

WEB3D CONSORTIUM

PROCESS SUMMARY AND GUIDELINES

APRIL 2005

1. INTRODUCTION

This document describes the new organization, procedures and processes of the Web3D Consortium. These process guidelines will become effective following a Web3D Member vote in Spring 2005. This document is also intended as an introduction to the Members Agreement, Bylaws and IP Guidelines. It serves as a plain-language description to some of the most important aspects of those documents. It also lays out some working processes and details not contained in the legal Agreement package. If there is any unintentional conflict in meaning between this document and the official documents – the official documents are the master.

The new bylaws and associates agreements will be voted upon by the organizational membership as soon as they are refined and approved by the Board. Under section 10 of the current bylaws: "These By-laws, or any of them, may be altered, amended, or repealed and new By-laws adopted by approval of two-thirds (2/3) of the Organizational Members of the Corporation." The vote can be undertaken by written ballot that specifies no specific timeframe.

2. GOALS FOR THE NEW WEB3D ORGANIZATIONAL STRUCTURE

It is four years since the Consortium last undertook a significant re-organization. In that time the Intellectual Property (IP) environment in the industry has become significantly more exacting – and the Consortium has gained significant experience in establishing effective processes.

The main aims of this re-organization are to:

- preserve the Consortium's open participatory structure – enabling any individual, company, academic or government institution to join to further Web3D in the industry;
- ensure the appropriate balance in decision-making between the various classes of membership;
- establish a significant and tangible benefit for Charter members with a guaranteed seat on the Board – renaming this level of membership to Directing Members;
- create a written membership agreement that all members must execute laying out contractual rights and responsibilities - especially a state-of-the-art IP framework;
- establish an IP framework that both protects the IP rights of Members and builds a solid foundation for royalty-free use of any Consortium standard;
- refine and clarify the major processes by which the Consortium creates standard specifications.

3. CONSORTIUM MISSION STATEMENT

The purpose of the Consortium is to create and encourage market deployment of open, royalty-free standards that enable the communication of real-time 3D across applications, networks, and XML web services. Web3D promotes the foregoing in cooperation and conformance with pre-existing and accepted industry standards and specifications.

The emphasis on market deployment is critical – creating specifications that no-one uses is largely a fruitless exercise.

4. PARTICIPATORY STRUCTURE

The Consortium is an open organization that any interested entity may join. A number of membership tiers provide well-defined privileges. In addition, the Consortium outreaches to the wider industry via a series of widening circles of participation.

4.1 Board of Directors

The Board of Directors is drawn from the Membership through a mix of seats allocated to Directing Members and membership elections. The Board typically teleconferences monthly and makes strategic decisions including:

- Allocation of budget;
- Retaining external services;
- Approval of working group proposals from the membership;
- Ratification of specification from working groups;
- Decision to submit ratified specifications to ISO;
- Initiating outreach strategies for industry and membership;
- Admission of new Directing Members.

4.2 Working Groups

All business below the Board is conducted in working groups – which are open to any member and are conducted according to Consortium Working Group Process Guidelines included here as Attachment A. All working group mailing lists, minutes and draft specifications are confidential to Consortium members. Member contributions are not confidential to avoid a complex web of potential Non-Disclosure Agreement (NDA) infringements as contributions are used by the membership. Working groups may be created to accomplish tasks such as, but not limited to, the following:

- Creating and maintaining a Specification;
- Creating and maintaining an Adopters Package;
- Creating and maintaining a free open-source code/content pool;
- Marketing activities.

4.3 External Review

With the Board's approval, a working group may seek external feedback on draft specifications under the terms of a Board-approved Reviewer's Agreement. Such an agreement will define confidentiality terms and a reciprocal IP license to ensure any IP associated with third party contributions are licensed under the same terms as if from a member.

4.4 Adopter Programs

If the Consortium produces software, content or programs that invite participation by non-members, such as a conformance test program, the Board can create an Adopter Agreement appropriate for that activity that defines licensing terms and fee structure. It may be necessary for Members to sign a particular Adopters Agreement – but any associated fees may be waived for some member classes.

