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HL7®

Co-chair Handbook

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FOREWORD

There are numerous responsibilities that you assume as co-chair of an HL7 Work Group (WG) or Board appointed committee. This document is provided to assist you with those responsibilities. In addition to this guide, all co-chairs should be familiar with:

* The HL7 [Bylaws](http://www.hl7.org/permalink/?Bylaws)
* The HL7 Governance and Operations Manual ([GOM](http://www.hl7.org/permalink/?GOM)) – which may be updated three time a year
* The HL7 Essential Requirements: Due Process Requirements for HL7 American National Standards ([HL7 ER](http://www.hl7.org/permalink/?EssentialRequirements)) – which may be updated three times a year
* The Co-chair Handbook; available as both a PDF and WIKI version. The WIKI version may be edited more frequently, especially with TSC updates. Co-chairs may wish to add the WIKI version to their watch lists so as to be aware of any updates.
  + PDF [Co-Chair Handbook](http://www.hl7.org/permalink/?CoChairHandbook)
  + WIKI [Co-chair Handbook](http://wiki.hl7.org/index.php?title=Co-Chair_Handbook_Information)

Suggestions for improvements/corrections to this document should be sent to the Associate Executive Director of HL7 ([Karenvan@hl7.org](mailto:Karenvan@hl7.org)) and the [Co-chairs](http://www.hl7.org/permalink/?PICLeadership) of the Process Improvement WG.

This booklet is divided into the following sections:

**Organizational Structure** – provides reference to the HL7 organizational structure.

**Administrative Responsibilities** – provides instructions for completing the administrative responsibilities of being a co-chair, such as draft agendas, chairing the meetings, taking/posting minutes, etc.

**Balloting** – many new co-chairs have questions about balloting. This section provides a flowchart of the ballot process for both normative and review documents. There are three types of review ballot: comment only, informative document, and standard for trial use (STU).

**Decision Making Practices (DMP)** – provides guidance for conducting the business of the WG you are co-chairing. This sections covers areas such as what constitutes a quorum, how to make decision on conference calls, etc.

**Robert’s Rules of Order** – provides an overview of and tips for conducting meetings using the official Robert’s Rules of Order followed by the rules themselves.

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**NOTE**: Co-chairs are encouraged to read and review this Co-chair Handbook and return comments to the Process Improvement Work Group [list server](mailto:pic@lists.hl7.org?subject=COmment%20on%20Co-chair%20Handbook) if you are a subscriber or enter a change request on the [PIC wiki](http://wiki.hl7.org/index.php?title=PIC:COCHAIRS)

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# 1 HL7 Organizational Structure

As with all growing organizations, the [HL7 organization](http://www.hl7.org/permalink/?HL7OrgChart) undergoes continuous review and updates. For an explanation of Steering Divisions (SD), WGs, and Board appointed committees please refer to the Organization and Process documentation which can be found in the [Organization and Process presentation](http://www.hl7.org/permalink/?HL7OrgAndProcessPresentation).

# 2 Administrative Responsibilities

## 2.1 Your Term as Co-chair

Co-chairs are typically elected to two-year terms and may be re-elected without limit. When a new WG is formed half the co-chairs will be elected to one-year terms and half the co-chairs will be elected to two-year terms. This ensures that the elections from that point on will be staggered so that there is continuity of leadership.

Prior to the Working Group Meeting (WGM) when your term as co-chair is due to expire, HL7 staff will notify you and the membership at large that the WG will be holding co-chair elections at the next WGM. The HL7 process for electing co-chairs ([GOM](http://www.hl7.org/permalink/?GOM) §05.02 WG Co-chair Nomination and Election) involves a 30-day nomination period that is announced to the membership. Anyone who is a current individual member or voting representative of a current organizational or Affiliate member can be nominated or can nominate themselves. HL7 Headquarters will contact all nominees to ensure that they wish to serve if elected. Each nominee will be asked to draft and submit a brief position statement. These statements are published to the membership at large, along with an announcement of the elections, which are held Monday – Wednesday during the WGM.

Should you or one of the other co-chairs need to resign before your two-year commitment expires, notify HL7 Headquarters by [email](mailto:hq@hl7.org?subject=WG%20co-chair%20resignation). HQ will attempt to seek nominees and include the open co-chair position in the next regularly scheduled election. If there is not enough time prior to the WGM, your WG may appoint an interim co-chair to serve until the next scheduled election. The interim co-chair may be a nominee in the subsequent election. HQ will then formally announce the open co-chair position as part of the normal process and elections will be held at the next WGM.

## 2.2 Engaging with the Steering Division (SD)

In addition to chairing the WG, co-chairs are expected to engage with the SD to which their WG belongs. The co-chairs that comprise each SD elect the SD co-chairs and vote on projects, proposed changes to work group missions and charters, the dissolution or addition of new work groups, etc. Co-chairs should view their SD as the first point of contact in resolving any number of issues that they or their WG face and/or would like to escalate to the Technical Steering Committee (TSC) for discussion and resolution.

Likewise, the SD co-chairs are the conduits of communication from the TSC to the WG co-chairs. The SD typically schedule regular conference calls and meet immediately following the Monday evening co-chairs’ meeting at each of the three WGM. At least one co-chair from each WG is expected to attend these calls and meetings. Upon your election as co-chair, you will automatically be subscribed to the list server of the Steering Division to which your WG belongs.

### 2.2.1 Changing Steering Division Affiliation

[GOM](http://www.hl7.org/permalink/?GOM) §09.02.03 defines the process for a WG to change its assigned SD.

## 2.3 Work Group Health Metrics

There is an ongoing effort to ensure that WGs are open, active and effective within each SD. The measures of perceived WG health include a few simple items identified to better align the WGs with HL7 expectations for effective WGs. WG Health Metrics are produced before each WGM. The following TSC wiki page includes the details on what is measured in the [WG Health Metrics](http://hl7tsc.org/wiki/index.php?title=Work_Group_Health) as well as approval requirements for the Work Group Mission and Charter Statement (M&C), Decision Making Practices (DMP), and Strength/Weakness/Opportunity/Threat (SWOT) analysis.

## 2.4 Attending the Co-chair Dinner Meeting

The co-chairs dinner/meeting is composed of the co-chairs of all WGs and committees within HL7, HL7 leadership, and staff. Additionally, any WGM attendees are allowed to observe but not actively participate in discussion or decision making unless they have been invited to participate on specific topics. While registering for the WGM, co-chairs should indicate their intent to attend this meeting. It is typically scheduled for Monday evening during each WGM. Check the meeting brochure to confirm the date/time and location of this meeting. While all co-chairs are encouraged to attend the meeting, only one co-chair per WG is required to attend. The SD should be notified if this is not possible. Each WG will designate one co-chair from amongst the co-chairs to represent their interests at the co-chairs dinner/meeting. They are the official spokesperson and voting co-chair for their WG. The co-chairs dinner/meeting is typically followed by the SD meetings. Co-chair representation from each WG is required at the SD meeting. Both the WG and SD should be notified if this is not possible. SD meeting attendance by a co-chair representative from each WG is a WG Health Metric.

## 2.5 Co-chair Division of Labor

Each WG will typically be led by at least two co-chairs. Each WG has unique projects and needs; the division of responsibilities should be approached with that in mind. For instance, for those WGs whose work involves both V2 and V3, it is advisable to divide responsibilities between the co-chairs. One successful model is to specify a V2 co-chair, a V3 co-chair and an administrative co-chair (who assumes responsibility for meeting minutes and other administrative duties). Dividing the responsibilities in this way ensures that all areas are covered without overburdening a single person. Another model, when there are four co-chairs, is to designate/elect both an experienced and new co-chair per version and split administrative duties amongst the four co-chairs.

## 2.6 Who Can Speak on Behalf of HL7

Co-chairs cannot speak on behalf of HL7 except where allowed by the policy, as provided in [GOM](http://www.hl7.org/permalink/?GOM) §07.02.02 Representing HL7.

## 2.7 Formal Relationships with Groups Outside of HL7

[Relationships with outside organizations](http://www.hl7.org/about/agreements.cfm?ref=nav) are managed by the Board of Directors. Co-chairs should refrain from inviting outside organizations to meet with a particular WG without approval from the HL7 Board of Directors.

## 2.8 Subscribing to and Participating on the HL7 List Servers

You must read emails sent from the HL7 Co-chairs List. HL7 Headquarters will subscribe you to this list when it learns of your election to a co-chair position. The list is [cochairs@lists.hl7.org](mailto:cochairs@lists.hl7.org). Additionally, co-chairs are automatically subscribed to the appropriate SD list server.

You must sign up for and participate in any list servers involving or dedicated to your WG including list servers for projects for which your WG is responsible. A [complete list of list servers](http://www.hl7.org/permalink/?Listserv) is available.

Most co-chairs should also sign up for the Modeling and Methodology (MnM) list.

## 2.9 Assuming Stewardship for the Work Group Page on the HL7 Web Site

Any updates to your WG page should be conveyed to the webmaster ([webmaster@HL7.org](mailto:webmaster@HL7.org?subject=Updates%20to%20WG%20Page)). Some guidelines for what information must be kept up-to-date are available from the monitoring done in the [WG Health Metrics](http://hl7tsc.org/wiki/index.php?title=Work_Group_Health) which includes historical metrics and description of their measures. This includes approved changes to your mission/charter statement (which requires SD approval), changes to your contact information, Decision Making Practices (DMPs), etc.

### 2.9.1 For a Newly Elected Co-chair

HL7 HQ will update the page dedicated to your WG on the HL7 web site to reflect your status as co-chair. HQ staff will not update individual WG wiki pages. Wiki page edits are the responsibility of the WG co-chairs.

### 2.9.2 For a Newly Elected Co-chair of a New WG

When the TSC approves a new WG, a task will be opened in gForge to authorize the webmaster to create all the appropriate web services that will be needed including the WG page and list server. Review the task to make sure the most [current version of your mission/charter statement](http://www.hl7.org/permalink/?MissionCharter) guidelines and your "[New Work Group Formation Template](http://www.hl7.org/permalink/?WorkGroupCreationTemplate)" has been attached to the task. Until both of these documents are available by being attached to the task, the webmaster will not be able to complete the task of making a web presence for your WG. Please allow the webmaster at least 5 business days to complete this task. A new list server will be created for your WG. The new WG list server will typically be announced via an electronic update from Headquarters that is sent to all members.

### 2.9.3 Keeping WG Mission and Charter Up-to-date

Co-chairs should ensure that their WG’s [mission and charter statement](http://www.hl7.org/permalink/?MissionCharter) is kept up-to-date. Mission and charter (M&C) statements must be reviewed periodically, at least every two years as reflected in WG Health Metrics, with or without updates made. During this review, the WG M&C should also be compared to the current [M&C template](http://www.hl7.org/permalink/?MissionCharter) to maintain consistency with the current format. Updated M & C are sent to the SD for review and approval. If no updates are made, please indicate to the TSC Project Manager that the M & C was reviewed and no changes made. The review date can then be updated on the WG's web site. Approved updated M&C should be forwarded to the TSC Project Manager for posting to the WG web site.

A WG may have informal relationships with a number of organizations. For example, a WG may have several active projects, which in turn may identify early adopters or organizations that are working with HL7 to develop a standards document. These are informal relationships that are and should be identified in project scope statements; these **should not** be listed in the Formal Relationship portion of your WG’s mission and charter statement. Occasionally a WG, such as Imaging Integration, may be formed in collaboration with another standards group or organization. These relationships are formalized with a Statement of Understanding (SOU) or Memorandum of Understanding (MOU). A [list of these formal relationships](http://www.hl7.org/about/agreements.cfm?ref=nav) is available.

