Groups, and Product Steering Committees

An organization can cast an internal vote provided they have attended at least fifty percent (50%) of the last four (4) workgroup meetings.

4.1.4 Final Approval of TAB Decisions

Technical Advisory Board decisions constitute recommendations to the Board of Directors. Formal approval of these recommendations normally is pro forma. However, this final level of approval provides a means to ensure

that due process has been observed by the TAB in its activities.

4.1.5 Disputes

Any individual or group of individuals who feels that due process has not been observed may appeal or dispute a decision by notifying the CEO of IMS in writing within one week of such a decision.

If the action taken in response to such an appeal or dispute is not satisfactory, the individual or group of individuals may notify the Chairman of the Board of Directors in writing within one week of the action being taken. The decision of the Board of Directors is final.

4.2 Meetings

The By-Laws of IMS permit both face-to-face meetings and synchronous (teleconference) or asynchronous (email and forum) electronic meetings. All types of meetings are used for all types of activity.

4.2.1 Electronic Meetings

All formal votes by the TAB are conducted electronically in order to enable universal participation, as well as to provide a means for record keeping and audit trail for due diligence in decision making.

All groups are encouraged to maintain a regular schedule of teleconferences and are encouraged to use web forums to maximize access and participation across the many time zones and geographical regions represented by the members of IMS.

4.2.2 Scheduled Face-to-Face Meetings

Quarterly Meetings are held in February, August, and November with the mid-year conference taking place in April or May. The conference is held in conjunction with the Annual Members Meeting, and all TAB representatives are encouraged to attend.

Annual Members Meeting: At least one face-to-face meeting of the IMS Membership is held each year. This meeting normally is held in April or May.

The agendas for the Quarterly Meetings and the Members Meeting are developed by the IMS Staff in response to input from working committees and the Board of Directors. Task Forces, Project Groups, and Innovation Leadership Networks may request time on the agenda of Quarterly Meetings by contacting the IMS Staff at least one month prior to the meeting in question.

All resources and meetings of the Task Forces, Project Groups and Innovation Leadership Network including web pages, documents, and any other records of discussions, must only be located on facilities designated by IMS GLC. Task Forces, Project Groups and Innovation Leadership Networks may not conduct official business or technical discussions, store documents, or host web pages on servers or systems not designated by IMS GLC.

Technical Meetings of Task Forces, Project Groups and Innovation Leadership Networks are scheduled by IMS GLC at the Quarterly Meetings. Working Groups of IMS GLC should not schedule or hold technical face-to-face meetings outside of those times. However, an exception can be made if a subset of a Task Force, Project Group, or Innovation Leadership Networks may work face-to-face on producing a deliverable to the workgroup that is then subsequently considered and accepted by the group. A subset of the group cannot however, be a decision making body or a substitute for the publicly scheduled meetings.

Side meetings should only be attended by IMS GLC Contributing Members when working on IMS GLC projects, however, these side meetings are not official IMS GLC meetings and have no IMS GLC support or attendance. Side meetings cannot in any way replace the responsibility of a Project Group, Task Force or Innovation Leadership Networks from holding regularly scheduled conference calls (at least once per month) and participating in the IMS GLC Quarterly Meetings (at least two per year). Failure to abide by these policies will result in a suspension of workgroup activities and require TAB Executive Committee and IMS management approval for the group to continue work on a project.

4.3 Websites

The IMS Staff maintains a Members Only area of the website to support forum and email interaction among Contributing Members in IMS activities. Affiliates and Alliance areas are also available for discussions, and a Public Website for distributing general information and supporting community-wide activities.

4.3.1 Members Area of Website

Access to the Contributing Members area of website at https://www.imsglobal.org is limited to Contributing Members and is password protected.

The IMS Contributing Member area of the website includes web-based tools for access to documents, issue lists, on-going discussions, calendars, etc. and workspaces for each activity. Workspaces also exist for Contributing Members, Project Groups, Task Forces, Innovation Leadership Networks, and any ad hoc committees. Mailing lists managed by the IMS Staff are maintained for making announcements to these groups.

Documents and materials posted in the Member area of the website or the IMS Github repositories , Slack or any other IMS designated tools are made available for the purposes of the working group only and should not be distributed outside of the Project Group or Task Force without the express written consent of IMS GLC. Any documents provided to non-participants will be done by IMS GLC only on the IMS GLC Public Website when the documents become publicly available.

All resources of the Project Groups and Task Forces including web pages, documents, and any other records of discussions, must be located only on facilities designated by IMS GLC. Project Groups and Task Forces may not conduct official business or technical discussions, store documents, or host web pages on servers or systems not designated by IMS GLC.

- Participants in the Project Groups/Task Forces are solely responsible for the content of their posts;
- Posting of technical material to the forum, in appropriate circumstances, may be deemed a contribution to that Project Group/Task Force under the IMS GLC IPR Policy. IMS GLC members and participants are responsible for their contributions under the terms described in that policy.

4.3.2 Affiliates Area Website

Resources for Affiliates are available after login at https://www.imsglobal.org The Affiliates area of website provides specialized information for Affiliates, such as preferred access to draft specifications and special tools, best practices reports, as well as general information about IMS.

4.3.3 Alliance Area Website

Each IMS Alliance has its own specialized area of the website that provides specific information for Alliance Members including a forum for discusion, tools and conformance testing and details.

4.3.4 Public Website

A Public Website http://www.imsglobal.org provides general information about IMS and is the primary means for publishing specifications and disseminating topical information.

4.4 Support by the IMS Staff

The IMS Staff provides administrative, technical, and managerial support for the TAB and its working committees, as well as for the operation of IMS as a whole. These services include:

- Meeting management
- Web resources
- Technical editing and writing

- Liaison with other organizations
- General consortium management

5 Processes: Chartering, Development, Maintenance, Profile Management, and Certification

Chartering, development, and maintenance processes of Task Forces and Project Groups are overseen by the TAB.

5.1 Chartering

All new specification development and significant revisions of the functional content of released specifications and various other technical projects are undertaken only after a Charter has been developed by a group of members (normally a Task Force) and approved by the TAB.

A Charter describes the proposed work in sufficient detail for technical and administrative review by the TAB.

Charters are developed through informal collaboration among prospective participants. Charters typically are developed with the assistance of the IMS Staff which provides advice regarding support resources and scheduling.

The TAB may approve a proposed Charter with or without specifying changes or conditions. Approved Charters are forwarded to the Chief Operations Officer, who schedules development in the context of other Charters and on-going work. Charters may be revised and resubmitted until they are approved. But no development work is permitted to begin until they have been approved.

An approved Charter is an informal contract in which the Project Group participants agree to conduct the tasks and deliver the work products identified in a Charter. On its part, the TAB promises timely reviews of progress and distribution of the results of the Project as an IMS technical product. Changes or additions to the work specified in a Charter, or substantial revisions of the Project schedule require TAB approval (i.e., rechartering).

5.1.1 Contents of Charters

Charters provide a convenient "point of entry" for TAB members and potential participants to determine their level of interest in a development project. A template for Charters is included in an "Appendix B – Sample Outline of Charters".

No Charter will be considered for approval by the TAB if it does not contain at least the following basic information:

1) **Name**
   A descriptive name and a short name or acronym for use in forum names, agendas, mailing lists, etc.
2) **Chair(s) and Co-Chair**
   At least one Chair and a Co-Chair who have agreed to perform the administrative and leadership functions necessary to conduct the project and have been approved by the IMS CEO.
3) **Referenced Spec(s)**
   A list of IMS or other specifications or standards used by or impacted by this effort, annotated to describe the impact of this work on each.
4) **Participants**
   A list of representatives of Contributing Members and others who have agreed to work on this Project, with contact information and organization. As a requirement, at least five Contributing Members must agree to work on the Project Group as part of the chartering process.
5) **Web Resources**
   A description of any special Web resources or tools needed in addition those provided on the IMS Member Website.
6) **Description of Proposed Work**
   A concise summary of the problem to be addressed, the goal(s) of the project, and the approach to be taken, with sufficient detail for use as an abstract of the Project. A TAB member who is not participating in the

project should be able to determine by reading this description, whether the effort is relevant to his or her organization. The description also should specify the expected impact of the project on other specifications, reference models, or application profiles. In addition, the proposed work must indicate whether the work is "Informational" in nature or "Implementable".