4.5 Implementers

The intent of the Consortium is to produce specifications that are freely and widely available to the industry and may be used by "Implementers" to create products and services with minimal barriers:

- Ratified Consortium Specifications will be typically be freely available with appropriate Copyright and Trademark licensing terms;
- Consortium Specifications that are approved by ISO/IEC will be available through ISO processes.

4.6 Open Source Programs

The Consortium may define opens source programs, under an appropriate license that is approved by the Board.

5. MEMBERSHIP DOCUMENTS

Participation in Web3D will be defined by a set of documents.

5.1 Bylaws

The bylaws provide the legal foundation for the corporation and contain broad policies, not details of implementation. A vote of all Organizational Members is required to amend the bylaws. The bylaws define:

- Purpose of the organization;
- Appointment, election and duties of Directors and Officers;
- Frequency, purpose and conduct for Board and member meetings;
- Approval of the formation of new working groups;
- Financial, tax-reporting and record-keeping responsibilities;
- Member Provisions including classes and rights, number of members, voting, admission, termination and withdrawal;
- Mechanism for changing the bylaws.

5.2 Membership Agreements

Each membership class has a corresponding Membership Agreement. The Membership Agreements may be changed by Board vote. The Participation agreement is a contract between the member and the Consortium that defines:

- Payment of dues;
- Member rights and responsibilities;
- Termination and withdrawal provisions;
- Confidentiality responsibilities;
- IP policy and members participation in that policy;
- Copyright and trademark provisions.

5.3 Process Documentation

The Board shall agree and update as necessary a set of process documents that define the details of the Consortium's affairs including but not restricted to:

- Creation and approval of working groups;
- Dues amount for each membership class;
- Ratification of specifications;
- Submission of specifications to ISO;
- Approval of Adopters Packages and open source programs;
- Conduct and responsibilities of working groups.

6. INTELLECTUAL PROPERTY POLICY DISCUSSION

6.1 The Purpose of the IP Framework

The Consortium is committed to produce open, royalty-free standards. The Web3D IP Policy establishes a framework whereby, UNLESS specifically excluded, all the Necessary Claims of Members' IP that are included in the scope of a ratified specification are reciprocally licensed on a royalty-free (RF), non-discriminatory, basis to all other participating members. This ensures that no IP can be unexpectedly "submerged" into a specification – and it builds a "raft" of reciprocally licensed IP to protect any Consortium specification from third party IP claims. Pragmatically, this framework means that only in exceptional cases does any IP have to be discussed or disclosed – reducing IP exposure for all members and speeding specification drafting.

Although consideration of specifications containing RAND, royalty-bearing contributions is allowed by the Web3D Membership Agreements, it is unlikely that Web3D will ratify any standard that necessitates the payment of royalties to any member or third party. The voting threshold for ratification of an encumbered specification is $\frac{3}{4}$ of the Board, rather than the normal $\frac{2}{3}$ of the Board, followed by a vote of approval of by $\frac{2}{3}$ of the Organizational Membership.

6.2 Minimizing Member's IP Commitment

Necessary Claims are tightly defined so as to exclude IP if there are any commercially viable alternatives and to exclude IP for any implementation techniques, such as silicon processes. There are also provisions for a Member to explicitly exclude any specific IP that will not be licensed under the default license, including an opportunity for any member to raise any IP issues during an advertised Exclusion Period before any specification is ratified. If any member is aware of IP issues they are encouraged to raise an IP disclosure as soon as possible and not wait for the Exclusion Period to commence – so the affected working group does not waste time and effort.

A member may also provide written notice that it chooses not to participate in any reciprocal license for specifications produced by working groups in which the member does not wish to participate – making it easier for companies with diverse IP portfolios to join the Consortium and not assume IP exposure for specifications that are of no interest to them.

Note that no member can ever be forced to license any IP that it does not wish to.