Refer to §2.7 above for additional information on formal relationships with groups outside of HL7.

### 2.9.4 Keeping Work Group SWOT Statement Up-to-date

Co-chairs should ensure that their WG's SWOT (strengths, weaknesses, opportunities and threats) documentation is kept up-to-date, not to exceed three years old. The presence of a current SWOT statement is a Work Group Health Metric.

### 2.9.5 Work Group White Papers

A WG may, on occasion, decide to prepare and publish a white paper; i.e. an authoritative report or guideline informing readers in a concise manner about a complex issue and presenting the issuing body’s philosophy on the matter. A white paper is meant to help readers understand an issue, solve a problem, or make a decision.

A white paper, as with any other HL7 publication, shall be initiated via a Project Scope Statement ([PSS](http://www.hl7.org/permalink/?ProjectScopeStatement)) and follow the prescribed project approval process. The scope and intended audience of the white paper are factors that affect its processing and publication.

* A white paper purported to represent a ***Work Group(s)* position** on an issue or resolution and intended for a specific interest group may, at the WG’s discretion, be approved following WG peer review, which may be undertaken via the WG list server or wiki. A Work Group White Paper (WGWP) shall use the WGWP Template and be published on the WG web page under “Documents” and/or the WG wiki, but shall not appear in the Master Grid of Standards. Upon Work Group approval, the responsible WG co-chairs shall post the WGWP to the WG web page under <documents><white papers>. The HL7 site will include a new page under <Resources> that will display WGWP by WG. WGWP shall be subject to reaffirmation or withdrawn within five years of publication, by simple majority vote of the Sponsoring Work Group. Co-chairs shall ensure that appropriate action is taken on or before the five year anniversary.
* A white paper purported to represent an ***HL7 position*** on an issue, decision, or resolution shall be approved via an Informative Ballot and shall appear on the Master Grid of Standards. Upon Work Group approval, the responsible WG co-chairs shall submit the white paper for consideration for publication using the [Publication Request Template](http://www.hl7.org/permalink/?PublicationRequestTemplate). Informative white papers shall be subject to reaffirmation or withdrawal within five years of publication, last update or last reaffirmation following the same process as current balloted HL7 artifacts. Co-chairs shall ensure that appropriate action is taken on or before the five year anniversary.

## 2.10 File Upload/Viewing Capability

As co-chair of an HL7 WG, you are responsible for posting meeting minutes and documents related to all meetings/business of the WG that you chair. There is a file naming convention and a couple of utilities that are available to co-chairs to assist with this responsibility.

### 2.10.1 File Naming Convention

The HL7 standard file naming conventions are:

CCYY-MM-DD\_<WG Acronym>\_WGM\_Agenda

CCYY-MM-DD\_<WG Acronym>\_WGM\_Minutes

CCYY-MM-DD\_<WG Acronym>\_Call\_Agenda

CCYY-MM-DD\_<WG Acronym>\_Call\_Minutes

### 2.10.2 Wiki Page

The HL7 wiki provides the opportunity for editable pages for the WG to provide information on their activities, as well as file upload capability for documents or meeting agendas and minutes.

### 2.10.3 Co-chair Utility Page

Templates and other helpful instructions are available on the [Utilities page](http://www.hl7.org/Special/committees/tsc/tsc.cfm) of the HL7 website. The page is divided into four sections: Balloting, File Maintenance Utilities, Reports, and Robert’s Rules and Other which are briefly described below.

#### 2.10.3.1 Balloting

There are a number of useful files available on the website to assist with balloting. The following utilities are available to assist co-chairs with balloting process:

* Ballot Comment [Amalgamation Macro](http://www.hl7.org/permalink/?AmalgamationMacro) Spreadsheet: assists WG co-chairs in summarizing ballot comments, an amalgamation utility with macros to combine all submitted comment spreadsheets is provided for ballot reconciliation. The zip file contains a spreadsheet and instructions for performing this task. Refer to the balloting section later in this document for further information.
* Current [Ballot Cycle Planning Page](http://www.hl7.org/special/committees/tsc/ballotmanagement/index_cbc.cfm) This online form allows WG co-chairs to indicate their intentions for balloting items in upcoming ballot cycles, and to flag items that have completed balloting in the most recently completed ballot cycle. The deadline for completion of this form is the same as for the submission of new Project Scope Statements, that is, the Sunday following the Sunday of the week that closes a WGM.
* [Notice of Intent to Ballot](http://www.hl7.org/permalink/?NIB) (NIB) form: Headquarters requires specific information in preparation for a ballot cycle well in advance of the actual cycle start. Use this online form to submit a Notification of Intent to Ballot for an upcoming cycle. Members are then alerted that this document will be balloted in the upcoming ballot cycle and are invited to join the consensus group.
* [Special Request Documents Upload Site](http://www.hl7.org/special/committees/tsc/specialuploads/index.cfm) This site allows you to check Intent to Ballot forms or their supporting Project Scope information.

#### 2.10.3.2 File Maintenance Utilities

The following utilities are provided to help post minutes and documents to the website.

* [Upload and Catalog Document](http://www.hl7.org/special/Committees/_common/upload.cfm) - Documents and publications are uploaded using this utility, which is available only to co-chairs and staff.
* [Upload WG Meeting Minutes](http://www.hl7.org/special/Committees/_common/upload.cfm?wg_docs_subfolder_name=minutes) - Meeting minutes are uploaded directly on your WG home page where there is a file utility. Alternately, you can use this utility to post minutes. This utility, along with the upload utility on your WG home page, is available only to co-chairs and staff. Other members of your WG do not have access to this utility. Section 2.10.1 above defines the standard HL7 file naming conventions. The minutes will display in date upload order on the web page for your WG.

#### 2.10.3.3 Reports

The following reports related to balloting are provided to assist co-chairs in keeping track of the status of their open ballot projects:

* [Active Ballots with no Reconciliation Package Posted](http://www.hl7.org/special/committees/tsc/ballotmanagement/reports/NoReconPackage_by_wg.cfm) – This report lists active ballots for which a reconciliation package has not been posted. It is ordered by WG and ballot cycle.
* [PBS Metric Guidance](http://gforge.hl7.org/gf/download/docmanfileversion/9076/13967/PBS%20Metric%20Guidance%20for%20SD%20CoChairs%202016%20Final.doc) for SD Co-chairs – This document provides guidance for SD Co-chairs on using PBS (Projects, Ballots and Standards) Metrics to evaluate a WG's capacity to undertake new efforts.
* [PBS Metrics Reports](http://gforge.hl7.org/gf/project/tsc/frs/?action=FrsReleaseBrowse&frs_package_id=169) – This is an archive of PBS metric reports based on WGM meeting cycle.

#### 2.10.3.4 Robert’s Rules

The following documents relate to Robert’s Rules of Order; a guide to parliamentary procedure:

* [Robert’s Rules on-line](http://www.rulesonline.com); a link to the complete original 1915 edition of Robert’s Rules
* [Robert’s Rules](http://hl7.amg-hq.net/library/robertsrules/roberts_rules_2.zip) that apply to WG co-chairs; a link to a brief document that outlines the essentials from Robert’s Rules for WG co-chairs.
* [Robert’s Rules](http://www.robertsrules.com/); a website for co-chairs needing/wanting more in-depth knowledge of Robert’s Rules

### 2.10.4 Other

The utility page also provides links to the Co-chair Handbook (PDF). Links to templates are included in Appendix A of this document. There is also a link to the most recent Power Point presentation used at the WGM for [training new WG co-chairs](http://www.hl7.org/permalink/?NewCoChairTraining).

#### 2.10.4.1 HL7 You Tube Channel.

In an effort to expand the ability of WGs to share information beyond joint meetings during the WGM, the Process Improvement WG has suggested that WGs consider producing webinars for viewing prior to the WGM or use the [HL7 YouTube channel](https://www.youtube.com/user/HealthLevelSevenInc) to share their work with each other in advance of the WGM.

Work groups interested in this option should upload their video to YouTube and then send the link to the HL7 webmaster ([Tamara@HL7.org](mailto:Tamara@HL7.org?subject=WG%20YouTube%20Link)) so that it can be added to the HL7 You Tube Channel. The webmaster will [create a playlist](https://www.youtube.com/user/HealthLevelSevenInc/playlists) for each WGM so that information can easily be found. Headquarters will then announce the availability of the video(s) to the membership.

For tips and advice on recording videos for YouTube, please refer to the [YouTube Upload Instructions and Settings](https://support.google.com/youtube/answer/57407?hl=en&ref_topic=2888648) page, which provides information on supported file formats as well as methods to upload your video.

## 2.11 Conference Call Center

You will undoubtedly need to schedule a conference call at some time to discuss WG business. The conduct of business via conference calls between WGM is a WG Health metric. Conference calls are scheduled via the [conference call center](http://www.hl7.org/permalink/?Concalls). These may be scheduled to discuss business that was left over from the Working Group Meeting, to continue ballot reconciliation, or simply to agree on the agenda for the next meeting. Some groups schedule recurring calls every Monday at 10 am EST, for example, or every other Wednesday at 2 pm EST. The conference call number and access code(s) are included in the meeting invite.

### 2.11.1 How to Schedule Your Call

Use the on-line conference call center. The call center allows you to schedule single (one time occurrence) or recurring (every week) calls for your WG. You can also edit, cancel and delete calls using the Conference Call Center.

Normally conference calls can only be scheduled through the next two WGMs and should be rescheduled during or immediately following a WGM so they are calendared on a continuous basis. For example, if the next WGM is the first week of May, after January 13th, you can request calls through the first week of October which is one month following the last day of the September WGM.

### 2.11.2 Process at a Glance

1. Go to the [Conference Call Center](http://www.hl7.org/permalink/?Concalls)
2. Use the navigation to add the type of call you want to request either one time or recurring
3. Make sure to select the list service that will be used by this call for automated messages
4. Your call is now online and will be tied to a dial-in and access number
5. A reminder for each call will automatically be sent to the list associated with the call one to two days (1-2) days prior depending on your time zone.

### 2.11.3 Conference Call Center Features

On-screen tips are available to help while you learn the new interface for call scheduling. It is a straightforward guided system similar to ones you probably already use.

* You can “name” your call when submitting a request. This enables topic or event driven calls to be obvious on the calendar. You should not name a call if the call is just a routine call (or a recurring series of calls) for a group. This is meant as a phrase for WGs (for example the EHR publishing group), not as an agenda description. There is a place provided for agendas.
* If you have the privileges needed to schedule a call, you have an option to “secure” a call. Because everything you see on the calendar is public domain, securing a call is necessary for executive level committees. For WG calls the use of this function is discouraged.
* If there are multiple list services available for the working group you have selected for a call, you can choose the list that reminders will go to.
* Reminders for calls will automatically go out to the assigned list one to two days (1-2) days prior depending on your time zone.
* You can change basic information for an individual call, even if it occurs as part of a series of calls.
* Individual calls can be cancelled and an automatic reminder will go to the list to which that call has been assigned.

### 2.11.4 Conference Call Reminders

* You must have access privileges as a co-chair, Board Member or HQ Staff in order to request a call
* Do not “name” your call if the call is for a WG (see conference call features for information on naming a call) rather than a specific event. There is agenda space provide for these kinds of details
* Do not forward your confirmation of a scheduled call to remind people of the call which happens automatically. Additionally, there is a manual reminder option should events dictate.