An "Informational" specification is published for the general information of the community, which is not likely to be implemented (i.e., Framework documents). An "Implementable" specification will be accompanied by at least two implementations prior to Candidate Final. An implementable specification must also be accompanied by a set of test data that can be distributed to CMs and Affiliates.

7) **Use Cases**
At least one use case that can be made available on the Member Website. Use cases should capture specific interaction scenarios from which the project requirements can be identified and understood. The description of the proposed project should specify the intended impact of the project on the use case.

8) **Schedule of Milestones**
Intermediate and final milestones and an estimated duration and completion date of the tasks leading to those milestones. By reading this schedule, a TAB member who is not participating in the project should be able to identify the appropriate time to provide input and/or review the work. Milestones dates which coincide with Quarterly Meetings facilitate face-to-face communication with other IMS members and other organizations. Milestones must refer to specific work products such as "Candidate Final submitted," rather than to project activities such as "incorporate public feedback".

9) **Implementations**
All implementable specification charters must include details on the number of implementations to be delivered (must be at least two), how the Project Group lead will document the implementations for the TAB to move to the Candidate Final stage, and be accompanied by a set of test data that can be distributed to CMs and Affiliates.

5.1.2 Criteria for Evaluating a Charter

In determining whether to approve a Charter, the TAB will confirm that the Charter has overall technical merit and includes all required information. It also will consider such general questions as:

- Are the requirements specific, relevant, and achievable?
- Are the time frame and level of effort proposed reasonable?
- Are the technical and administrative risks of the Project identified and mitigated?
- Is there a good understanding of relevant existing work?
- Does the list of participants balance the interests of suppliers, consumers, and others directly impacted?
- Does the work proposed complement and/or exploit work being done by other groups?
- What is the priority of this work compared to other on-going or planned efforts?
- Is there sufficient Member commitment to support the technical work, the management of the group, the production of documents, and necessary liaison and integration activities?
- Is there sufficient expertise within the IMS membership to review the Charter and the results of the work?
- Have intellectual property rights issues been resolved?
- What is the recommendation of the IMS Staff?

5.1.3 Charter Timeline

The time required to complete a Charter varies widely, depending the scope of the problem, the availability of participants, and the existence of prior work. The actual work of producing the Charter document itself requires approximately 2-3 months.

5.1.4 Distribution of Charters

The Charter will be maintained as a library document in the Project workspace, where it is accessible to all IMS Contributing Member representatives and others authorized to access the Members area of the Website.

5.2 Development

Project Group(s) carry out approved Charters. The development process is summarized in Figure 2.

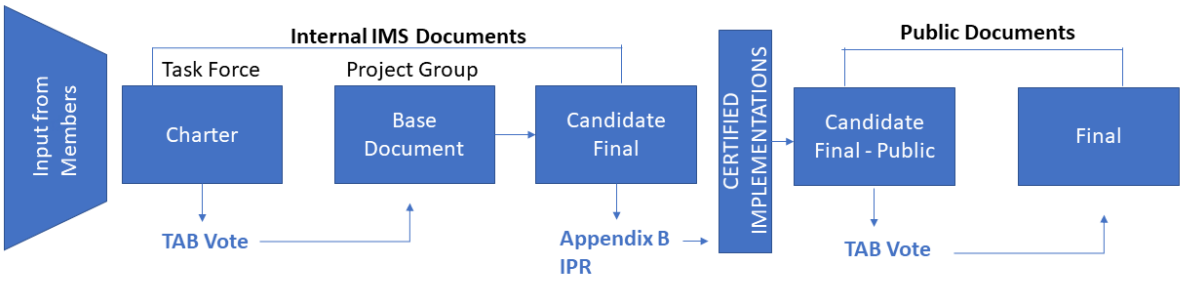

Figure 2 - Diagram of Development Process.

Guidelines for conducting Projects are included in Section 6 this document. Project participants are required to create and maintain basic information such as issue lists, decision summaries, meeting agendas, meeting minutes, participant lists, etc., so that TAB members who are not participating in a Project can easily monitor the status of work and anticipate the impact of issues being addressed. All Contributing Members may read Project Group documents in development on the forum; however, if a Member wishes to participate in the activities of the Group, such as commenting on documents, participating in meetings, access to the github repository, the individual must sign the Project Participant form, acknowledging agreement with the IMS GLC IPR rules, and the IMS GLC Policies and Procedures.

Project Group(s) develop three drafts: two for TAB review and/or approval by vote, and one for internal Project Group review. These draft documents include the following:

5.2.1 Base Document

A working outline that conveys the scope of the Charter and the approach to be taken. This document adds details to flesh out the project description and plan provided by the Charter. Review of the Base Document is for Project Group participants only and aids with producing the subsequent drafts of the documents. A simple vote by Project Group participants indicates that they agree with the progress being made.

5.2.2 Candidate Final Draft

A specification from which at least two independent and interoperable implementations from different code bases have been developed, and for which sufficient successful operational experience has been obtained, may be elevated to an Candidate Final. For the purposes of this section, "interoperable" means to be functionally equivalent or interchangeable components of the system or process in which they are used. The requirement for at least two independent and interoperable implementations applies to all of the options and features of the specification. In cases in which one or more options or features have not been demonstrated in at least two interoperable implementations, the specification may advance to the Candidate Final only if those options or features are removed. The Project Group chairs are responsible for deciding and declaring to the Project Group when they believe the draft documents are ready to move to Candidate Final Draft.

The Project Group chair is responsible for documenting the specific implementations which qualify the specification for Candidate Final status along with documentation about testing of the interoperation of these implementations. The documentation must include information about the support of each of the individual options and features. An Candidate Final may still require additional or more widespread field experience, since it is possible for implementations based on Candidate Final to demonstrate unforeseen behavior when subjected to large-scale use in production environments.

A Candidate Final is normally considered to be a near final specification, and changes are likely to be made only to solve specific problems encountered or to address conformance.

See Section 5 of this document for a discussion of the intellectual property declarations that are required for the publication of the Candidate Final and the subsequent Final Specification.

Candidate Finals of "Informational" nature do not need to produce implementations prior to delivering the draft to the TAB for review. Once reviewed by the TAB, the Candidate Final of Informational specifications are released to the CMs/Affiliates for feedback, at which point any feedback will be addressed and the document sent to the TAB for Final Specification vote.

5.2.3 Candidate Final/Public Draft Release Review

A Candidate Final/Public Draft Release is developed by the Project Group after it has been released as a Candidate

Final. The Candidate Final /Public Draft Release addresses any implementation issues brought forward from the Candidate Final and includes conformance and certification information. At this time, the Candidate Final /Public Draft Release is also released to the public for review and comment.

5.2.4 Final Specification

The published specification once approved by the TAB. This document is treated as an Candidate Final until it has been approved for publication by the TAB.

4.2.5 Development Timeline

The suggested timeline for specification development is as follows:

- Develop Base Document and conduct internal Project Group review - 2-3 months
- Develop Candidate Final and conduct TAB review - 6-12 months (depending on implementation status)
- Develop Candidate Final Release/ Public Release - 4 months
- Develop Final Specification and conduct TAB vote – 6 months -1 year

5.2.5 Other Technical Documents

From time to time, technical documents which are not specifications may be created under TAB oversight. Documents which are intended for internal IMS use or informal distribution do not require TAB approval for internal release.

5.3 Maintenance

Published specifications are updated or revised in response to problem and issue reports made via a publicly accessible forum.