6.3 Explicit Statement of Licensing Intentions

If a member wishes to explicitly state that they will grant IP under the default license then they may issue a written statement to that effect, optionally accompanied by any supporting documentation indicating that the IP is unencumbered by any other third party. A member would normally wish to make this kind of explicit statement if making a Contribution that it wishes to see adopted and a clarification of the IP position would make the contribution easier for the working group to consider and subsequently incorporate into a draft.

6.4 Avoiding IP Logjams

If there is a known or suspected issue with any member's IP, but that member has made no explicit statement on the issue, then on the approval of the Board, that member can be requested to make a carefully controlled IP statement so that the situation may be clarified and the working group can make forward progress.

6.5 IP Committees and Avoidance of IP Exposure

All members should be aware of inevitable IP issues related to creating an open standard. Each working group should maintain an environment in which members can work together without fear of putting themselves on notice of possible patent claims, or without fear of making lay statements that may be held against them or the working group at a later stage.

For these reasons that Consortium requires that any IP sensitive discussions be held in carefully controlled, Board-initiated, IP Committees and not in open working group meetings. Attachment B contains the process guidelines for IP Committees.

Outside an IP Committee, a member may indicate that a draft specification may be encumbered by IP from third parties that are not working group members and request the establishment of an IP Committee to investigate. However, the contributing company should NOT communicate any detailed information, including patent numbers, relating to such potential encumbrance to the working group.

7. MEMBERSHIP CLASSES

The Consortium defines a number of member classes that enables participation by any interested corporation, academic institution, government and military organization and individuals. All members must sign the appropriate Membership Agreement - no membership privileges are enabled until the member's signature is on file and dues paid.

The new membership fee structure is substantially unchanged from the current fee tiers, except larger academic institutions will need to renew at the large fee tier. By default, when the new structure is approved all non-Charter Organizational members will become Organizational Members and all Charter Members will become Directing Members. After the transition, any Organizational member may apply for Directing Member status at any time. Directing Membership is subject to Board approval, primarily as a safeguard against the Board becoming too large, whereas Organizational or Professional membership does not need specific Board Approval

Annual Dues payable for each class of membership vary according to the size of the member organization:

- "Large" organizations are: companies with \$50M annual revenue or more; or academic, military and government organizations with 1,000 or more paid staff or faculty members;
- "Standard" membership is available to any company with less than \$50M annual revenue; military and government organizations with less than 1,000 paid staff; or academic organizations with less than 1,000 but more than 100 faculty members.
- "Small Academic" organizations are defined as academic organizations with under 100 faculty members;
- Standard Professional membership dues are reduced for accredited students.

	Directing	Organizational	Professional
Dues: Large	\$15,000	\$7,500	
Dues: Standard	\$5,500	\$3,500	\$100
Dues: Small Academic / Student	\$5,500	\$1,500	\$25
Membership Approval Needed	By Board	None	None
Seat on Board	Yes – if desired	By election	By election
Working Group Participation	Yes	Yes	Yes
Vote in working groups	One Vote	One Vote	No
Vote on Bylaws change	Yes	Yes	No
Waiver of Adopters Fees	Yes	Yes	No

8. BOARD MEMBERSHIP

The Board of Directors is drawn from the Membership with a minimum of nine and a maximum of thirty seats. The Consortium will hold an annual election for Organizational and Professional members. All elected Board members sit for a one year term.

The Board is composed of:

- All Directing Members who wish to take their seat on the Board;
- Elected Organizational Members with at least 1/3 the number of seats as Directing members – or more if needed to make up the minimum number of seats – and with a minimum of three Organizational Members on the Board;
- Two elected Professional Members.

The following table sets out the number of board seats depending on the number of Directing Members that chose to take their seat on the Board.

Professional	Directing	Organizational	Total
2	0	7	9
2	1	6	9
2	2	5	9
2	3	4	9
2	4	3	9
2	5	3	10
2	6	3	11
2	7	3	12
2	8	3	13
2	9	3	14
2	10	4	16
2	11	4	17
2	12	4	18
2	13	5	20
2	14	5	21
2	15	5	22
2	16	6	24
2	17	6	25
2	18	6	26
2	19	7	28
2	20	7	29
2	21	7	30

9. STANDARDIZATION PROCESS

The creation of a Consortium standard follows a number of distinct steps.