### 2.11.5 Using the Conference Call Service

It is difficult, if not impossible, to accommodate everyone’s schedule for a conference call, especially with participants from around the world. If you need to know what time it is in a different country/city, it is suggested that you consult the [World Clock](http://www.hl7.org/permalink/?DateTImeConversion).

Provide a desired start time to your call participants along with your access number and participant code which you are provided.

**Dialing In**

1. Dial the access number at the designated time provided for your call
2. Enter the participant pass code or if you are a moderator for a moderated call, the moderator pass code, followed by (#)

**Moderator Features** [note that features are prefixed by the star (\*) key]

\*1 **Dial-Out to a Participant** – (If activated at account set-up) Pressing \*1 dials out to a participant. After the dial-out connection is made, pressing \*2 will join a participant or pressing \*3 will cancel the dial-out.

\*2 **Start/Stop Conference Recording** – Pressing \*2 starts the recording. Pressing \*2 again stops the recording. Replay instructions will be emailed to you.

\*3 **Unused**

\*4 **Volume Control** – Dialing \*4 increases the volume, dialing \*4 again returns volume to original level.

\*5 **Listen-Only Mode** – Dialing \*5 places all participants in listen-only mode. Only the moderator can be heard. Dialing \*5 will again will return the call to fully interactive mode.

\*6 **Mute/Unmute Self** – Dialing \*6 will mute your line. Dialing \*6 again will unmute your line.

\*7 **Secure/Unsecure Conference** – When enabled, no other participants may enter the call; press \*7 again to unsecure.

\*8 **Roll Call** (If activated at account set-up) – Pressing \*8 plays a recording of the participants on a call. With Private Roll Call, only the moderator hears the roll call. With Conference Roll Call all conferees hear the roll call.

\*0 **Operator Assistance**

**Participant Features** [note that features are prefixed by the star (\*) key]

\*6 **Mute/Unmute** Use \*6 to mute your line; enter \*6 again to unmute your line

\*0 **Operator Assistance**

## 2.12 Responsibilities at the WGM

### 2.12.1 Chair All Meetings and Conference Calls of Your WG

Co-chairs are expected to attend all WGMs. Obviously, there will be occasions when you cannot, for work or personal reasons, attend. But generally you should plan on attending all WGMs. Refer to the DMP and Robert’s Rules sections of this handbook for tips on ensuring successful meetings. Arrive in time to meet all of your commitments as co-chair of your WG and to check over your meeting room. This will certainly include attending the co-chairs’ meeting on Monday evening as well as attending the SD meeting for your WG, which is a WG Health Metric. Announce your agenda at your meeting. It is good practice to do introductions each quarter at the WGM. This helps new attendees become familiar with your work group and its members/participants, and allows new attendees to be introduced to the larger group. Before adjourning your session at the WGM, work with your group to define a preliminary agenda for the next WGM or conference call; preferably no later than Wednesday of the current WGM.

### 2.12.2 Keep Attendees Apprised of Agenda Changes

Occasionally, WGs need to change their agendas or cancel or add meetings. To ensure that all WGM attendees are kept up to date on these types of changes, co-chairs are required to make announcements regarding these types of changes in a timeframe that aligns with the group's DMP. To ensure that these types of changes are communicated to all attendees, co-chairs are required to post these announcements to their WG listserv, and on the bulletin board near the WGM registration desk. Additionally, co-chairs may also wish to make these announcements via the [HL7 mobile app](http://eventmobi.com/hl7). Since all attendees do not use the mobile app, making these types of announcements only via the mobile app is not appropriate.

### 2.12.3Appoint an Acting Co-chair as Needed

Infrequently, there may be occasions when no co-chairs from your WG will be available to attend a WGM. For these occasions, WGs may appoint an acting co-chair by bringing a formal motion to the WG in advance of the WGM. [GOM](http://www.hl7.org/permalink/?GOM) §05.04 Majority Rule allows for any formal motion (including one to appoint an acting co-chair(s)), to be brought for vote to the WG using its DMP.

Acting co-chairs shall have allthe powers, privileges, and responsibilities of an elected co-chair for a specific period of time with no expectation of election. An acting co-chair would typically be appointed to preside over the WG sessions at a WGM. The co-chair powers, duties and responsibilities revert back to the elected co-chairs at the conclusion of the WGM.

### 2.12.4 Select an Interim Co-chair

HL7 has a formal process for electing co-chairs, which include a 30-day call for nominations and elections at the WGM. Occasionally, a co-chair will resign at a point in time that occurs after the 30-day call for nominations. When this occurs, WGs may select an interim co-chair by a vote of hands during their WG meeting. The interim co-chair will serve until such time as a formal election can be announced and held. Unlike an acting chair, an interim chair has all the powers, privileges and responsibilities until the formal election is held. Many times, the interim chair anticipates being elected during the formal election period. Interim co-chairs will be added to the appropriate list servers and web pages.

### 2.12.5 Ensure that Meeting Minutes are taken

If you have a WG secretary or a co-chair who is responsible for taking minutes, verify that he or she will be in attendance. Otherwise, ask for a volunteer to provide notes or minutes in electronic form so you can focus on chairing the meeting.

Minutes can vary widely in their depth of coverage. WGs should use the [RTF minutes template](http://www.hl7.org/permalink/?MinutesTemplate) or the [Wiki minutes template](http://www.hl7.org/permalink/?WikiMinutesTemplate). These templates provide an empty file (no words) with the appropriate styles for taking meeting minutes. A style guide is included with the templates to assist co-chairs with the look/feel of meeting minutes. Also available is the [Meeting Attendee template](http://www.hl7.org/documentcenter/public/wg/tsc/WGM_Meeting_Attendance_Template.rtf) which can be posted with the minutes.

The minutes should include:

1. A list of attendees
2. Precisely worded motions that were made along with indication of how successful they were (passed unanimously, passed without objection, or the actual number of votes for, against, and abstentions). Motions and tallies related to ballot reconciliation can, instead, be recorded in the reconciliation spreadsheet, and posted as noted under item 5 below.
3. Descriptions of any associated work products (white papers, draft documents, presentations, etc.).
4. The agenda for the next meeting
5. Electronic copies of all work products of the WG including papers that were presented at the meetings, overheads, etc. Text files, Microsoft Word documents and PowerPoint documents are the three most common ways of providing information. Combine the minutes and all related documents in a single .ZIP archive and upload it to the website.

If your WG did not achieve quorum, post a document stating that fact and that no business was conducted. While there can be no binding decisions on calls that do not achieve quorum, minutes of the discussions, should there be any, should be taken and posted to the website.

Your WGM meeting minutes are expected to be posted within two weeks following the WGM. Conference call minutes should be posted as defined in the Decision Making Practices document.

**Note that meeting minutes must be accessible from the Work Group’s “Minutes” tab whether posted to the Work Group’s page on the HL7 website or to the HL7 wiki.** Work Groups posting minutes to a location other than the WG page on the HL7 website should include links under the “Minutes” tab to direct visitors to the appropriate location. Notify the webmaster if you have alternate locations for Conference Call Notices, Documents, Issues/Hot Topics, Meeting Agendas, Meeting minutes, other links, Presentations, Project Documents, or a Wiki page. The posting of minutes is a WG Health Metric

### 2.12.6 Meeting Room and AV Requirements

Instructions for requesting meeting rooms for the next WGM are distributed at the co-chairs’ dinner meeting held on Monday evening of the current WGM. Co-chairs will also receive a reminder email from the Director of Meetings with instructions and the URL for room scheduling for the next WGM.

Rooms are assigned in the following priority, based on room size and availability:

1. Work Groups
2. Board-appointed Committees
3. HL7 Special Projects Groups
4. Ancillary Groups

Request only the space you will need and indicate the numbers of attendees you expect at the WG meeting. In the event more participants attend than were planned for, the HL7 Director of Meetings can have additional chairs brought in.

Meeting space for the next WGM is requested online. Room requests for all joint WGMs planned for the next WGM, must be submitted to the HL7 Director of Meetings no later than the Friday following the WGM as specified in the section below.

#### 2.12.6.1 WGM Room Requests

[Meeting room requests](http://www.hl7.org/permalink/?MeetingRoomRequestForm) for the next WGM are submitted online no later than Friday of the week following the most recent WGM, (7 calendar days). You must include your AV requirements in the online form.

Requests for meeting rooms for joint WG meetings are made after the co-chairs of the WGs determine a day and quarter(s) which they would like to meet. The co-chairs determine which WG will be designated as the Host. One of the co-chairs of the Host WG will submit the meeting room request for the joint meeting when they submit the meeting room request for the next WGM. The non-Host WG(s) **WILL NOT** request meeting room for the quarters when they are meeting jointly and should not include any reference to it in their WGM request.

For assistance using the WGM Room Request Application, please take the opportunity to view a short [webinar](http://gforge.hl7.org/gf/project/es_wgm_rm_rqst/docman/) targeted to co-chairs demonstrating the use of the application to request conference rooms for upcoming WGM.

#### 2.12.6.2 AV Requests

When requesting AV support, consider your needs carefully and request only the items needed. The following items should be considered: LCD projector; screen; power requirements (strips); and sound system for large groups and special presentations.

### 2.12.7 Requesting Photocopies during the WGM

HL7, like many organizations, is “green” and therefore encourages the use of electronic rather than hardcopy documents. If you need photocopies during the WGM you will need to obtain them through the meeting venue business support office or contract for photocopy services with an off-site provider.

### 2.12.8 Meeting Change Notification

Notify the WGM registration desk of any changes to your scheduled WG sessions. The headquarters staff posts changes to scheduled WG sessions to a bulletin board near the registration desk and can ensure the change is posted to HL7 mobile app. This alerts interested attendees of the changes and advises the staff of changes. You may also need to announce meeting changes on your WG’s list server or via other means as defined in your WG’s DMP.

### 2.12.9 Prepare a Detailed Meeting Agenda

WGs should plan the agenda for the following WGM by Wednesday of the current WGM in order to determine room requirements and joint meetings for the following WGM. Agendas for upcoming WGM are to be posted as soon as possible to the [wiki site](http://wiki.hl7.org/index.php?title=WGM_information) so that WGM attendees can plan their participation well in advance of the meeting.

HQ will send several emails to co-chairs reminding them to post their agendas. Agendas can be updated as needed and reposted to the wiki site. Once an agenda is set you should consult with your WG prior to changing the agenda, particularly for items that might impact travel schedules. For example, some organizations have different representatives for V2 and V3 work so changing those agenda items could adversely impact travel plans.

If the agenda is changed after the WGM has started, post those changes on the bulletin board near the WGM registration desk and announce the change on the WG list service. Additionally, co-chairs may also wish to make these announcements via the [HL7 mobile app](http://eventmobi.com/hl7). Since all attendees do not use the mobile app, making these types of announcements only via the mobile app is not appropriate.

Agendas should be brief but cover the major topics including, but not limited to, votes or elections that may be coming up. The Plenary meeting (usually in September) has a general session Monday morning (Q1, Q2) with the WG sessions beginning after lunch (Q3.). Plan your agenda accordingly. An [agenda template](http://www.hl7.org/permalink/?WGMAgendaTemplate) is provided on the website along with [agenda icons](http://www.hl7.org/documentcenter/public/wg/tsc/Work%20Group%20Agenda%20Icons.zip).

### 2.12.10 WGM Checklist

A [generic checklist](http://gforge.hl7.org/gf/download/docmanfileversion/6767/9305/GenericWGMChecklist.doc), including the items discussed above, that WG co-chairs need to coordinate both before and after the WGM is available online.