As a first step, the IMS Staff, and others who are knowledgeable concerning the document in question and classifies each report as an update or a revision of a specification document(s). This step typically involves publishing a call for any further reports and a teleconference among interested parties to review the accumulated reports and their classification. An individual report may result in more than one update or revision.

5.3.1 Updates: Errata, Bug Fixes, Editorial Changes, etc.

If the change required to address a report results in no functional change to the document, then an update is produced and published as quickly as possible.

Once the update has been produced, it is submitted for a two-week review by the TAB. This review may include a TAB vote, if appropriate. If no significant comments are made during the review, the update is published promptly thereafter. Updates may be published singly or in groups.

In the event of a significant objection to releasing a proposed update, the IMS Staff will consult with members or others to determine the appropriate course of action.

5.3.2 Revisions: Changes with Functional Impact

Reports whose resolution requires a small functional change to published documents, Once the update has been produced, it is submitted for a two-week review by the TAB. This review may include a TAB vote, if appropriate. If no significant comments are made during the review, the update is published promptly thereafter. Updates may be published singly or in groups.

In the event of a significant objection to releasing a proposed update, the IMS Staff will consult with members or others to determine the appropriate course of action.

If a change is required to a public specification with significant funtional changes, whether identified initially or

reclassified as a result of the review of a proposed update, are routed to a new or existing Task Force or Project Group for development of a revised document.

5.3.3 Maintenance Timeline

Updates to a technical document will be published or assigned to a scheduled revision or update cycle within 30 days after they are reported. Changes that require revision of a technical document follow the normal Chartering and Development timeline. One or more steps in the development process may be accelerated, so long as requirements for TAB review and voting and IPR management procedures are observed.

5.4 Profile Development, Maintenance, and Accreditation

A Project Group, in conjunction with a Product Steering Committeeare primarily responsible for the activities around profile development, maintenance, accreditation, and certification as indicated below:

1) Designate Required Functionality and Elements for Verified and Accredited Profiles
A key component of an Project Group and PSC is to identify the required elements in a specification. The required elements of a specification are those items necessary to facilitate interoperability and conformance to the base specification while allowing changes and extension points to serve the needs of a particular community. Among the first deliverables of an Project Group and PSC is to identify and document the required elements of a specification and to provide further definition as required to ensure interoperability, based on the agreed sufficient set of functionality. The document, Specification : Required Elements for Profiles, must be approved by a vote of the Project Group. When approved, the document will be published on the IMS Public Website.

2) Collect, Review and Test Submitted Profiles
Only Contributing Members can submit profiles for accreditation by the Project Group and/or PSC. The groups will use the IMS toolset as one check in identifying possible profiles for accreditation. In addition, for a profile to receive IMS GLC Accredited Status, the profile must be tested in a real-world environment. The Project Group is responsible for identifying the environment and testing it to the satisfaction of the Project Grop and PSC

3) Recommend and Approve Accredited and Certified Profiles
Once a profile is reviewed and tested in accordance with Evolution and Certification Committee procedures and those indicated in 'IMS GLC Specification Adoption Note 11: Profile Definition, Registration and Maintenance Procedures', and successfully passed, the Project Gropu shall conduct an electronic vote to officially grant Validated or Accredited status to the profile.

4) Conduct Profile and Specification Maintenance
Occasionally, a profile may need to be changed in order to meet the evolving needs of the community. If a previously Verified or Accredited profile is changed, in order for it to maintain its verified or accredited status, it must go through the original process and be submitted to the Project Group for review and approval.

An Project Group or PSC may identify bugs or changes that need to be made to a specification as a by-product of reviewing and testing profiles. If the change required to address a bug report results in no functional change to the document, then an update to the base specification is produced and published as quickly as possible.

Both the Project Group and the PSC are also responsible for suggesting updates to exisiting specifications and the addition of new services for specifications. Task Forces are created to carry out the development work for services and/or specification updates. .A TAB will vote will be conducted on updates.

Once the update has been produced, it is submitted for a two-week review by the Project Group. If no significant comments are made during the review, the update is published promptly thereafter. Updates may be published singly or in groups.

In the event of a significant objection to releasing a proposed update, IMS Staff will consult with members or others to determine the appropriate course of action.

Bug reports whose resolution requires a functional change to published documents, whether identified initially or

reclassified as a result of the review of a proposed update, a specification development process is undertaken by a Project Group to update the base specification.

5) Prescribe and Witness Testing for Conformance and Certification
A Project Gropu is responsible for the development of Test cases and testing protocol and criteria, to sufficiently test profiles for conformance. Profiles submitted for IMS GLC Conformance Certification must be verified for compliance by a sufficient number of tests and witnesses to verify that such tests accurately and fairly demonstrate that it meets the requirements needed to support interoperability. Each test should be well documented indicating the testing protocol and desired outcome. The Project Group will develop the specific tests by which the profiles will be subjected.

5.4.1 Accrediting Profiles

IMS Staff will be responsible for communicating decisions to all Members and to the Public.

An Project Group is also required to keep detailed records of:

1) Profiles Submitted for Verified or Accredited Status, including:

   a. Submitting Organization and Contact
   b. Community of Interest for the Profile
   c. Process by which the Profile was developed
   d. IMS Tool Set Results
   e. Real-World Test Examples and Results (if Accredited)
   f. Decisions regarding Certification Approval
   g. Reasons for Non-Approval (if necessary)

Templates will be provided by the IMS Staff to facilitate record keeping.

2) Test Creation, Criteria, Protocol and Results for Conformance.

5.4.2 Verified/Accredited Profiles

If a profile has been submitted to an Project Group or PSC and approved by vote of the Project Group, the Project Group will notify IMS Staff who will ensure that the organization is notified and the profile posted to the IMS GLC Profile Registry. An organization that has received Verified Status may choose not to have its profile publicly available on the IMS Public Website, by requesting such. However, a list of Accredited Profiles will be available on the IMS Public Website in a Certified Conformance Chart.

5.4.3 Non-Accredited Profiles

If a profile has been submitted to an Project Group or PSC, but not approved, the Project Group will notify IMS Staff, including the reasons the profile was declined, and IMS Staff will notify the organization of the Evolution and Certification Committee decision. The Project Group may request that the profile be submitted as a Validated Profile in the IMS GLC Profile Registry. A Validated Profile indicates that the IMS GLC Process and Tools were used to create the profile.

5.4.4 Decision Making Process with regard to Certification Requirements

Approval of Verified / Accredited Profiles and specification required elements is finalized by conducting an electronic vote of Project Group members. A majority of Members in the Project Group is required for approval, and all voting Members of the Project Group must cast a vote to be valid. Other decisions to be made by the Project Group require a simple majority of Members. Each Contributing Member organization in the Project Group shall be eligible to cast one vote on Project Group activities provided the organization has been in attendance at least fifty percent (50%) or more of the preceding four [4] Project Group meetings.

5.4.5 Final Approval of Project Group Decisions

Project Group and PSC decisions constitute recommendations to the Board of Directors. Formal approval of these

recommendations normally is pro forma. However, this final level of approval provides a means to ensure that due process has been observed by the Project Group and PSC in its activities.

5.4.6 Disputes

Any individual or group of individuals who feels that due process has not been observed may appeal or dispute a decision by notifying, and the CEO or COO of IMS in writing within one-week of such a decision.

If the action taken in response to such an appeal or dispute is not satisfactory, the individual or group of individuals may notify the Chairman of the Board of Directors in writing within one-week of the action being taken. The decision of the Board of Directors is final.

5.5 Certification

5.5.1 Oversight of the Conformance Requirements

Conformance certification requirements for each standard are overseen and developed by an the Project Group and the Product Steering Committee(PSC). Once a standard has been voted on and approved by IMS Contributing Members, the Project Groups and PSCs are responsible for its maintenance and ongoing conformance certification requirements.