9.1 Proposal

Any Member can bring a proposal for the creation of a working group to produce a draft specification to the Board at any time. Such a proposal should include evidence of market needs for such work, support from other Consortium Members and a clear charter and milestones.

9.2 Approval

The Board shall consider each working group proposal and, depending on its review of the charter based on by-laws procedures and Consortium strategies, may approve or modify or disapprove the charter for the working group. Suggested modifications will be returned to the working group for reconsideration and resubmission. Once approved, unless the final working group charter states otherwise, the working group will operate under the Working Group Guidelines in Attachment A.

9.3 Drafting

The working group produces a series of draft specifications under the guidance of the chair. All drafts are Consortium confidential, however working groups can create mutually agreed marketing materials as long as they don't expose specification details or represent the draft has been finalized. Drafts can also be circulated for external review under an external Reviewer's Agreement approved by the Board.

9.4 Ratification

Once the Working Group has voted on a Final Draft specification that it considers ready for public release, it passes that Final Draft to the Board for Ratification. The Board alerts the membership that the specification is under consideration for ratification to provide the opportunity for any member to raise IP issues during a 30 day Exclusion Period. If IP issues are raised then the Board establishes an IP Committee to investigate and make recommendations back to the Board. If no IP issues are raised then the Board considers whether the original charter has been fulfilled and that due process has been followed – and if so – will ratify the specification for public release. It is on the date of Ratification that the reciprocal license between to all Consortium members that haven't excluded themselves is granted.

9.5 Public Release

Once Ratified, the specification is publicly released on the Consortium web-site. The working group should take care to establish and answer any questions on a Consortium public forum for the specification and drive external marketing and promotion activities to encourage industry adoption. A working group would also normally begin work on handling any specification bugs and working on the next version of the specification.

9.6 Submission to ISO

Once a specification has been ratified, the Board may consider whether to enter the specification into the ISO process. Entering the ISO process does not affect the development of the specification inside the Consortium and the working group will need to be willing to provide support to the ISO submission and approval process.

ATTACHMENT A

WEB3D CONSORTIUM WORKING GROUP PRACTICES

1. CHANGE HISTORY

- February 2005 – First Release.

2. INTRODUCTION

These guidelines outline discussion, outreach, consensus-building and decision-making practices to be used in Web3D working groups. These mechanisms are intended to encourage active participation and accountability. Working groups normally build consensus naturally under the guidance of the Chair. When consensus does not arrive naturally, the working group can use the processes in this document to avoid deadlock. The success of a working group is strongly influenced by the leadership of the Chair, the responsibilities of which are described here.

3. CONFIDENTIALITY AND OUTREACH

All Contributions to a working group are non-confidential within Web3D, so that all Participants may freely discuss any Contributions with any other working group member. All working documents and draft specifications produced by the working group are confidential within Web3D to prevent public release before ratification - leading to possible marketing and IP issues.

Working groups will normally create marketing materials to communicate its high-level roadmap, main technical direction and participation opportunities to non-members. These materials must not include excerpts from draft specifications, must not represent that any aspect of the specification is finalized before ratification. Working group chairs are encouraged to seek explicit working group approval for any external materials to be used in a significant outreach activity. The working group can prevent the external use of any outreach material that may be inappropriate or controversial.

An optional publicly available email list or electronic forum may be provided for discussion of ratified, publicly available versions of working group specifications.

Draft specifications can be made available to non-members only if they have signed a Web3D Reviewers Agreement that contains, at a minimum, an NDA and reciprocal IP license agreement that is substantially similar to the one contained in the Web3D members agreements.