## 2.13 Responsibilities Following the WGM

### 2.13.1 Submit Meeting Room Requests for the Next WGM

Within one week following the end of the most recent WGM you must submit your request for your regular meeting room for the next WGM via the [web form](http://www.hl7.org/permalink/?MeetingRoomRequestForm) announced at the TSC meeting during the most recent WGM as indicated in §2.12.6.1.

### 2.13.2 Submit WGM Meeting Minutes within Two Weeks

Submit minutes and associated work products within two (2) weeks following the end of the most recent WGM. Get the minutes from your secretary or the person who took notes for you. Review, edit and have the WG vote to approve them. Note that minutes may be approved by “general consent” when there are no corrections; the co-chair states “You have received the minutes. Are there any corrections to the minutes? Hearing none, if there are no objections the minutes are approved as posted.” Once approved, upload them directly to the web site by going to the Minutes repository for the individual WG located on the WG page. You can upload you minutes in Word, PDF or Zip file format. You are encouraged to include machine-readable diagrams in your minutes. Should you choose to post meeting minutes to the HL7 wiki a link to the location must be included in the “Minutes” tab of the WG’s web page.

Communicate with your WG members via teleconference or by e-mail; monitor and facilitate any work towards deliverables that are due before or at the next WGM.

### 2.13.3 Submit Post-WGM Survey

One of the co-chairs of each WG must complete and submit the post-WGM co-chair survey providing feedback on the WGM. This survey will be available the week of the WGM. Many WGs complete the survey as they are concluding their WGM sessions. Several emails will be distributed to the co-chairs listserv reminding co-chairs of the survey, its location, and date by which responses are due. Completion of this survey is a WG Health Metric; WGs are encouraged to complete the survey on time.

## 2.14 Work Group Dissolution or Merger

### 2.14.1 Dissolving a Work Group

[GOM](http://www.hl7.org/permalink/?GOM) §09.02.04 defines the process for Dissolution of a WG. The [WG Dissolution Template](http://www.hl7.org/permalink/?WGDissolveTemplate) referenced in the GOM is available online.

### 2.14.2 Merging Work Groups

[GOM](http://www.hl7.org/permalink/?GOM) §09.02.05 defines the process for merging two or more Work Groups.

## 2.15 Project Management

WGs are expected to follow HL7’s project management methodology as described in the Project Life Cycle for Product Development ([PLCPD](http://www.hl7.org/permalink/?PLCPD)). This includes creating project scope statements for WG projects, following the project approval process, and maintaining project status in HL7’s project management tool, Project Insight. Each WG should recruit a project facilitator when possible to assist in these tasks, either for the WG projects in total, or on a project-by-project basis.

Project Services also hosts an “open forum” on weekly calls and is available to respond to any project-related questions. The Project Services WG maintains the Project Scope Statement, Project Approval Process, PLCPD, and facilitator responsibilities and other project-related artifacts; these documents are hyperlinked below or can be located on the HL7.org website under Resources>Tools & Resources>Project Management and Tracking Tools.

### 2.15.1 Project Services WG Artifacts

* [HL7 Cover Page Template](http://www.hl7.org/Library/Committees/projectservices/HL7%20Document%20Cover%20Page%20Template%20v2010April.doc) – provides a cover page for artifacts produced by your WG (excluding ballots)
* [HL7 Ballot Guide](http://gforge.hl7.org/gf/project/psc/docman/HL7%20Ballot%20Guide) – The HL7 Ballot Guide was developed as a supplement to the HL7 Co-Chair Handbook to provide a quick reference guide to information related to each level of HL7 balloting.
* [HL7 Project Management Tool Overview](http://www.hl7.org/Library/Committees/projectservices/PMO%20Tutorial%20-%20Project%20Insight%20Overview%20-%202010%20May.ppt) – describes the Project Insight tool
* [Project Approval Process](http://www.hl7.org/permalink/?ProjectScopeStatement) – describes the steps to take a project through the approval process, which is a requirement to ballot standards. There are different approval paths for different types of projects.
* [Project Life Cycle for Product Development](http://www.hl7.org/library/Committees/projectServices/PSWG%20PLCPD%202008-08%20Release.doc) (PLCPD) – The Project Life Cycle for Product Development (PLCPD) describes the process to produce HL7 ‘products’ including standards and specifications and includes project initiative, analysis and requirements documentation, and specification design. The PLCPD, depicted as a cyclical process flow, presents the HL7 strategy for protocol specification development, enhancement, and management; however, as described in the GOM, it allows WGs flexibility to plan their strategy to produce their artifacts.
* [Project Scope Statement (PSS](http://www.hl7.org/permalink/?ProjectScopeStatement)) – The PSS is required for project approval as described in the Project Approval Process. It includes a template only version, and a version including the instructions. The PSS is typically updated annually.
* [Project Facilitator Responsibilities](http://gforge.hl7.org/gf/download/docmanfileversion/8241/12051/ProjectFacilitatorResponsibilities_2014_Final.doc) – describes responsibilities of project facilitators, and the traits desired of individuals filling the roles and the tasks expected.

### 2.15.2 Project Insight

[Project Insight](http://www.hl7.org/permalink/?ProjectInsight) is HL7’s Project Management System. Each WG has been assigned a log-in available from the WG co-chairs or the HL7 Project Management Office (PMO): [PMO@HL7.org](mailto:PMO@HL7.org).

### 2.15.3 Gforge Homebase

In addition to Project Insight, some Work Groups use [GForge Homebase](http://gforge.hl7.org/) to assist with the management of projects. The HL7 Project Homebase site is intended to support HL7 Tool Developers (Toolsmiths) and WGs in managing their projects. All of the tools available on this Homebase are designed to support the development and publication of HL7 Version 3 Messaging Standards. These tools carry a [license](http://hl7projects.hl7.nscee.edu/tc_include/hl7_eula.html) that restricts their use to activities that support the development of standards by HL7 International and the HL7 Affiliate Organizations.

### 2.15.4 Three-year Planning

Three-year planning should be conducted by each WG, and the future work identified should be listed as three-year planning project placeholders in Project Insight. By using this mechanism, visitors and members using the Project Insight Searchable Database can find reference to upcoming project in which they may be interested. As future development is identified, co-chairs can send their planning project descriptions, which do not require a full project scope statement, to the HL7 PMO office for update. The TSC has provided [Three Year Planning Guidelines](http://www.hl7.org/permalink/?3YearPlans).

## 2.16 Responsibilities for Intellectual Property

HL7 has extended Intellectual Property rights to any HL7 material (Informative, STU, or Normative) that has passed ballot. Beginning with the approval of balloted material and continuing for a period of 90-days from the date of publication access to such material shall, with the exception of that material subject o prior agreement or named in proposed or final rules, be restricted to HL7 International and Affiliate members.

This provision includes those drafts of such material representing the WG’s effort to prepare the balloted material for final review and subsequent request for publication. WG co-chairs shall ensure that such material is posted to the WG page under “members only” access until such time as Headquarters releases said material.

# 3 Balloting

Co-chairs are ultimately responsible for ensuring that any material that the WG wishes to ballot is completed as required and in a manner that is consistent with procedures upheld by the TSC following Publishing guidelines.

The following publications are very useful for new co-chairs to get a good understanding of the ballot process:

* HL7 Ballots - [Voting Made Easy](http://www.hl7.org/permalink/?VotingMadeEasy) – This document is available for new co-chairs or anyone interested in understanding the HL7 ballot process.
* [HL7 Ballot Guide](http://gforge.hl7.org/gf/project/psc/docman/HL7%20Ballot%20Guide) - Provides a quick reference to information related to each level of HL7 ballots.

## 3.1 Participating In Publishing

Each WG is encouraged to select an individual who will function as the WG publishing facilitator or editor and participate in the Publishing WG. A list of [current publishing facilitators](http://www.hl7.org/documentcenter/public/membership/Facilitators%20Summary%20List.pdf) is available. Please contact Headquarters ([HQ@HL7.org](mailto:HQ@HL7.org?subject=Change%20WG%20Publishing%20Facilatator)) if your WG changes the publishing facilitator so that we can keep this list updated. The individual selected to function as the WG editor should join the editor’s list server and contact the chairs of the [Publishing WG](http://www.hl7.org/permalink/?Publishing) for additional instructions.

## 3.2 Participating in Harmonization

Each WG is encouraged to select an individual who will represent any material proposed for sponsored or co-sponsored balloting of V3 material on the Harmonization calls. That individual should join the Harmonization list server or refer to the [Harmonization events page](http://www.hl7.org/events/harmonization/index.cfm?ref=nav) for additional instructions. Participation in Harmonization is a WG Health Metric.

## 3.3 Managing Suggested Updates and Modifications to the Standards

Keeping track of suggested enhancements and technical corrections/typographical errors was once a time consuming and often overwhelming task. To assist co-chairs with this task, HL7 developed databases that members use to upload suggested enhancements and corrections to the standards such as the [Version 2 Database](http://www.hl7.org/permalink/?V2Tracker). Additional databases for tracking changes to other standards may be created as the need arises.

Complete instructions for using the V2 tracking databases are provided on the website (also available as a link from the database page). The databases can also be exported to an Excel spreadsheet for WG preparation.

Co-chairs are encouraged to review the appropriate database(s) and/or Wiki pages regularly to ensure that they have a list of the suggested enhancements/fixes to discuss with the WG and to update the disposition of the line items that have been dealt with.

## 3.4 Quick Checklist of Co-chair Responsibilities

The current process for conducting Review Ballots is found in [GOM](http://www.hl7.org/permalink/?GOM) §13 while the process for balloting normative documents is provided in the HL7 Essential Requirements ([HL7 ER](http://www.hl7.org/permalink/?EssentialRequirements)). It is imperative that co-chairs know how to prepare for and conduct ballots. ANSI auditors select a given number of normative ballots for review every five years. The auditors are very thorough and will check to ensure that every negative balloter/commenter has been advised in writing of the status of their negative vote/comments and that each negative vote has either been withdrawn or addressed in a recirculation ballot, and that each negative balloter is informed of the appeals process.

An annual HL7 ballot schedule, based on three ballot cycles per year, is produced by Publishing. All ballot types will adhere to the ballot schedule unless granted an exception by the TSC. The ballot schedule is distributed to all co-chairs and identifies all critical path dates regarding preparation and submission of ballot material. All ballots must be approved by the TSC. A [current publishing calendar](http://www.hl7.org/special/committees/publishing/schedules.cfm) is available online.

### 3.4.1 The Ballot Desktop

HL7 uses the [Ballot Desktop](http://www.hl7.org/permalink/?BallotDesktop) to store votes, comments and reconciliation packages for each of its ballots. The Ballot Desktop enables co-chairs to view ballots related to current and past ballot cycles, send email to voters in the consensus groups related to their WG ballots, and post reconciliation spreadsheets that advise the voters of the status of negative votes. All ballot types, be they Review or Normative, are handled by the Ballot Desktop.

### 3.4.2 Review Ballots

There are three types of Review Ballot: Informative Documents ([GOM](http://www.hl7.org/permalink/?GOM) §13.01); Standards for Trial Use (STU) ([GOM](http://www.hl7.org/permalink/?GOM) §13.02); and Comment-only ([GOM](http://www.hl7.org/permalink/?GOM) §13.03). The flow involved in the review ballot process is depicted in Appendix B:

**Informative Documents** explain or support the structure of HL7 standards, or provide detailed information regarding the interpretation or implementation of an HL7 standard.

**STU** are normally issued as a precursor to a normative ballot. They allow the responsible WG to gather industry input on the completeness and viability of the implementation of a proposed standard. The review ballot allows for validation of the content of the proposed standard prior to release for trial use.