5.5.2 Conformance Details

All of the conformance certification tests are run and completed by the individual organization, IMS does not conduct the testing. Once completed, results are then submitted to IMS for review. Upon approval, members will be sent details on how to complete the certification, which includes submitting details about your product, organization, and other information to help potential customers learn more about your product(s).

By completing and submitting the results form, members are agreeing that these test results are an accurate representation of a properly executed certification testing process and that the document is a true and accurate representation of the results of that process.

5.5.3 Conformance Certification Yearly Re-Testing

All IMS Conformance Certifications will be active for a period of one year from certification testing. As both products and the certification suite evolves, good practice would dictate that organizations re-test their product yearly to ensure that they are accurately meeting the requirements set forth in the specification.

Notification will be sent to members one month prior to their one year conformance certification expiration with a request to retest their product. Conformance certifications that are not retested will be considered inactive and will be designated as such on the IMS Conformance Certification Directory (www.imscert.org) Exceptions to this policy will be considered if there have been no modifications to the product since achieving conformance certification.

5.5.4 Conformance Certification Re-Testing Due to Errors/Omissions

While the tests are designed to be comprehensive, an occasion may arise that an error or omission in the test will be discovered.. If an error or omission is found in an IMS conformance test, the following items will be taken under consideration on whether or not organizations must retest their systems/files to maintain their conformance designation:

The Project Groups and Product Steering Committees are responsible for managing conformance on the specification will review the error and categorize the severity of the problem.

If the severity of the problem will not significantly hinder interoperability, notification will be sent to all conformant organizations, indicating the problem and suggesting they retest their systems/files. A retest will not be mandatory. The test system will be updated, fixing the problem and notification will be posted in the test details.

If the severity of the problem will significantly hinder interoperability, the Project Groups and Product Steering Committees may deem it necessary for all systems/files to be retested. Notification will be sent to all conformant organizations with a timeframe to retest their systems/files. A retest will be mandatory to maintain a conformance certification designation.

A testing date will be added to the IMS conformance certification registry so that consumers will be aware of the time and test system version under which the conformance was issued.

5.5.5 Third Party Utilization Notice

When a product utilizes another supplier's IMS certified application, API, or services to make the IMS specification REST API calls or to create/consume files as part of certification, that dependency must be identified in the supplier's certification application details and indicated on the Product Directory. A product can only achieve certification by undergoing direct testing and acceptance by IMS. However, a 3rd party can help facilitate this testing as long as both parties are IMS member organizations. Testing Organizations must be Contributing Members.

6 Managing Intellectual Property

The intellectual property contained in a specification typically is created by the collaborative effort of individuals in a Project Group. All ownership rights to intellectual property that is collaboratively created (i.e., not submitted material) belong to the Consortium.

However, it is possible that intellectual property may be submitted as a contribution to a document by a member or third party. In such cases, the submitter may either assign the rights to that property to IMS or grant IMS a right to use the intellectual property. Procedures and forms contained in the IPR Policy document and summarized below specify the information which must be provided. Procedures requiring members to disclose possible infringement of their intellectual property also serve to reduce the possibility that implementations of a specification inadvertently infringe the intellectual property rights of any member. Similar requests are made of third parties during the development of a specification.

The Consortium requires that all Contributing Members, Participants in s, and Submitters of contributions conform to IPR policy and observe the rules summarized below. The material provided here summarizes the main features of the IPR policy and the procedures to be followed; however, the IPR Policy itself takes precedence over this document.

6.1 Submitters of Intellectual Property

A Submitter of intellectual property must elect one of the following two options at the time of making a Submission. This election is made by delivering a signed letter or fax to the Chief Operations Officer using the form contained in Appendix A to the IPR Policy and available on the IMS Website.

Option 1: The submitter agrees that if the Draft Specification in connection with which the Submission is made is finally approved by the Consortium, the Submitter and its Related Parties will license all Necessary Claims owned by it and inherent in its Submission on a perpetual, non-exclusive and worldwide basis, without compensation and otherwise on a reasonable and non-discriminatory (RAND) basis, to all Implementers; or

Option 2: The submitter agrees to the same terms as Option 1, but reserves the right to charge a royalty or other fee on RAND terms.
The use of Option 2 is discouraged. Option 2 is provided solely to allow for the possibility that it is in the interest of IMS Members to incorporate material in a specification for which a royalty or fee will be charged by the contributor.

6.2 Participants in Project Groups and Task Forces

Prior to participation in a Project Group or a Task Force, each individual must complete the click through Participation form located on the Task Force or Project Group main page. Individuals may review documents and materials in a Project Group or a Task Force without clicking on the Participation form, but in order to participate in the forum, attend meetings, etc., a Participation form must acknowledged and received by IMS GLC.

At the time that a Draft Specification is posted as a Candidate Final, every participant organization in the Project Group must elect one of the following options. Note that a participant organization may elect different options for different Necessary Claims. This election is made by delivering a signed letter or fax to the Chief Operations Officer using the form contained in Appendix B to the IPR Policy and available on the Member Website.

Option 1: The participant agrees that if the Draft Specification is finally approved by the Consortium, the Participant and each of its Related Parties will license all Necessary Claims that are owned by it on a perpetual, non-exclusive and worldwide basis, without compensation and otherwise on a RAND basis, to all Implementers; provided that such license need not extend to any Necessary Claims identified with particularity as specified in Option 2 or 3 below; or

Option 2: The participant agrees to the same terms as Option 1, but reserves the right to charge a royalty or other fee on RAND terms, and identifies the Necessary Claims as to which such rights are being reserved and

the portion of the Draft Specification that would result in infringement of them; or

Option 3: The participant identifies the Necessary Claims and the portion of the Draft Specification that would result in infringement, and indicates that no guarantee of license rights is being made or that such rights will be denied in all cases, provided that, with respect to any of its Necessary Claims that are not specifically identified for this purpose, Participant shall make available licenses in accordance with the licensing terms elected under "1" or "2" above.

In the case of Necessary Claims under non-public patent applications, the Participant need not describe any such claims at a level of detail that would disclose any of its valuable trade secrets.

Elections will not be required to be made in less than 45 days from the date that a Draft Specification has been posted as a Candidate Draft. An electronic notification of such posting will be sent to each Participant specifying the date that elections are required.

6.3 Contributing Members

A Contributing Member who is not participating in a Project Group and who exercises the right to vote upon the adoption of a Specification is required to elect one of the options described above and set forth in Section 3.3 of the IPR Policy. All elections by these Members shall be made by submitting a signed declaration by letter or fax to the COO using in the form contained in Appendix B to the IPR Policy and available on the Members Website.

6.4 Counteracting Deliberate Avoidance

In the event that a Participant or Contributing Member who is voting does not return a signed and completed election form, and later asserts a Necessary Claim(s) against an implementer of the Specification in question; if it can be shown that such Member knowingly and willfully withheld disclosure; then such Participant or Member shall be deemed to have elected to license all of its Necessary Claims under the Specification in question with the terms set forth in Section 3.3(a) of the IPR Policy.

6.5 Patent Calls

At the beginning of all IMS working Meetings, including Project Groups and Task Forces , and at any other time specified under the policies and procedures of the TAB, a Patent Call shall be made. The text to be employed in making Patent Calls is set forth in Appendix C of the IPR Policy. The scope of Patent Calls shall be limited to Necessary Claims personally known to an individual Representative, and not to the knowledge of that Representative's employer.

7 Guidelines for Conducting a Project

7.1 Conducting Meetings

7.1.1 Attendance and Participation

Open access to Project information is essential for their ultimate success. Therefore, all Contributing Members have opportunity to access the records of all Projects on the IMS website. All Project meetings are open to any IMS Contributing Member. Since Project Group and Task Force meetings generally involve intense work by small groups of individuals who share substantial context for their work, the Chair of a meeting may restrict participation (not attendance). He or she also may decline to devote meeting time to items not included in the agenda or previously dealt with by the group.