4. MEETINGS

The working group may use any combination of face-to-face meetings and teleconference meetings at its discretion. Telephone dial-in will always be provided for face to face meetings. Each working group will define its meeting schedule well in advance, preferably covering the next 3-6 months. In no event will a working group meeting be held with less than two weeks notice.

5. PARTICIPATION AND VOTING RIGHTS

Any Web3D Contributor or Promoter may attend any working group meeting.

To encourage active participation, rights to take part in a working group vote is limited to working group Participants in good standing, which is defined as Participants that have attended two of the last three working group meetings in person or by phone, counting the current meeting. New members may vote on their second meeting – if they are in good standing. Each Participating company in good standing may cast one vote, whether a Contributor or Promoter.

A working group vote is passed when a super majority of votes of at least 2/3 of the non-abstaining votes cast are in favor of an issue with a quorum requirement of at least 50% of working group Participants in good standing voting for, against or abstaining. The vote to pass the Final Draft Specification to the Board must be passed with a super majority of votes greater of at least ¾ of the non-abstaining votes cast with the same quorum requirement.

A working group may hold votes at working group Meetings or on the working group mailing list with a clearly defined deadline that is at least one week from the call to vote. The voting constituency for an email vote is the same as the working group members in good standing at the working group meeting preceding the email vote.

6. CONSENSUS AND VOTING POLICY

The notion of consensus is integral to the Web3D process. While unanimity is preferred, it is not practical to require that working groups reach unanimity on all issues. The process for introducing and resolving issues is as follows:

- *Issue Formulation and Documentation* - any participant may call for a vote by fully documenting/articulating a specific issue and framing a proposal for voting;
- *Straw Poll* – if appropriate, the Chair can hold straw polls to gauge whether there is any significant opposition to the proposal and pass it if not. At the discretion of the Chair members not in good standing may vote in a straw poll to gather the broadest range of opinions on a particular topic;
- *Debate* - if there is not consensus, arguments can be presented in a limited time defined in advance and enforced by the Chair;
- *Formal vote* – each member's vote being recorded by the Chair in the minutes;
- *Passage* - if the vote passes, record any dissent and consider the issue resolved;
- *Failure* - if the vote does not pass, return to the debate stage. If the issue is not resolved in the second vote, the Chair must work with the various sides to reformulate the problem so the working group can achieve consensus in a reasonable time.

Any participant may open a resolved issue by obtaining consensus support, or if necessary calling for a vote, to open the resolved issue. The Chair should encourage the working group to consider whether there is new information relevant to the issue that would significantly change the opinions of participants before the working group decides to open a resolved issue. Once re-opened, the issue should be resolved using the standard resolution process above.

7. WORKING GROUP ONLINE RESOURCES

Each working group will have an associated members-only email list for group discussion. The method for subscribing and unsubscribing to this list will be published on the Web3D member web-site.

The working group Chair will maintain password-protected web pages containing meeting minutes, attendance records, written contributions, proposal revisions, and other documents. The working group may also use online resources such as CVS repositories and wiki-sites at its discretion.

Any online resources that are subject to working-group confidentiality rules must be password protected to enable access by Web3D members only, and be reachable from the Web3D member web-site page.

8. RESPONSIBILITIES OF WORKING GROUP CHAIR

A Chair pro-tem for the working group is designated by the Board when the working group is created. After a reasonable period the working group should vote to select a Chair (or co-chairs) from any working group members that wish to stand for consideration. If the Chair wishes to step down the working group will select a new Chair from its own members. The Chair may be changed at any time by consensus vote of the working group Participants.

The primary role of any working group Chair is to facilitate consensus-building among Group members. Other responsibilities of the Chair include:

- Record and post the list of meeting attendees on the working group web-site;
- Create and post a meeting/call schedule with appropriate advance notice;
- Define meeting agendas;
- Ensure minutes are taken, posted in due time and approved at each subsequent meeting;
- Ensure that actions are followed up in good time;
- Solicit contributions, encourages participation;
- Clearly define the constituency of members in good standing before any votes are taken so the quorum and super-majority requirements are clearly established before voting;
- Oversee voting within Group;
- Clearly records results of all votes;
- Generally stays neutral in discussion but can participate in technical discussions if announces in advance that will remove his or her chair "hat" at that time;
- Keeps Group's activities compliant with Web3D Process documents and IP policy;
- Maintains home page of Group with the support of the Web3D webmaster;
- Revises deliverables timeline as needed;
- Provides regular working group updates to the Board;
- Requests the Board initiate an IP Committee for any IP sensitive discussions.