A **Comment-only** review allows the WG to gather input from a broader audience on documents in process; be they requirements documents, possible informative documents, or candidates for normative status. Comment-only ballots are also used to validate certain administrative actions such as assessing the membership’s position on the proposed withdrawal of an informative document or normative standard.

Although the TSC may approve multiple iterations, typically there is a single occurrence of a given Comment-only ballot since the next step for the document under review would be an informative, STU, or normative ballot. An informative document or STU review ballot may remain active until the content is either approved or withdrawn.

HQ notifies all current members at least 30 days prior to scheduled ballot open date of the intent to form a consensus group for Review Ballots. Consensus group signup is allowed until the day prior to the date that the ballot opens.

In the course of the ballot period all comments should be captured via the Ballot Desktop to facilitate later consideration by the WG.

There is no reconciliation of review ballot comments per se. However, WGs are expected to consider all comments with the intent of improving the quality and clarity of the content being reviewed. The results of the WG’s consideration of each comment shall be recorded on the Ballot Desktop. There is no requirement to resolve negative comments.

Substantive change as a result of a review ballot does not cause an arbitrary need to conduct another review ballot. Such changes are the result of identifying obvious shortcomings in the ballot content which is the intent of a review ballot. Having incorporated the change, the WG may move forward with the informative document or STU. However, a WG always has the option to conduct another review if felt necessary.

Quorum and approval levels differ by review ballot type. Please consult the [GOM](http://www.hl7.org/permalink/?GOM) for specifics.

Where the evaluation and comment period of a STU results in a need for substantive changes to the proposed standard, the resulting normative ballot material may embody such changes or a revised STU may be released for further evaluation and trial use without recourse to another review ballot.

### 3.4.3 Normative Ballots

A normative ballot is used to validate and approve proposed American National Standards (ANS). The normative process is driven by American National Standards Institute (ANSI) requirements as implemented by the HL7 Essential Requirements: Due process requirements for HL7 American National Standards ([HL7 ER](http://www.hl7.org/permalink/?Essentialrequirements)). The flow involved in the normative ballot process is depicted in Appendix C:

HQ notifies all current members at least 30 days prior to scheduled ballot open date of the intent to form a consensus group for normative ballots. Consensus group signup is allowed until the day prior to the date that the ballot opens.

Co-chairs should monitor ballot responses as they are submitted (co-chairs receive copies of all returned ballots related to their WG) and notify the consensus group, especially those who returned negative ballots, when and where their comments will be discussed; e.g., Monday-Wednesday at the next WGM including the location and date.

Prepare a preliminary reconciliation package that is distributed at the meeting, via e-mail or posted to the Ballot Desktop that lists each negative vote/comment and a motion for resolving it. HL7 provides an [Amalgamation Macro](http://www.hl7.org/permalink/?AmalgamationMacro) to aide this process. Hold open discussions to determine the disposition (by WG vote) on all negative comments received in response to the ballot. This may be accomplished at the WGM, via a conference call, etc., but should be consistent with what was announced above. Record the motions and subsequent votes in the disposition section of the Ballot Comment Spreadsheet and include as a zip file with the meeting minutes. The different dispositions are:

* Persuasive: A majority of the WG agrees without objection that the position expressed by the negative response is persuasive; the changes recommended by the comment shall be incorporated as reasonable and necessary revisions.
* Not Persuasive: A majority of the WG agrees that the comment deals with process or issues not under the control of the WG, or suggests the use of alternate methodologies or solutions which have no advantage over those used, or questions the validity of the approach or the expertise of the developers. Comments declared not persuasive but not withdrawn are reported as unresolved negatives.
* Not Related: A majority of the WG agrees that the comment deals with issues or functions beyond the scope of or is clearly not related to the ballot subject matter. Comments declared not related are reported as “negative without comment” and don’t impact the outcome of the ballot.

Once the WG has voted on the dispositions, send an e-mail through the Ballot Desktop to each negative submitter advising them of the status of their negative vote/comment. HL7 headquarters must be able to produce this communication for the ANSI auditor. Using the Ballot Desktop ensures that this requirement is fulfilled and that the communications are captured in a central location.

Follow up with each negative voter to ensure that he/she has been informed of the disposition of their negative vote and given an opportunity to either withdraw the negative vote (which becomes a positive vote) or affirm the negative. To withdraw a negative vote, the voter must advise the co-chair and the appropriate HL7 staff in writing, which is typically done through the Ballot Desktop.

Following reconciliation, determine if the document passed: a majority of the consensus group returned a ballot representative of a majority of HL7 members enrolled and at least 75% of combined affirmative/negative votes are affirmative. Unresolved negative comments do not preclude a document from being submitted to ANSI; however, submission with unresolved negative comments must be preceded by a recirculation ballot to allow consideration of such comments by the entire consensus group.

Make any updates to the document and notify HQ of your intent to re-ballot, if substantive changes merit such, or move forward to ANSI for approval.

For a subsequent normative ballot of the same content, the consensus group shall include those who responded to the previous ballot; whether affirmative, negative, or abstain. Although the TSC may re-open the consensus group to additional registrants, typically the consensus group for subsequent normative ballots of the same content is not open to additional signup.

In the case of a subsequent normative ballot of the same content, a negative vote or comment that has been previously considered and resolved and is resubmitted does not require further consideration.

## 3.5 Reconciliation Activities

Co-chairs are responsible for tracking, completing and posting Ballot reconciliation items using the Ballot Desktop. It is very important that ALL reconciliation activities be recorded on the Ballot Desktop. If at any time you need support in correctly using the Ballot Desktop or in troubleshooting problems you might have, please contact the Technical Publications Manager ([ballotmanager@HL7.org](mailto:ballotmanager@HL7.org)) and Webmaster ([webmaster@Hl7.org](mailto:webmaster@Hl7.org)) for help. For specific instructions on completing the Excel-based reconciliation spreadsheets, please refer to the instructions in the reconciliation spreadsheet template. In general, co-chairs are responsible for:

* Consolidating all comment spreadsheets submitted on their ballot document during the ballot period before the WGM using the [Amalgamation Macro](http://www.hl7.org/permalink/?AmalgamationMacro)
* Conducting reconciliations during WGMs and conference calls
* Recording and tracking the WG reconciliation decisions and actions in the consolidated spreadsheet
* Posting the completed reconciliation package to the Ballot Desktop
* Notifying all negative voters of the status of their negative votes using the Ballot Desktop

It is recommended that co-chairs post an amalgamated spreadsheet before beginning reconciliation so all participants have access. As reconciliation activity proceeds, post incremental updated spreadsheets using version numbering (V1, V2, etc.) or including the “effective date” in the title. These posting should be to the Ballot Desktop; if not, you must ensure that all participants are aware of their location. When reconciliation is completed, it is recommended that the term “final” be included in the title of the spreadsheet.

Completion of reconciliation activities is required for all Normative Ballots to meet ANSI requirements. Co-chairs may find the [reconciliation how-to document](http://wiki.hl7.org/index.php?title=Reconciliation_HowTo) helpful when undertaking reconciliation activities.

### 3.5.1 Consolidating Comment Spreadsheets

At the close of the ballot period a co-chair should log in to the [Ballot Desktop](http://www.hl7.org/permalink/?BallotDesktop) and consolidate all the comments received from voters during the ballot period. These actions should be completed prior to the upcoming WGM so that WG members have the consolidated comments spreadsheet available for review during your sessions at the WGM.

1. From the Ballot Desktop, click on the Tally tab. When the screen refreshes, you will see a listing of all the consensus groups with each title linking to an individual Tally page.
2. Click the link for your WG’s ballot document. This will load the Tally page for your ballot document. In the left-hand menu section titled "Participation Summary Download" are links to help you download summary information and create a consolidated comment spreadsheet.
3. To begin, click on the Export this Ballot Participation Summary Information link. You will be prompted to open or save a "CSV" file. Click the Save button and save the file to a convenient location, such as an appropriately-named folder on your desktop. (More information on saving and formatting this "CSV" file as an Excel spreadsheet can be found from the Tally page by clicking on the Instructions for Using the Exported data link.)
4. You should also download the Participant Summary Download Macro spreadsheet from the Tally page to the same location you saved the "CSV" file. When you open this spreadsheet it will prompt you to select the "CSV" file. Macros in the spreadsheet will then format it and allow you to save it as an Excel file.
5. Continue to download all the comment spreadsheets submitted by voters to the same download directory. The Tally page will display a link to each of these files in the "Upld?" column.
6. Once you have collected all the Comment spreadsheets, you will need to consolidate them into a single spreadsheet. This is done with the [Ballot Amalgamation Macro Spreadsheet](http://www.hl7.org/permalink/?AmalgamationMacro). A link to this spreadsheet is available from the main Tally page that lists all the consensus groups. Full directions on performing the consolidation are included in the spreadsheet. Please note that not all voters will provide their comments in a Comment spreadsheet; some may use a Word file or provide comments with their votes. You will need to manually add such comments to your consolidated comment spreadsheet.
7. Use of the Ballot Amalgamation Macro Spreadsheet may result in links from the consolidated spreadsheet back to the original spreadsheets. These links are maintained by Excel and may produce annoying notices when opening the spreadsheet regards updating the document from the linked document. If Excel is set to update those links automatically there is the possibility of locking up Excel while it attempts to do the updates. To break the links to the other spreadsheets, open the consolidated spreadsheet and do the following: [IMPORTANT: When a link to a source is broken all formulas that use the source are converted to their current value. For example: the link =SUM([Budget.xls]Annual!C10:C25) would be converted to =45. This action cannot be undone; it is recommended that you save a version of the spreadsheet before you start. NOTE: these links are different from hyperlinks embedded in a cell.]
   1. On the Edit menu, clink Links
   2. In the Source list, click the link you want to break OR to select multiple linked objects hold down CTRL and click each appropriate link OR to select all links press CTRL+A
   3. Click Break Link

### 3.5.2 Tracking Reconciliation Activities in the Reconciliation Spreadsheet

During your WG sessions or calls, use the consolidated comments spreadsheet to record decisions for each of the comments listed. Information should be as complete as possible because the reconciliation spreadsheets provide the primary means of recording WG decisions, of communicating those decisions and the supporting rationale to negative voters, and of tracking any activities by individuals to resolve those negative comments.

Individual columns in the spreadsheet are provided to, among other things, allow WGs to record their responses to comments, to provide a rationale for a decision, to assign a person responsible for completing a reconciliation action, and to record the completion of that action. Please refer to the instructions in the comment spreadsheet for more help on completing the reconciliation spreadsheets correctly and completely filling in column information.

When your reconciliation actions are complete, compress the reconciliation spreadsheet into a zip file along with any other documentation needed to support the reconciliation actions and decisions. This zip file and its contents are now referred to as the Reconciliation Package and will be posted on the ballot document Tally page on the Ballot Desktop.

### 3.5.3 Posting a Completed Reconciliation Package

Once a WG has completed all the necessary reconciliation actions to address all negative comments, the completed spreadsheet needs to be uploaded to the Ballot Desktop.

1. From the Ballot Desktop, click on the Tally tab. When the screen refreshes, you will see a listing of all the consensus groups with each title linking to an individual Tally page.
2. Click the link for your ballot document to view the Tally page for your consensus group.
3. In the left-hand menu, expand the Resolving Negatives header and click on the Upload the Reconciliation Package for the Document Pool link.
4. The Upload page includes a button to allow you to browse to and select your completed Reconciliation Package.
5. Once you have selected the appropriate file click the Upload this Reconciliation Package button. Please note that the web site system will automatically rename your file based on file naming conventions for the ballot pool and the current ballot cycle. You will receive notification when the file upload is complete.