Any disputes concerning access to Project Group activities or concerns about participation in meetings should be presented in writing to the IMS COO.

7.1.2 Decision Making

Within Project Groups when issues arise that require resolution by vote, each Contribution Member organization may cast a single vote provided they have attended at least fifty percent (50%) of the last four (4) project group meetings, either teleconference or face-to-face. A record of attendance will be kept to correctly identify those who have participated closely in the project and are eligible to vote. Decisions will be made by simple majority of those eligible, except when participants appear closely divided or minority opinions are strongly held. In these cases, the chair of the meeting may elect to require a two-thirds supermajority to ensure there is sufficient agreement to move forward.

7.1.3 Meeting Management

The Project Group as a whole has the final responsibility for striking an appropriate balance between open and thorough consideration of issues and limiting discussion in order to complete tasks within the time allotted by the charter.

Most groups will conduct business electronically and in person at Quarterly Meetings. Each group can determine the balance of electronic and face-to-face sessions and arrange meeting locations and times that are appropriate for achieving its milestones. The Chair(s) must publish an agenda in advance of all electronic or face-to-face meetings and post minutes as soon as possible after the meeting.

The agenda for a meeting always should contain at least:

- The items for discussion;
- The estimated time devoted to each item; and
- A clear indication of any material to be used during the session.

At a minimum, meeting minutes should include:

- The agenda of the session;
- A summary of the discussion of each agenda item;
- A list of any decisions made; and
- A list of attendees.

Special care must be taken to avoid systematic exclusion of participants or hardship caused by timezone differences and meeting locations. The distribution of agendas, minutes, issue lists, and other material should explicitly address any special needs of participants.

Tools for creating agendas, issue lists, and minutes are provided in the workspace of each group, and templates for

these documents are included in the Appendix of this document.

The Project Group Chair is responsible for insuring that session minutes are written and posted, though the actual task may be performed by someone designated by the Group Chair.

Repetitious discussions can be avoided by using the Issues List tool on the IMS website and/or github repository to archive the main arguments and outcomes of meetings or forum interactions. Such a decision-making history is useful not only for avoiding reiteration and for identifying issues that have been eliminated or resolved to be out of scope, but also for acquainting new participants and reviewers with the group's history of decisions.

7.2 Documentation Formats

IMS requires Project Groups, Task Forces and Evolution and Certification Committees to use document formats and a standard methodology for specification development wherever appropriate. Using a common methodology ensures consistent practice and consistency. Details of document development are hosted in IMS spec-central github repository. Specific details for document development are available: https://github.com/IMSGlobal/spec-central

7.3 Document Versioning

Version considerations are essential to interoperability. IMS employs the following principles for specification and related document versioning.

7.3.1 Version Numbering Protocol

The version format for specifications is comprised of a minimum two digits and a maximum three.

Major - Leading digit position
Minor - Second position
Correction - Optional third position

Example: v2.1.1

7.3.2 Version Number Meaning

A new Major version indicates a significant feature or capability for the market. New major versions have a minor version of 0.

A Minor version greater than 0 indicates a new, changed or removed feature or capability of any kind. Impacts may be to functional capabilities, or technical-only additions or changes or both. These versions may contain breaking changes.

A correction is a bug-fix that provides additional clarity and is significant enough to warrant revising the specification.

7.3.3 Breaking and Non-Breaking Changes and Compatibility

Breaking Changes include features that when changed or added in a new version indicates a previously certified implementation will require changes to certify against the new version of the specification. Examples are:

- Renaming of properties
- Changing the meaning of a property
- Adding new properties that are required
- Making optional features required

- Changing the meaning of vocabulary terms

Non-Breaking changes are changes that have should have no effect on the ability to re-certify a previously certified product.

Examples of non-breaking changes are:

- Making required properties optional
- Adding new properties that are optional
- Adding new terms to vocabularies

Backward Compatibility

A specification is fully backwards compatible when ALL of the changes between the different versions are non-breaking.. Partial backward compatibility exists when a consecutive subset of the versions is non-breaking.

A version is not backward compatible when it introduces a breaking change relative to another version, which is often but not exclusively the just-previous version. Non-backwards compatibility does not mean that a implementation cannot be compliant to more than one version of the specification.

Forward Compatibility

A specification is forward compatible when it does not contain features that are explicitly bound to a specific version.

7.3.4 Extensibility

Extensions are feature additions which are non-breaking relative to the main specification. All extensions require certification.

7.4 Participating in Quarterly Meetings

If a Project Group wants to hold a face-to-face session at an IMS Quarterly Meeting, the Chair should make a request for a time-slot containing the following information:

- Project name
- Amount of time requested
- Draft agenda
- Estimated number of participants
- Any other activities that should not be scheduled at the same time
- Preferred time for meeting (if any)

7.5 Submitting Work Products for Approval

The Group Chair should notify the COO when a document is ready for TAB action. Document(s) and any supporting materials must be delivered to the COO in the standard format for posting. A Vote Request will be sent to the TAB asking for interested voters.

Unless there are editorial deficiencies in the package, the IMS Staff will post its contents on the TAB forum issue a call for an electronic review or vote at the earliest time that is compatible with other votes or TAB activities. No changes to the materials can be made once this call for a review or vote is made.

Project participants are required to facilitate TAB review and voting by distributing supplementary documentation via the website, making presentations at Quarterly Meetings, and conducting question and answer sessions by

teleconference or FAQ.

7.6 Finishing a Project

Once its chartered tasks are complete, the Project Group's work is finished, and its function as a Project Group. Revisions to specifications require by the TAB prior to the specification being published as a final specification.

At any time that a Project Group appears to be unable to complete the work outlined in its Charter, or if the technical or administrative assumptions on which that work was based have changed substantially, the TAB may require the group to submit a new Charter, identify a different Chair(s) and/or participants, or disband the Project.

7.7 Extending a Project

Extending a Project beyond the tasks or duration specified in its Charter may require the submission of a new Charter.

7.8 Maintaining Work Products

Routine maintenance of a base specification is accomplished by the maintenance procedures described elsewhere in this document. Ongoing maintenance of profiles, and development of conformance requirements of the specification, is done by a Project Group and/or Product Steering Committee

Appendix A – Strategic Documents

A.1 – Abstract Framework

The Abstract Framework document is available on the Public Website at: http://www.imsglobal.org/af/index.html

A.4 – Specification Development Methodology

IMS will use a modified form of the industry standard Unified Modeling Language (UML) Process to develops specifications that address behaviors for interoperability. This process will include but not be limited to a standard Use Case format, activity and modeling diagrams, etc. The IMS Specification Development Methodology is available at:

A.5 – Guidelines for Profiling

A committee of members has produced a document describing how to extend specifications and standards to customize them for use in an application domain. Following these guidelines will facilitate interoperability across application domains and permit sharing of lessons learned and tools between groups developing profiles. The document can be found at: http://www.imsglobal.org/ap/index.html

Appendix B – Sample Call for Participation

A call for participation is a document which outlines a request to begin potential new work in IMS Global. The call for participation should be a short document which outlines the following:

- The Opportunity: This area should described what can be achieved by starting a new Project group to work on a particular issue.
- The Challenge: This area will describe why there is a need to start a new group and explains the problem space.
- What the Group Proposes to Do : The area should describe what the group aims to work on to solve the challenge and realize the opportunity.

Appendix C – Sample Outline of Charters

Format Note: Please use outline numbering whenever possible to facilitate references to sections of the charter during review and in subsequent discussions.