A working group may create and elect additional positions, such as specification editors, vice-chairs etc. at any time at its discretion.

WEB3D CONSORTIUM IP COMMITTEE PRACTICES

1. CHANGE HISTORY

- January 2005 – First Release.

2. INTRODUCTION

All members should be aware of inevitable IP issues related to creating an open standard. Each working group should maintain an environment in which members can work together without fear of putting themselves on notice of possible patent claims, or without fear of making lay statements that may be held against them or the working group at a later stage. For these reasons the Consortium requires that any IP-sensitive discussions be held in carefully controlled, Board-initiated IP Committees and not in open working group meetings. An IP Committee produces high-level recommendations to the Board which the Board may pass to a working group. These recommendations should not contain any details on any specific IP that was discussed. The recommendations are used as input to Board and working group decisions using the standard Board and working group processes. These recommendations might include approaching third parties to obtain licenses to IP.

3. CREATION OF IP COMMITTEES

The Board shall establish an IP Committee to discuss any IP-sensitive issue. If a working group wishes to discuss IP issues then the working group chair shall request that the Board establish an IP Committee.

IP Committee membership is open to any member but is voluntary and working group members are free to not participate without affecting their working group good-standing.

If the IP issue involves IP from a Consortium member then that member may be excluded from any meeting of IP Committee at the discretion of the IP Committee.

A Chair pro-tem for the working group is designated by the Board when the IP Committee group is created. After a reasonable period the Committee may vote to select a Chair from any members that wishes to stand for consideration.

4. IP COMMITTEE PROCESS

IP Committee meetings are not minuted.

The IP Committee shall first determine whether the IP issues are specific and complete with clearly identified specific intellectual property together with proposed licensing terms and conditions. If the IP Committee determines that the IP in question is not specific and complete then it may recommend the Board take actions to obtain further information. Such actions may include the Consortium Secretary sending a letter to a third party and should establish a time period for that party to respond, or issuing a disclosure request to a member.

If the IP in question is deemed to be sufficiently specific and complete, the IP Committee may: a) recommend no further action is there is no substantive IP issue; b) recommend that Board enter into a licensing arrangement with a member or third party, especially if the proposed licensing terms are royalty-free and any other terms seem reasonable; c) recommend use of an alternative technology without known royalty-bearing encumbrance or recommend the identification of such a technology; d) recommend removing the IP in question from a specification, together with an analysis of the impact on the specification. Impact analysis may be conducted by the affected working group(s).

If the IP Committee decides to make a written recommendation to the Board it shall ensure that these recommendations not contain any details on any specific IP that was discussed and be prefaced with the disclaimer language in the following section.

5. IP COMMITTEE RECOMMENDATION DISCLAIMER LANGUAGE

THIS REPORT IS PROVIDED ON AN "AS IS" BASIS AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTY OF ANY KIND.

THIS REPORT IS NOT A LEGAL OPINION AND IS NOT INTENDED TO BE USED AS SUCH. IT IS CONFIDENTIAL INFORMATION OF THE CONSORTIUM AND SHALL BE PROTECTED BY ALL MEMBERS OF THE CONSORTIUM IN A MANNER CONSISTENT WITH THE PROTECTION OF SUCH MEMBERS'S OWN CONFIDENTIAL INFORMATION.

THIS REPORT IS FURNISHED SOLELY IN CONNECTION WITH THE WEB3D CONSORTIUM IP POLICY AND MAY NOT BE RELIED UPON BY ANY MEMBER OR ANY OTHER PARTY FOR ANY OTHER PURPOSE.