### 3.5.4 Notifying Negative Voters of the Status of Negative Comments

Once a completed Reconciliation Package has been posted to the Ballot Desktop, co-chairs are responsible for notifying submitters of the status of their negative comments. The Tally page on the Ballot Desktop provides functionality to help you complete these actions.

1. From the Ballot Desktop, click on the Tally tab. When the screen refreshes, you will see a listing of all the consensus groups with each title linking to an individual Tally page.
2. Click the link for your ballot document to view the Tally page for your document pool.
3. In the left-hand menu, expand the Resolving Negatives header and click on the Request Withdrawal by Emailing All Negative Voters link. This page allows you to email all or select negative voters in the consensus group. Please note that you either need to select the Send to All Names checkbox or check individual names. If you don't check any box, the message has no recipients.   
   This page also allows you to customize the notification email and to include a link to the reconciliation package in the email. Co-chairs can use this page to send out several notification emails at different points in the process of completing a ballot. Such notification might include an initial notification that a reconciliation package is available, follow-up notices if the information in a reconciliation package changes, or requests for additional information from voters who fail to withdraw their negatives.

The completion and posting of reconciliation actions and the recording of reconciliation activities is a very important part of a co-chair's responsibilities and helps us to comply with the requirements of an ANSI-accredited standards development organization.

## 3.6 Escalating and Resolving Requests to Withdraw Negative Votes

As noted above, normative documents can progress to ANSI as long as 75% of the affirmative and negative votes cast on the document are affirmative. However, unresolved negative votes must be subject to a re-circulation ballot, which presents the members of the consensus group an opportunity to change their vote if desired. To request a recirculation ballot, complete the [Recirculation Request Template](http://www.hl7.org/documentcenter/public/procedures/HL7_Recirculation_Request_Template.doc) and send it to both the [Director of Technical Publications and the Associate Executive Director](mailto:ballotmanager@hl7.org;%20karenvan@hl7.org?subject=Recircular%20Ballot%20Request). If the recirculation ballot concludes with at least 75% affirmative votes, the document can be submitted to ANSI for approval.

Many times, negative voters do not respond to repeated requests to withdraw negative votes or engage with the committee on resolving negative votes. The following steps are recommended to keep the ballot process moving forward:

* Provide each negative voter with two (2) requests, sent through the Ballot Desktop, to withdraw their negative votes, providing a week or two for a response.
* If the negative voter fails to respond to those requests, call the HL7 Associate Executive Director (734-677-7777 x104), who will phone the key contact at the appropriate organization and ask the key member to resolve the issue.
* If the key member fails to respond within a week or two, co-chairs should reassess how many affirmative votes have been received. If less than 75% of the combined affirmative and negative votes are affirmative, the document may need to be re-balloted. If at least 75% of the combined affirmative and negative votes are affirmative, the co-chair shall advise the Director of Technical Publications that a recirculation ballot is necessary.
* If at least 75% of the combined affirmative and negative votes returned for the recirculation ballot are affirmative, the document will be submitted to ANSI for approval. If the document failed to pass the recirculation ballot with at least 75% affirmative vote, it is a candidate for re-ballot or withdrawal.

## 3.7 Substantive Change

What is a substantive change? According to ANSI a Substantive Change is one that directly and materially affects the use of the standard. The ANSI definition includes changes that would break solutions that were implemented using the specification as it existed before the change. As an ANSI-accredited Standards Development Organization (SDO), HL7 must be guided by the ANSI definition provided in *ANSI Essential Requirements* and reiterated in the [HL7 ER](http://www.hl7.org/permalink/?Essentialrequirements).

According to ANSI a Substantive Change to a proposed American National Standard is one that directly and materially affects the use of the standard. Examples of Substantive Changes are:

* Changing “shall” to “should” or “should” to “shall”;
* Addition, deletion or revision of requirements, regardless of the number of the changes.
* Addition of mandatory compliance with referenced standards

The Architectural Review Board (ARB) describes substantive changes as those changes which modify the standard by adding or removing capabilities. Any change that damages the integrity of semantics as well as the validity of syntax is a substantive change. A change that materially affects the contents of exchanged messages is substantive. For example, the addition of a new trigger event is substantive; adding fields to an existing message type is substantive. On the other hand, the correction of a typographical error, or the addition of an example message is not considered substantive.

The ARB considers a change to the standard to be substantive if an interface would fail when a message composed with the change is built, sent or received. This is similar to, but more expansive than, the definition of backwards compatibility. A change that creates a backwards compatibility problem is substantive by definition.

### 3.7.1 Role of Substantive Change in Balloting

The goals of the HL7 ballot process are to:

* Meet its members' needs for specifications that are responsive to conditions. Timeliness is important.
* Develop specifications that permit any interested HL7 member to participate and make their views known.
* Encourage early implementation of specifications to ensure that final specifications are used and useful.
* Publish high quality specifications that are accurate, clear, coherent, and consistent across the full set of specifications.
* Adhere to *ANSI Essential Requirements* that are focused on ensuring that a consensus is achieved within the entire industry without any "special interests" skewing the results.
* Abide by the HL7 Bylaws, Essential Requirements (HL7 ER) and Governance and Operations Manual (GOM) to achieve these goals.

The definition of "substantive" changes must be interpreted within this context.

In a perfect world, every specification submitted for ballot would be complete, coherent, clearly expressed, consistent with all related specifications and delivered "just in time" for its intended use. Normative ballot reviewers would represent the full spectrum of affected parties and would vote in the affirmative with the only comments being small suggestions to add "polish" before publication. Additionally, many people would implement the specifications and actively provide feedback to continue to extend and enhance the specifications.

We realize that we do not live in a perfect world. Each of us juggles many objectives. The tradeoffs are tough and it is the Architecture Review Board's responsibility to provide guidance to the WGs so that the overall set of Version 3 specifications approaches this ideal. The ARB has been approached by WGs for interpretation when they cannot clearly delineate changes as either "substantive" or "non-substantive". The 2.x concept of substantive change is based on the premise that changes that would "break" solutions implemented using the specifications are substantive. The ARB will apply this principle to Version 3.

Since the goal of Version 3 Standards is semantic interoperability, the overriding principle for determining if a change is substantive will be whether the change damages the integrity of semantics or the validity of syntax. A primary Version 3 principle is the use of constraints as the delineation of correctness. The Version 3 specifications are model driven, so changes to any of the structural properties that would alter the constraints contained in the source models would be substantive changes.

### 3.7.2 Effect of Substantive Change

HL7 ER §02.09.04 stipulates that substantive change introduced as a result of comments received on a normative ballot will result in a subsequent normative ballot of the same content.

### 3.7.3 The Importance of Substantive Change

Why is the distinction between substantive and non-substantive important? ANSI rules and HL7 process require that all substantive changes to normative material be balloted.

The identification and designation of changes as substantive or non-substantive plays an important role in the balloting process. When a WG creates a ballot package, the package should include a list of all changes from the previous version of the document. This list should indicate which changes are considered to be substantive, and which are not. When a chapter or other section of a standard goes through successive ballots, this list should indicate changes from the prior ballot, not from the beginning of the balloting process.

### 3.7.4 V2 Substantive Changes

The following constitute substantive V2 changes:

* Addition or deletion of a trigger event - This implies the definition of an abstract message corresponding to the trigger event.
* Addition or deletion of an abstract message or change to an existing one - This includes addition or deletion of segments or segment groups, changes in segment or segment group repetition and changes to segment or segment group optionality.
* Addition of a segment - This implies the use of the segment in an abstract message.
* Addition of a data element within a segment.
* Changes to an existing data element - This includes changes to element repetition or optionality. It also includes changing the code table assigned to a coded value. When an element is used differently in different segments, e.g. different lengths, this can be addressed as a non-substantive technical correction if the segments are newly conceived. However, if this is a situation of long standing, fixing it should be considered as substantive. In this case, the proper tack is to choose a standard length, deprecate the element uses that do not fit, and add the needed elements to the end of affected segments.
* Addition of a data type - This implies its assignment to a data element.
* Change to an existing data type - This includes addition or deletion of components, and changes to component order, optionality, or repetition. It includes changes to the data type assigned to a component, and/or changes in the maximum length of a component.
* Changes to an HL7 defined table - This implies that the code table is assigned to at least one data element. Substantive changes include the addition or subtraction of code values.
* Change to a definition that changes how a receiving system has to manage the received message.
* Changes to chapter text that change the rules for when a trigger event is used.

### 3.7.5 V2 Non-Substantive Changes

The following constitute non-substantive V2 changes:

* Changes to the codes in user defined and externally defined tables.
* Changes to definitions (segment, element, trigger event, data type, etc.) that clarify the WG’s intent rather than changing subsequent processing.
* Technical corrections that implement the original intent of the WG. For example, if a WG meant to add an attribute to one segment, and it was mistakenly added to another; this can be corrected without an additional ballot.
* Changes to the HL7 assigned ID for an element when it is realized that what appears to be a new element is an existing one.

### 3.7.6 V3 Substantive Changes

The objective is the same as for V2 – anyone materially affected by a change in the normative specification should have an opportunity to make their opinion of the change known, and have that opinion taken into consideration, before a change is adopted.

Those potentially materially affected are not just senders and receivers of messages – but consumers of ANY HL7 specification. Operationally, if implementing against the specification as previously communicated does not accomplish the same objective as implementing against the current specification, the introduced change is substantive.

Substantive differs between Version 2 and Version 3 in the increased emphasis on the “semantics” of the interaction, not just the syntax. Therefore, if any system participating in an interoperable function cannot meet its contractual obligations, the introduced change is substantive.

Because V3 has more artifacts and is more explicit, there is more probability that ANY introduced change will be substantive, unless it was just a change to definition to improve clarity. The following are examples of substantive changes:

* Changing constraints on data.
* Changing the properties of an existing data type - For example, Add a property to AD to indicate the parts are unordered.
* Changing the value set assigned to a structural table - For example, Use of an HL7 defined vocabulary instead of xml:lang for coding languages. This is non-controversial, but substantive.
* Changing definitions that change receiving system behavior.

### 3.7.7 V3 Non-Substantive Changes

Changes to descriptive text that clarify, but do not change meaning, are considered non-substantive:

* Typographical corrections.
* Formatting corrections.
* Changes made to graphics.

### 3.7.8 V3 Elements and Substantive Change

This section lists elements of a Version 3 Standard with rules and examples of substantive and non-substantive changes. See the Version 3 Guide in the HL7 Ballot document for more information on each element. As a general rule, changes that are made to non-normative elements are not substantive. Changes to normative elements may be substantive.

***Storyboards***

A storyboard consists of a short description of its purpose and an interaction diagram that shows the progression of interactions between application roles. A storyboard narrative is a description of a real-life event that provides the necessary context for the development of a specific interaction described in the storyboard. The process of storyboarding lays the foundation for describing HL7 messages and their content. Storyboards are not normative. Therefore, changes to Storyboards are not substantive.

***Application Roles***

Application Roles represent a set of communication responsibilities that might be implemented by an application. They describe system components or sub-components that send or receive interactions. Application Roles are not normative. Therefore, changes to Application Roles are not substantive.

***Trigger Events***

A Trigger Event is an explicit set of conditions that initiate the transfer of information between system components (application roles). Trigger Events are normative. Changes to normative elements may be substantive.