1. Project Name

<text name>

2. Chair(s) of Development Project

<Name(s), organization(s), contact information. Note: This is the Chair of the Project Group, not the PUFSIG.>

3. Secretary

<Name, organization, contact information. Note: This is for the proposed Project Group, not the PUFSIG.>

4. Description of Work

4.1 Summary

<description of the problem the work will solve>

4.2 Background

<brief history of the problem and its current context>

4.3 Rationale

<benefits of the proposed project>

4.4 Accessibility

<brief description of the impact of this work on accessibility>

4.5 Deliverables

<list of recommended documents and or files to be created as part of the Project Group effort. Typical deliverables include: Information Model, Binding, Best Practices, sample code, potential profiles, implementation report, MIME-media types and file extensions, etc.>

4.6 Demonstration of Interoperability

<description of requirements needed to demonstrate interoperability>

5. Use Cases

<use cases which broadly define the scope of the activity. see sample use case in Appendix C for style and format>

6. Glossary

<list of special terms used in this proposal and their definitions>

7. Requirements

<Note: The description of requirements should provide sufficiently detailed scope to guide the Project Group. This description should focus on what functionality is required, but leave the task of specifying how that functionality will be provided to the Project Group>

7.1 Functional

<description of the requirements to be addressed by this effort>

7.2 Binding

<description of the binding amendments to be addressed by this effort>

7.3 Documentation

<description of the documentation amendments to be addressed by this effort>

7.4 Conformance

<description of the requirements this effort will impose on conformance>

7.5 Interoperability Demonstration

<description of how interoperability will be demonstrated>

7.6 Out of Scope

<description of those issues explicitly excluded from the scope of the proposed project>

8. Sources of Input

<description of the sources of input to be included by the Project Group>

9. Relationship to and Impact on Existing Specifications and Standards

<list of specs or standards that are related to this effort and impact on each by the products of the project>

10. Project Group Members

10.1 Project Participants

<list of individuals who are committed to working on the proposed project, with organizational affiliation>

Organization	Name

10.2 Specification Implementers

<List of organizations that have committed to implement the specification into products and systems. Implementers can include Contributing Members and invited organizations, as approved by the Chief Specification Strategist. The objective is to use the time period between Internal Draft and Final Release to complete actual working implementations of the specification that will be used by the Project Group to inform best practice, implementation guidance, code samples, etc. to be included in the Final Release.>

10.3 Project Reviewers

<list of individuals committed to reviewing interim documents produced by the Project Group and/or providing advice regarding issues that arise during the project>

Organization	Name

11. Special Resources

<description of collaborative features if different from those provided by default on the IMS Member Website and list of IMS Staff resources needed>
<Note: by default on the Project Group will use a workspace consisting of a forum, issues List, and calendar. The forum will include folders for documents and for agendas/minutes. If approved, IMS Staff will support document tracking, and UML design tool or templates for the development of use cases using the Cockburn method>

12. Milestones and Task Durations

<list of milestones and project tasks with expected duration of each task – see example; proposals for projects lasting longer than 12 months should include a rationale for the abnormal duration>

Activity	Date
Charter Vote	
Project Group Meeting	
Project Group Meeting	
Base Document Review	
Candidate Final Release	
Project Group Interoperability Demonstration	
Candidate Final / Public Release	
Interoperability Demonstration	
Final Release	

13. Charter Background

13.1 History

<narrative description of the Task Force's work to create the Charter>
<Note: The purpose of this section is to provide general context for TAB members and summarize the decision-making of the proposal authors in defining the scope of the project>

13.2 Contributors

<list of individuals who helped to develop the proposed Charter, including organizational affiliation and relationship to IMS>

Appendix C – Sample Use Case

C.1 – Use Case Instructions and Template

It is recommended that the Alistair Cockburn technique for writing use cases is adopted [*Writing Effective Use-case*, A.Cockburn, Addison-Wesley, 2001, ISBN 0-201-70225-8.]. Cockburn is a recognized expert in the field of use case documentation. He has written widely and many organizations adopt his various techniques.

C.2 – Text-based Descriptions

It is recommended that, in the first instance, use cases are explained using simple text descriptions based upon an agreed tabular template. The template shown in Table 1 is taken from Cockburn [Cockburn, 01, Table 11.1] and is based upon his 'Fully Dressed' format. Each use case should have its own description.

Fully-dressed use case description tabular template.

Use Case Title:	
Use Case Local ID:	
Brief Description:	
Level:	
Actors:	**Primary:**
	Secondary:
Stakeholders & Interest:	**Stakeholder:**
	Interest:
Preconditions:	
Minimal Guarantees:	
Success Guarantees:	
Triggers:	
Basic Flow of Events:	
Alternative Flows:	
Postconditions:	
Exception Handling:	
Extensions Points:	
Notes:	

The accompanying description should include:

- Use Case Title – the unique title for the use case. This should identify the goal as a short active verb phrase;
- Use Case Local ID – the unique identifier for the use case in the set of use cases under development. This identifier does not have to be globally unique.
- Brief Description – this should provide a concise description of the use case including its context and scope (the black-box range of the system being described);
- Level – the level of abstraction of the use case description using the vocabulary 'Summary', 'Primary Task' and

'Subfunction';

- Actors – identification of the role names of 'Primary' and 'Secondary' actors (this could be users or software systems themselves e.g. operating system). There should only be one primary actor but there can be more than one secondary actors;
- Stakeholders & Interest – the name of the stakeholder and the primary interest of the stakeholder in the goal described by the use case. There may be more than one stakeholder;
- Preconditions – the state of the 'system world' before the use case can be activated;
- Minimal Guarantees – the stakeholder interests as protected under ALL exits;
- Success Guarantees – the stakeholder interests as satisfied on a successful ending;
- Triggers – the action upon the system that starts the use case e.g. the menu item selected;
- Basic Flow of Events – the sequence of events from trigger to goal that are undertaken as the realization of the use case;
- Alternative Flows – alternative sequences of flows from trigger to goal that can be undertaken instead of the basic low. These alternatives, there may be more than one, may be due to intermediate conditions encountered during the use case e.g. some known error conditions;
- Postconditions – the state of the 'system world' once the use case has been completed;
- Exception Handling – the handling sequence required to support known or unknown exception conditions e.g. such as errors in data integrity;
- Extension Points – the sequence of branching actions that link this use case to other use cases describing this system. This allows the interaction between use cases to be explained. In the case of reference to a use case external to the set of being documented then this must include the globally unique identifier of the use case (its local ID preceded by the specification context identifier);
- Notes – the notes that will have been referenced within the rest of the table.

Appendix D – Sample Agenda, Issues List, and Minutes

Web forms are provided in each Project Group workspace for entering this information. A generic sample is given below.

1 – Teleconference or Meeting Agenda

Meeting Date and Title
12 May 2004 <Name and type of meeting>

Agenda
<list of items for discussion with time allocation>

Meeting Preparation
<description and locator for any material to be used or read to prepare for the session>

2 – Issues List

Due Date
<date the issue will be complete>

Title
<issue title>

Explanation
<detailed description of the issue>

Urgency
<importance of resolving the issue: High, Medium, Low>

Assignment
<name of person(s) assigned to resolve issue>

3 – Teleconference or Meeting Minutes

Minutes Date and Title
12 May 2004 <Name and type of meeting>

Summary of Actions and Decisions
<brief description of significant events during the session>

Agenda
<copy of the agenda actually followed>

Discussion of Agenda Items
<for each agenda item, include short description of item, discussion summary, and decisions or actions regarding that item>

Action Items
<list the actions and assignments made for each action; include the date the action will be completed; the name of the person responsible; and a brief description of the result of the action>

Attendees
<list of attendees>

Absentees
<list of those absent>

Scribe
Name of minute taker.