Here are some examples:

* Adding or deleting a Trigger Event is a substantive change.
* Changing descriptive text that alters Trigger Event rules is a substantive change.

***Domain Message Information Models***

The Domain Message Information Model (D-MIM) is a subset of the Reference Information Model (RIM) that includes a fully expanded set of class clones, attributes and relationships that are used to create messages for a particular domain. D-MIMs are not Normative. Therefore, changes to D-MIMs are not substantive. However, a change to an R-MIM not supported in the D-MIM is Substantive, because messages will fail.

***Common Message Element Types***

Common Message Element Types (CMETs) are a work product produced by a WG for expressing a common, useful and reusable concept. They are generally "consumed", or used by both the producing WG and other WGs. CMETs are Normative. Changes to normative elements may be substantive. A CMET is a special kind of R-MIM. The same rules that apply to R-MIMs apply to CMETs. See below for further information.

***Refined Message Information Models***

Each Refined Message Information Model (R-MIM) is a subset of the D-MIM and contains only those classes, attributes and associations required to compose the set of messages derived from the Hierarchical Message Descriptions (HMD) that originate from the R-MIM root class. R-MIMs are normative. Changes to normative elements may be substantive. A change to an R-MIM not supported in the D-MIM is substantive, because messages will fail.

Here are some examples:

* Addition/deletion/change of an R-MIM is a substantive change.
* Changes to an R-MIM that constitute addition or removal of a class clone, association to a class clone, attributes of a class clone are substantive.
* Changes to the characteristics of an attribute within an RMIM, HMD or Message Type are substantive. For example, InM made changes that remove three Message Types and replaces them with one. The three Message Types were very similar and were combined into a single message that has all the features of the previous three. This is a Substantive change.
* A change to an R-MIM not supported in the D-MIM will cause messages to fail, and is, therefore, substantive.
* A change to an item's cardinality – from mandatory to required is non-substantive.
* Correcting a change of destination CMET. For example, the framers of the ballot had intended to point to a particular CMET, but there was an incorrect entry in the cmetinfo.txt file which pointed to a different CMET. Correcting the reference is an example of a technical correction and is non-substantive.

***Hierarchical Message Descriptions and Message Types***

Hierarchical Message Descriptions (HMD) and their resulting Message Types define the message payload. An HMD is a tabular representation of the sequence of elements (i.e., classes, attributes and associations) represented in an R-MIM that define the message without reference to the implementation technology. The HMD defines a single base message structure - the "common" message type. A Message Type represents a unique set of constraints applied against the common message. HMDs and Message Types are Normative. Changes to normative elements may be substantive.

Here are some examples:

* Adding or Deleting Message Types is a substantive change.
* Changing constraints is a substantive change.
* Changing the properties of an existing data type. For example, Add a property to indicate the parts are unordered is a substantive change.
* Changing the value set assigned to a structural table is a substantive change. For example, the use of an HL7 defined vocabulary instead of xml:lang for coding languages is non-controversial, but is substantive.

***Interactions***

An Interaction is a unique one-way transfer of information consisting of:

* Trigger Event
* Transmission Wrapper
* Control Act Wrapper
* Message Type
* Sending and receiving Roles

Interactions are normative. Changes to normative elements may be substantive.

The same rules that apply to the components of an Interaction (i.e., Trigger Events, Message Types, etc.) apply to the Interaction. Therefore, a substantive change to a Message Type is also a substantive change to all Interactions that use that Message Type.

***Message Wrappers and Infrastructure***

HL7 V3 provides a substantial level of functionality in the provision of envelopes to support the transport of HL7 messages from sender to receiver. HL7 calls these wrappers. Inside the wrapper is Domain Content. Wrappers are defined in the same way as message content; by defining object classes and relationships. These specifications can then be used to generate an XML schema, or other ITS-defined syntax to go on the wire.

The HL7 Infrastructure addresses the following aspects of the communications environment that is considered common to all HL7 Version 3 messaging implementations:

* A specification for the composite HL7 Version 3 message.
* A protocol for reliable message delivery.
* Generic "Communication Roles" that support the modes of HL7 messaging.
* Message control events that describe a framework for generic HL7 messaging.

Version 3 Message Wrappers and Infrastructure are normative. Changes to normative elements may be substantive.

For example: change cardinality of Message to Receiver from 0..\* to 1..\*. This was already mandatory with no default so changing the minimum cardinality from 0 to 1 was a technical correction and is non-substantive.

***Examples***

Examples are not normative. Therefore, changes to Examples are not substantive.

***Vocabulary***

The HL7-defined vocabulary domain tables are stored in the HL7 repository from which a number of views have been extracted to produce the HL7 Vocabulary Domain Listings for the [HL7 Reference Information Model](http://www.hl7.org/permalink/?RIM) (RIM). The HL7 Vocabulary is normative. Changes to normative elements may be substantive.

#### 3.7.8.1 Definitions

**Backwards Compatibility**: A change that would create a backward compatibility problem is a substantive change. For backwards compatibility, a message recipient is expected to process a new message and ignore added material. If there is new material that needs to be parsed in order to process the message given its new definition, the change is substantive.

Some general rules for a Backwards Compatibility are:

* From the V3 perspective, the focus is on message types. As long as there is a set of message types that do what was done before, the contents of a ballot are backwards compatible.
* Neither attributes nor associations can be removed from a message type.
* Association cardinality cannot be tightened.
* You can change attribute conformance from Mandatory to Required, and from Required to Optional, but not the reverse.
* You cannot remove values from the HL7 defined value sets for structural codes. This includes all attributes with CS data types.
* If a particular coding system is associated with a domain within the ballot, it may not be removed.
* If a particular value set is associated with a domain within a ballot, the value set reference may not be removed, nor may any code be removed from the value set.
* No interaction may be removed that existed in the prior ballot. This precludes removal or redefinition of a trigger event.
* Receiver responsibilities may not be removed from interactions.

**Non-substantive**: A change is considered to be non-substantive if it would not cause an interface to fail when a message was sent or received. All technical corrections are non-substantive changes. Changes made to non-Normative material are not substantive.

**Substantive**: Substantive changes modify the standard by adding or removing capabilities. A change is considered to be substantive if it would cause an interface to fail when a message was sent or received. This is similar to, but more expansive than, the definition of backwards compatibility. A change that creates a backwards compatibility problem is substantive by definition.

### 3.7.9 Technical Corrections

A technical correction is a type of non-substantive change. A technical correction is a non-controversial change that alters a document so that it says what the WG intended to say. Technical corrections typically involve correcting changes to normative content that were not made, were incorrectly made, or were inconsistently made during the editing process.

When there is doubt, a WG may ask the TSC to rule whether a change is a technical correction. In this case, the TSC will ask for documentation that the WG intended to make the change and evidence that the change is non-controversial, such as:

* A reconciliation package or meeting minutes that document the WG’s intent to make a change.
* Meeting minutes that document a discussion of the change and record a unanimous vote to make the correction.

Here are some examples of technical corrections:

* The CDA document refers and links to RFC 2557 "MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)" If the RFC moves, the hyperlink would break. Fixing a broken hyperlink is a technical correction and a non-substantive change.
* The RMIM Design tool never correctly named the associations to or from a role clone when that clone is a CMET. The tool was corrected. A process was run on existing material to correct the naming error. This is a technical correction and a non-substantive change.
* In ebXML, the WG neglected to add the type attribute used in the OASIS original. The type element could be ISO OID, DUNS Number, etc. Making this change, which makes ebXML consistent with the underlying OASIS standard, is a technical correction and a non-substantive change.

### 3.7.10 Managing Substantive Change

The TSC will play the following role in the management of substantive change:

* Define the criteria for substantive changes.
* Review, upon request, proposed changes to determine whether they are substantive.
* Act, as a general matter, in the role of an auditor. It is important to recognize that the TSC may need to discuss changes with the WG, because the application of the rules needs to consider the context.

## 3.8 Submitting ANSI-approved HL7 Standards for ISO Approval

Once an HL7 standard is ANSI-approved or is published as a Standard for Trial Use (STU), it can be submitted for approval by the International Organization for Standardization (ISO) under a special agreement. Please review [information and complete instructions](http://www.hl7.org/participate/isojic.cfm) to follow this process.

# 4 Decision Making Practices and Robert’s Rules

## 4.1 WG Decision Making Practices

The default and generic HL7 [Decision Making Practices](http://hl7.org/permalink/?DMP) (DMP) are available for download.

* The Default DMP applies to all WG that have not modified and adopted a DMP specific to their WG. Use the Default DMP if your WG DMP does not need any customization.
* The Generic DMP is intended for WGs with open or large membership. Use the Generic DMP as your template for a customized WG DMP; for example, a need to alter quorum requirements.

Each WG should review the DMP documents and either adopt the default or make those changes to the generic DMP that are appropriate for their particular processes. The WG should then vote to adopt the edited document as their DMP. Once adopted, whether generic of customized, by the WG the DMP should be sent to the co-chairs of the [Process Improvement WG](http://www.hl7.org/permalink/?PICLeadership) and posted to the WG web page under Documents and Presentations.

A copy of the WGs DMP should also be sent to [HQ](mailto:anne@hl7.org?subject=Current%20%3cWG%20name%20or%20acronym%3e%20DMP) for posting on the “Work Group Specific Decision Making Practices” HL7 web site. That way, as new people come into the organization, they can familiarize themselves with the rules and processes that each particular WG uses to make decisions.

The generic DMP contains sections on many areas that affect the operation of WGs, including:

* Work Group meetings
* Venues of Notification
* Meeting Notifications and Agendas
* Decisions publication
* Quorum requirements
* Voting
* Proxy

The Default and Generic DMP are updated every few years. Please check the most recent version of the DMP for up-to-date information on the areas noted above.

## 4.2 Robert’s Rules of Order

The WG shall rely upon [Roberts Rules of Order](http://www.hl7.org/permalink/?RobertsRules) in the event that formal guidance is needed or requested.

The WG intends to ensure the effective and active engagement of all participants. To ensure fair and just participation, the WG shall follow its documented DMP, falling-back to Roberts Rules of Order in the event of a question or concern. Since Robert’s Rules of Order provides formality for addressing almost all matters of process, this provides a “backup mechanism” of formality in the event that it is required.

It is the responsibility of the presiding chair to guide the WG to an efficient and effective outcome. The WG shall follow, in this order of precedence, the WG DMP (which cannot conflict with the Bylaws, GOM, or HL7 ER), the GOM, the Bylaws, the HL7 ER, and Roberts Rules of Order. WG-established DMP can refine HL7 processes so long as they remain in accordance with the basic tenets of the Bylaws, GOM, and HL7 ER.

In the event that an issue arises where formality is required and no other guidance exists, Robert’s Rules of Order shall take precedence. This provides a “common denominator” to keep in check the power of the presiding chair and to confirm the rights of all WG participants and members.

# Appendix A: Links to Frequently Used Templates, Forms, Documents, and Other Information of Use to Co-chairs

There are a number of resources on the website to assist co-chairs. Following is a partial list.

| **Resource** | **Permalink/URL and Description** |
| --- | --- |
| Ballot Amalgamation Macro Spreadsheet | <http://www.hl7.org/permalink/?AmalgamationMacro>  To assist WG co-chairs in summarizing ballot comments, an amalgamation utility with macros to combine all submitted comment spreadsheets is provided for ballot reconciliation. This zip file contains a spreadsheet and instructions for performing this task. |
| Ballot Desktop | <http://www.hl7.org/permalink/?BallotDesktop>  Use to manage the HL7 ballot process. Co-chairs can see who voted, view comments submitted, and communicate with voters in the consensus groups related to their WG. Reconciliation packages are posted to this site and co-chairs communicate with negative voters via this site. |
| Ballot: HL7 Ballot Guide | <http://gforge.hl7.org/gf/project/psc/docman/HL7%20Ballot%20Guide>  Quick reference to information related to each level of HL7 balloting. |
| Ballot: Notice of Intent to Ballot | <http://www.hl7.org/permalink/?NIB>  Used by WG co-chairs to officially request that a proposed standard or item be included in an upcoming ballot cycle. |
| Ballots – Voting Made Easy | <http://www.hl7.org/permalink/VotingMadeEasy>  Useful for new co-chairs wishing to understand the HL7 ballot process. |
| Checklist: WGM Tasks | <http://gforge.hl7.org/gf/download/docmanfileversion/6767/9305/GenericWGMChecklist.doc>  Generic checklist of tasks that co-chairs need to complete for each WGM |
| Database: CDA Changes | <http://www.hl7.org/permalink/?CDATracker>  Database where members log their proposed changes to the CDA standard. |
| Database: Standard for Trial Use Comments | <http://www.hl7.org/dstucomments/index.cfm>  Captures comments submitted by entities participating in trial use period; not to be confused with ballot comments |
| Database: Version 2 Changes | <http://www.hl7.org/permalink/?V2Tracker>  Database where members log their proposed changes to the V2 standard. |
| Education Portal | <http://www.hl7.org/permalink/?EducationPortal>  Provides a gateway to training and education opportunities for the HL7 community with access to information about Professional Development and Certification Opportunities beneficial to Project/Product Managers, Implementers, Software Engineers, Clinicians and Business Analysts working in the HL7 space. The portal also links you to exam preparation materials and registration for any certification exam at locations around the world. |
| Facilitators List | <http://www.hl7.org/documentcenter/public/membership/Facilitators%20Summary%20List.pdf>  Current list of all facilitators. Please advise HQ of updates by emailing [Karenvan@HL7.org](mailto:Karenvan@HL7.org?subject=Update%20for%20facilatators%20list) |
| Facilitators Summary of Expectations | <http://www.hl7.org/about/hl7facilitators.cfm>  Job descriptions for the various types of facilitators |
| Form:  Copyright Assignment | <http://www.hl7.org/permalink/?CopyrightAssign>  Used by HL7 faculty, frequently the co-chairs, to assign copyright to HL7 for tutorial materials. |
| Form: Out-of-Cycle Meeting Request | <http://www.hl7.org/permalink/?OOCMeetingRequest>  Use to request an out-of-cycle meeting. |
| Form: Press Release Request | <http://www.hl7.org/permalink/?PRRequestForm>  Use to convey relevant and press release worthy information to HL7 Director of Communications. |
| Form: WGM Meeting Room Request | <http://www.hl7.org/permalink/?MeetingRoomRequestForm>  Use to submit room request for upcoming WGM |
| Guidelines: Reconciliation | <http://wiki.hl7.org/index.php?title=Reconciliation_HowTo>  A how-to developed to assist co-chairs in managing reconciliation |
| Guidelines: Three Year Plan | <http://www.hl7.org/permalink/?3YearPlans>  Describes WG three-year plans and how to develop them. |
| Guidelines: WG Mission and Charter | <http://www.hl7.org/permalink/?MissionCharter>  Guidelines for developing WG mission and charter. |
| HL7 Architecture Review Board (ARB) | <http://www.hl7.org/Special/Committees/arb/overview.cfm>  GOM §09.03 |
| HL7 Bylaws | <http://hl7.org/permalink?bylaws> |
| HL7 Code of Conduct | <http://www.hl7.org/permalink?GOM>  GOM §05.05 describes the HL7 code of conduct in place for all participants of HL7 |
| HL7 Essential Requirements: Due process requirements for HL7 American National Standards (HL7 ER) | <http://www.hl7.org/permalink/?Essentialrequirements>  Defines how normative standards are balloted and how HL7 adheres to ANSI Essential Requirements |
| HL7 Governance and Operations Committee (GOC) | <http://www.hl7.org/Special/committees/gno/>  Maintains Bylaws, GOM, and HL7 ER GOM §10.04  Submit issues to [GOC list](mailto:goc@hl7.org?subject=%3cBylaws/GOM/HL7%20ER%3e%20Issue) |
| HL7 Governance and Operations Manual (GOM) | <http://hl7.org/permalink?GOM>  Organizational policy and process including review ballots |
| HL7 List Servers | <http://www.hl7.org/permalink/?Listserv>  All the HL7 list servers with open subscription. |
| HL7 Mobile App | <http://eventmobi.com/hl7>  Allows WGM attendees to keep up with event announcements and changes, view the site map and meeting agendas and create their own schedule |
| HL7 Process Improvement WG | <http://www.hl7.org/permalink/?PICLeadership> |
| HL7 Project Insight | <http://www.hl7.org/permalink/?ProjectInsight>  HL7 uses Project Insight to track its projects. |
| HL7 Publishing WG | <http://www.hl7.org/permalink/?Publishing> |
| HL7 Reference Information Model (RIM) | <http://www.hl7.org/permalink/?RIM> |
| HL7 Terminology Authority (HTA) | <http://wiki.hl7.org/index.php?title=HL7_Terminology_Authority_-_Policies_and_Procedures>  Manage processes involving external terminologies GOM §10.10 |
| HL7 Trademarks FAQ | <http://www.hl7.org/legal/trademarks.cfm?ref=common>  GOM §16.02.01 |
| HL7 Travel Expense Reimbursement Form | <http://www.hl7.org/permalink/?TravelExpenseForm>  Use to submit expenses for reimbursement when traveling on behalf of HL7. |
| HL7 TSC Wiki | <http://www.hl7.org/permalink/?TSCWiki>  TSC minutes and other details are kept on the wiki. |
| HL7 US Realm Steering Committee (USR-SC) | <http://www.hl7.org/Special/Committees/usrealm/index.cfm>  GOM §10.11 |
| HL7 webmaster | [webmaster@HL7.org](mailto:webmaster@HL7.org) |
| HL7 Wiki | <http://www.hl7.org/permalink/?HL7Wiki>  Many WGs and projects maintain a presence on the HL7 wiki. |
| Presentation: First Time Attendee | <http://www.hl7.org/permalink/?FirstTimeAttendeesPresentation>  Most current First Time Attendees session presentation. |
| Presentation: Organization and Process | <http://www.hl7.org/permalink/?HL7OrgAndProcessPresentation>  Most current Organization and Process tutorial provided for WGM first time attendees. |
| Presentation: PMO Project Insight Tutorial | <http://www.hl7.org/Library/Committees/projectservices/PMO%20Tutorial%20-%20Project%20Insight%20Overview%20-%202010%20May.ppt>  Introduction to Project Insight tool |
| Robert’s Rules | <http://www.hl7.org/permalink/?RobertsRules>  An online version of Robert’s Rules for managing meetings. |
| Template : HL7 Document Cover Page | <http://www.hl7.org/permalink/?CoverPageTemplate>  Use this template for the cover page of all HL7 documents published by your WG with the exception of Version 3 documents that are published via the publishing database. |
| Template : Meeting Minutes | <http://www.hl7.org/permalink/?MinutesTemplate>  Provides instructions and tips for capturing WG meeting minutes in Word. |
| Template : Meeting Minutes – Wiki | <http://www.hl7.org/permalink/?WikiMinutesTemplate>  Provides instructions and tips for capturing WG meeting minutes on the HL7 wiki. |
| Template:  GForge Homebase Project Request | <http://www.hl7.org/permalink/?GForgeHomebaseProjectRequestForm>  Request a WG page from the HL7 Project Homebase site. |
| Template:  Publication Request | <http://www.hl7.org/permalink/?PublicationRequestTemplate>  Once approved, informative documents, standards for trial use (STU), and normative documents require the concurrence of the TSC to be released for publication. Use this form to submit the request to the TSC.  Informative Documents GOM §13.01.05 Standards for Trial Use GOM §13.02.05 Normative documents HL7 ER §02.15 |
| Template: CTO Errata Cover Letter | <http://www.hl7.org/permalink/?CTOErrataLetter>  Use to submit request for errata to CTO for approval Informative Documents GOM §13.01.06 Standard for Trial GOM §13.02.06 |
| Template: Decision Making Practices (DMP) | <http://www.hl7.org/permalink/?DMP>  The default DMP as well as links to the specific DMPs of the various WGs. |
| Template: Harmonization Proposal | <http://www.hl7.org/permalink/?HL7HarmonizationProposal>  Submit proposed RIM or Vocabulary changes for Harmonization. |
| Template: New User Group Formation | <http://www.hl7.org/documentcenter/public/wg/New_User_Group_Formation_Template.docx>  GOM §19 |
| Template: Notice of Withdrawal of American National Standard (ANS) Project | <http://www.hl7.org/permalink/?WithdrawANS>  Use to request withdrawal of a proposed ANS; that is, to notify ANSI that work on a candidate normative standard is being discontinued by a WG. |
| Template: Project Scope Statement | <http://www.hl7.org/permalink/?ProjectScopeStatement>  Word template for the Project Scope statement; includes HL7’s Project Approval Process. |
| Template: Project Scope Statement | <http://www.hl7.org/permalink/?ProjectScopeStatement>  Includes project approval process |
| Template: Project Wiki | <http://wiki.hl7.org/index.php?title=Template:Project_Page>  Template for WGs that wish to track and make their project information available on the HL7 wiki |
| Template: WG Creation | <http://www.hl7.org/permalink/?WorkGroupCreationTemplate>  Use to request creation of a new WG. |
| Template: WG Dissolution | <http://www.hl7.org/permalink/?WGDissolveTemplate>  Use to request dissolution of a WG. |
| Template: WGM Agenda | <http://www.hl7.org/permalink/?WGMAgendaTemplate>  Template, including session icons, for presentation of the WGs’ WGM agendas.  Session icons may be viewed separately  <http://www.hl7.org/permalink/?AgendaIcons> |
| Template: WGM Attendance | <http://www.hl7.org/permalink/?WGMAttendanceTemplate>  Use for tracking WGM attendance. |
| Utility: Co-chair Utility Page/Procedures | <http://www.hl7.org/permalink/?Procedures>  Co-chair only accessible page which provides utilities for uploading and cataloging meeting minutes, etc. |
| Utility: Minutes Repository | <http://www.hl7.org/permalink/?Search>  Search utility that enables you to search the website, WG Documents, WG Meeting Minutes and the membership directory. |
| Utility: Time and Date Conversion | <http://www.hl7.org/permalink/?DateTimeConversion>  Particularly useful for scheduling conference calls. |
| Webinar Schedule | <http://www.hl7.org/events/webinars.cfm?ref=nav>  Current calendar of webinars, including Member Advantage webinars (free to members) and webinars for which members and non-members are required to pay. |
| WG Health Metrics | http://hl7tsc.org/wiki/index.php?title=Work\_Group\_Health |
| WGM Schedule | <http://www.hl7.org/permalink/?WGM>  Calendar of upcoming WGMs |

# Appendix B: Review Ballot Process Flow

Obtain TSC Authorization

30 Day Notice of Intent to Ballot

30 Day  
Review Period

Consider Comments

Make Revisions

Comment Only?

Requirements   
Document?

Review Again?

60%  
Approval?

Standard  
for Trial Use

Publish

Select next ballot type and cycle

Publish STU

Publish Informative Document

No

No

No

No

No

Yes

Yes

Yes

Yes

Yes

# Appendix C: Normative Ballot Process Flow