Appendix E – Defined Terms from IPR Policy

Exhibit A-1

DEFINED TERMS

Term	Definition
Draft Specification	A technical specification or a revision-in-process of an existing Specification, that is the subject of a formally chartered process within the Consortium, that has not yet been approved for final release.
Implementers	Those Members and non-Members who desire to use or implement a Specification.
IPR	An abbreviation of "Intellectual Property Rights", and including: claims made in patents and patent applications; copyrights; trademarks; and trade secrets.
Member	A registered member of the Consortium.
Necessarily Infringed	Unavoidable infringement by an implementation of any Required Element of a Specification, there being no technically reasonable alternative way to implement the Specification without resulting in such infringement.
Necessary Claims	Those claims under patents and/or patent applications anywhere in the world that would be Necessarily Infringed by the implementation of the Required Elements of a Specification. Necessary Claims do not include (i) claims covering any enabling technologies that are not themselves expressly set forth in a Specification; (ii) claims covering reference implementations or implementation examples; or (iii) claims covering the implementation of other published specifications not developed by or for IMS, but referred to in the body of a Specification.
Non-discriminatory	Available to all, and available to all under terms that are substantially identical to the terms made available to others under similar circumstances. It is acknowledged that non-discriminatory behavior cannot be established with precision where circumstances differ.
Participant	Any Member or, as permitted by the Rules of Procedure, non-Member, that participates in a Consortium Project Group after a point in time or process that is specified for such purposes in the Rules of Procedure.
Patent Call	See Section 5.5
Project Group	A process group chartered to create a Specification
RAND	Reasonable and Non-discriminatory
Reasonable	License terms relating to IPR included in a Specification that are not more onerous (including as to price) than could be obtained by the owner of such IPR in the open market absent its inclusion in a Specification. It is acknowledged that "Reasonableness" cannot be established with precision.
Related Party	Any entity that is directly or indirectly controlled by, under common control with, or that controls the subject party. For this purpose, "control" means beneficial ownership or the right to exercise more than 50% of the voting power for the entity. Any Member or potential Member that believes that the application of this definition would result in unfairness, as applied in its unique circumstances, may apply for a limited and fact-specific exemption on such form as the Consortium may from time to time make available for that purpose.

Representative	Any individual that acts on behalf of a Member or other entity in connection with the technical process, or in the completion of any form to be delivered to the Consortium pursuant to the Policy or the Rules of Procedure.
Required Element	Any element of a Draft Specification or Specification identified as "Mandatory" or "Optional", as defined in the Rules of Procedure.
Specification	A technical specification, or any other work product containing IPR, formally adopted by the Consortium.
Submission	A submission or other contribution made to a Consortium Project Group in written form or electronic form, and accompanied by a Submission of Technology Form (Appendix A), for consideration for inclusion in a Specification. A Submission may occur, for example, as a result of an unsolicited offer to the Consortium of existing technology by a Member or third party, or in response to a request for contributions.
Submitters	Both Members as well as any representative(s) of a Member, and any other person or entity making a Submission.

Appendix F – Disclaimer Statements for Specifications

IMS GLC intends for all of its specifications to available to the public without excessive fees or license restrictions that would inhibit their adoption and use world-wide. In order to make this "open" availability possible, the Consortium formally requests from its members or others appropriate rights to use intellectual property that is included in IMS GLC specifications. Notices that are appropriate for this third party material must be included in the introductory language of all specifications. Generic statements and disclaimers regarding third party intellectual property that are similar to those used by other specification consortia and standards bodies also must be included in the front matter of all IMS GLC specification documents. The Chief Operating Officer is responsible for ensuring that permission to use third party material has been requested and obtained and that the statements substantially as given below are included in all specification documents.

F.1 – Statements and Disclaimers to be Included in All Specification Documents

The front matter of all specification documents shall include the following introductory material.

IPR and Distribution Notices

Recipients of this document are requested to submit, with their comments, notification of any relevant patent claims or other intellectual property rights of which they may be aware that might be infringed by any implementation of the specification set forth in this document, and to provide supporting documentation.

IMS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on IMS's procedures with respect to rights in IMS specifications can be found at the IMS Intellectual Property Rights web page: https://www.imsglobal.org/sites/default/files/imsipr_policyFinal.pdf

Use of this specification to develop products or services is governed by the license with IMS found on the IMS website: https://www.imsglobal.org/license.html

Permission is granted to all parties to use excerpts from this document as needed in producing requests for proposals.

The limited permissions granted above are perpetual and will not be revoked by IMS or its successors or assigns.

THIS SPECIFICATION IS BEING OFFERED WITHOUT ANY WARRANTY WHATSOEVER, AND IN PARTICULAR, ANY WARRANTY OF NONINFRINGEMENT IS EXPRESSLY DISCLAIMED. ANY USE OF THIS SPECIFICATION SHALL BE MADE ENTIRELY AT THE IMPLEMENTER'S OWN RISK, AND NEITHER THE CONSORTIUM, NOR ANY OF ITS MEMBERS OR SUBMITTERS, SHALL HAVE ANY LIABILITY WHATSOEVER TO ANY IMPLEMENTER OR THIRD PARTY FOR ANY DAMAGES OF ANY NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF THIS SPECIFICATION.

Comments may be posted in the IMS Public Forums

F.2 – Additional Notice to be Included When Necessary Claims are Identified

When material for which a third party has identified Necessary Claim(s) is included in a draft or final specification, the material must be formally submitted to IMS GLC, and a notice substantially as follows shall also be included in the front matter of specification documents:

> The Consortium draws attention to the fact that it is claimed that compliance with this specification may involve the use of a patent concerning [Subject Matter (name of what is being used)] given in [Subclause (where it is used)]. The Consortium takes no position concerning the evidence, validity or scope of such patent rights.
>
> The patent holder has assured the Consortium that it is willing to license patent rights it owns or controls which would necessarily be infringed by any implementation of this specification to those licensees (Members and non-Members alike) desiring to implement this specification. The statement of the patent holder to such effect

has been filed with the Consortium. Information may be obtained from:

[Name of Holder of Right]
[Address]

Attention is also drawn to the possibility that some of the elements of this specification may be the subject of patent rights other than those identified above. The Consortium shall not be responsible for identifying any or all such patent rights.

In addition, if the patent holder refuses to license the material, the following will be text should be added:

The holder of patent rights has refused a request by the Consortium that it agree to make a license available for the purpose of implementing this specification. Information may be obtained from:

[Name of Holder of Right]
[Address]

F.3 – Additional Notice to be Included When Copyrighted Material is Identified

When material for which a third party holds copyright is included in a draft or final specification, permission to use the material must be obtained from the source, and a notice substantially as follows shall also be included in the front matter of specification documents:

Please note that the [name of copyrighted material] referred to in [location in specification] of this specification, is [published, released and maintained, under development, etc.] by [source]. IMS Global Learning Corporation has made no inquiry into whether or not the implementation of [the copyrighted material] would infringe upon the intellectual property rights of any third party. For further information, please consult [POC for source].

Appendix G – Co-Chair Instructions

Whether you are the co-chair for a Project Group or TaskForce, an efficiently run group ensures maximum participation and quality production from group participants. Below are some basics to help understand how IMS GLC groups function, where to find materials, your responsibilities as a team lead, and where to get help.

Getting Started

1) IMS Staff will send out a call for participation, announcing the initialization of a new work effort, to seek input from Contributing Members and Affiliates.
2) An initial team lead briefing conference call will be held between team leads/co-chairs, the COO and the CSS.
3) If you do not already have a workspace on the Members Area Website with a forum and calendar, and WebEx call details and a github repository, please contact IMS Staff to get one set up.
4) In your workspace, there is a forum with folders and templates for you to publish agendas and minutes. Each forum has two folders, one called Document Library and the other Minutes and Agendas.
5) A notification will be sent to all IMS GLC Contributing Members announcing that your group has started work. It will include the time and date of the first conference call, location of the forum, and the name of the team lead.
6) If your team would like a github repository for tracking issues, please notify IMS Staff.

The First Conference Call

1) Determine a time and day for Conference Calls. Discuss with team members and participants the best time to hold conference calls. This should take into account and not over-lap with conference call times of other active Project Groups or Task Forces You will be conducting weekly or bi-weekly conference calls via WebEx. You can use the integrated VOIP or the conference call number.
2) The team lead should review the project timeline with participants and establish a schedule of conference calls and milestones that will help the group stay on time and on track.

Weekly Conference Call Meetings (The Agenda)

An agenda provides your group with the information and tools it needs to participate effectively during the meeting. Agendas should be posted at least 24 hours prior to conference calls to ensure people have time to review the materials and prepare for the meeting. Your forum contains a web form for agendas asking for the following information:

1) Time of call in EST or EDT with GMT subtraction.
2) Link to Intellectual Property Statement on Member Website. Link to the participation agreement.
3) Agenda for the Meeting.
4) Link to the Member Forum.
5) Link to WebEx.
6) Links to background material.
7) Basic information on participating in WebEx.
8) Information to Member Website in the Agendas and Minutes folder of the forum.
9) Meeting information in Forum Calendar on Member Website.

Conducting Conference Calls

1) Start the conference call on time.
2) Remember to start an archive of the call and ensure that someone is taking the minutes (a team member or yourself).
3) Conduct a roll call.
4) Inform participants of the IP Statement/Patent Call (http://www.imsglobal.org/ip) and the Participation Agreement.
5) Briefly go over the agenda for the meeting, stating the goal for the call and any announcements (upcoming meetings, etc.).
6) Work from the agenda.
7) Ask participants to state their name prior to speaking.
8) Table issues not relevant to the issues to be discussed during this call and save them for future calls.
9) Summarize the issues outstanding and the progress made at the end of the call, as well as the list of action items and due dates.
10) Establish the day and time of the next conference call and when the minutes of the call will be posted.
11) End the call on time.
12) Post the minutes from the meeting no later than 24 hours after the call.

Face-To-Face Meetings

1) At Quarterly face-to-face meetings, there will be an opportunity for your group to meet. Please contact the COO to schedule the meetings.
2) Agendas and Minutes during face-to-face meetings should also be posted to the group forum in a timely manner.

Documents and Timelines

1) IMS GLC provides document templates to help your group prepare its documents. Templates are available from the spec-central github repository.
2) IMS GLC has a specific style and format for the documents and schemas it publishes and a system for naming and versioning. All materials must conform to these established methods. If you have any questions, about document naming or formatting, please contact the Document Manager.
3) The Development cycle for specifications is typically as follows:

Charters	2-3 months	Final Documents
Base Documents	2-3 months	
Candidate Final Documents	6-12 months	
Candidate Final / Public Draft Release	4 months	
Develop Final Specification	6-12 months	

This development cycle guides the timeline established in the chartering phase as planning for future work is done with this schedule in place. The team leads ensure that their group meets the established timelines and discourages scope creep. If problems arise IMS GLC staff are available to assist team leads in finding resolution.

4) Once chartered, a group will create and maintain a public description of the project on the IMS Public Website that includes descriptions of: Problem Being Addressed, Objectives, Co-chairs, Participant Organizations, Expected Impact, and Quarterly Update (where is the group now and how far away are key releases, etc.).

Voting and Reviews

Milestones in the specification development cycle must be reviewed or approved by the Technical Advisory Board.

Charter	TAB Vote
Base Document	Internal Work Group Review
Candidate Final Document	Internal Work Group Review
Final Document	TAB Vote

1) When your group's documents are ready to be submitted to the TAB for Review or Vote, notify the Chief Operations Officer and send the documents to the Document Manager who will prepare the documents for review.
2) Information included with the document set should include when the group will hold a conference call to answer any questions the TAB might have about the documents, as well as an overview document or slide presentation that explains what the material is about.
3) Once the documents are prepared, they will be posted on the Member Website and a message will be sent to TAB members asking them to review the documents for a two-week period.

IPR

1) A Patent Call must be read at the start of every meeting. All participants, Members and Non-Members must abide by the IMS GLC IPR policy. The patent call is available at: http://www.imsglobal.org/ip

Invited Guests

1) At times, Project Groups and TaskForces may wish to have non-members join the group or provide expertise. You must request in writing (via email) to the CEO or COO, for a Non-Member be allowed to join the group, stating why the person should be allowed to participate. The CEO and COO will decide if the addition of this person is warranted. Their decision is final.

Information/Document Management

1) While groups like to share information with others to gain feedback and information, documents that have

not reached approved Final Specification stage may not be shared with non-Members.

2) Minutes and other materials used during group meetings must be posted to the group's forum. It is the team lead's responsibility t ensure this happens within 24 hours of the meeting. Meeting minutes should not be posted to any other forums, and no other forums should be established outside of IMS prior to public release.

Appendix H – References

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Winer, Dave, "Ideas for Standards Work" http://scriptingnews.userland.com/ideasForStandardsWork

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CEN/CENELEC Internal Regulations – Part 4: Certification http://www.cenorm.be/boss/supmat/rd000.htm

CEN Optimization Process http://www.cenorm.be/boss/supmat/guidance/gd045.htm

(CEN) Guidance on the Planning of a Programme of Work of A Technical Committee http://www.cenorm.be/boss/supmat/guidance/gd025.htm

IEEE "What you need to know about IEEE Standards and the Law"

IEEE Standards Companion http://standards.ieee.org/resources/index.html#guides

IEEE-SA Standards Board Operations Manual http://standards.ieee.org/resources/index.html#guides

IETF The Internet Standards Process – Revision 3 http://www.ietf.org/rfc/rfc2026.txt

IETF Working Group: Guidelines and Procedures http://www.ietf.org/rfc/rfc2418.txt

"The IMS Specification Development Process," Steve Griffin and Pedro Hernandez-Ramos http://www.imsglobal.org/feature/specprocess.html

W3C World Wide Web Consortium Process Document http://www.w3c.org/consortium/process-20010208

W3C Conformance Testing and Certification Model for W3C Specifications – Working Draft 2 Jan 2002 http://www.w3.org/QA/2002/01/Note-qa-certif-20020102.html

About This Document

Title	IMS Technical Advisory Board Policies and Procedures
Authors	Rob Abel, Lisa Mattson
Version	9.4
Version Date	2 August 2018
Status	Draft for comment
Purpose	This document describes the organization and administrative processes that the IMS TAB uses to charter, develop, and maintain specifications.
Distribution List	This document is distributed to all IMS Contributing Member organizations for use by their representatives participating in IMS TAB activities.

Revision History

Version No.	Release Date	Comments
Draft 1.0	12 May 2002	Draft for Comment.
Version 1.0	04 July 2002	Released Document.
Version 2.0	08 November 2002	Released Document incorporating changes to organization of requirements and development committees.
Version 3.0b	9 July 2004	Draft for comment incorporating changes to voting procedures and IPR procedures.
Version 3.0c	11 January 2005	Added specification disclaimer statement information (Appendix F). Updated sections about the roles of PUFSIGs and Project Groups in implementation and development activities.
Version 4.0	25 October 2006	Updated changes to policy, including Internal Draft process, modified process diagrams, and Charter template.
Version 5.0	01 August 2007	Added sections about Evolution and Certification Committees and the team lead instructions and minor edits throughout the text.
Version 5.1	30 January 2008	Updated sections about Evolution and Certification Committees.
Version 5.2	07 July 2008	Added information about the TAB Steering Committee and made other minor corrections.
Version 6.0	13 January 2010	Updated voting procedures to reflect changes to the Bylaws and to clarify terminology.
Version 7.0	18 September 2013	Updated the structure section to include Task Forces along with general updating for consistency.
Version 8.0	2 July 2014	Updated the structure section to include APMGs along with general updating for consistency.
Version 9.0	22 February 2016	Updated for consistency
Version 9.1	19 April 2016	Updated TAB Executive Committee details.
Version 9.2	16 August 2016	Added Communities of Practice and Steering Committees
Version 9.3	4 January 2017	Added Executive Boards and Participation Guidelines
Version 9.4	19 June 2018	Removed Evolution and Certification Committees, Technical Advisory Board Steering Committee, updated certification details
Version 9.5	9 September 2018	Updated Section 5.2.2