1. Purpose of the Ada Rapporteur Group

The Ada Rapporteur Group (ARG) is a subgroup of ISO/IEC JTC1/SC22/WG9, the JTC1 Working Group for Ada. The ARG has the following duties:

- Serve as an advisory group for the project editors of ISO/IEC 8652, ISO/IEC 18009, and other standards as assigned by WG 9.
- Support the SC22 defect and interpretation process by drafting publicly available responses to Defect Reports on ISO/IEC 8652, ISO/IEC 18009, and other standards as assigned by WG 9.
- Draft text for proposed clarifications, corrections and changes to those two standards and others as assigned by WG9.
- Recommend strategies for extensions of the Ada language and libraries and prescription of conformity and optionality via the use of corrigenda, amendments, secondary standards, technical reports and informative materials.
- Coordinate with other organizations to promote uniform implementation of the Ada standard and appropriate usage of Ada in other standards.

Language proposals originating in other Rapporteur Groups of WG9 will be referred to the ARG for disposition in the same manner as suggestions originating outside of WG9.

1.1 Membership

The ARG exists from meeting to meeting of WG 9, and is reappointed at each meeting of WG 9. The membership list is proposed by the Rapporteur to the convenor of WG 9. Membership entitles a person to vote during ARG discussions and to participate in ARG letter ballots.

Members are expected to attend meetings regularly, to participate in e-mail discussions, and to vote on letter ballots.

1.2 Officers

The convenor of WG 9 designates officers from the membership of the ARG. The officers are:
Rapporteur  The Rapporteur (also known informally as Chair) is responsible for scheduling meetings, developing agendas for meetings (in consultation with the Editor), and conducting meetings. The Rapporteur is also responsible for conducting letter ballots, editorial reviews, and other business of the ARG, along with specific responsibilities outlined in these Procedures.

Editor  The Editor is responsible for administrative tasks related to the processing of commentaries, including initial classification, making editorial changes, and maintaining the publicly available versions. The Editor is also responsible for assisting in the production of agendas for meetings, and taking and distributing the minutes of meetings, along with specific responsibilities outlined in these Procedures.

1.3 Meetings

The ARG meets several two or three times a year. Meetings can be virtual or face-to-face.

Face-to-face meetings are typically multiday, and will not be held more than twice per year. The location and dates for face-to-face meetings will be determined as appropriate, striking a balance between meeting in Europe and the US. Remote participation in face-to-face meetings will be supported.

Virtual meetings are shorter (generally a half day or less) and can be held more frequently, but never more often than once per month.

Virtual meetings are generally preferred as they avoid travel expenses and reduce the disruption to members. Face-to-face meetings are valuable as they allow greater focus on tough problems as fewer distractions exist.

Face-to-face meetings should only be scheduled if all of the following conditions are met:
- Sufficient work exists to fill the scheduled time for the meeting. This should be at least an estimated 12 hours of work;
- Sufficient audio/visual equipment is available to allow useful remote participation;
- A majority of the members that expect to attend the meeting intend to attend in person.

Non-members may attend the meetings upon invitation; their active participation is at the discretion of the Rapporteur.
2. Processing Language Comments

Comments on the Standard are sent to WG 9, SC 22, or preferably by electronic mail to ada-comment at ada-auth.org, following the comment format specified in the Reference Manual.

The ARG deals only with Ada commentaries, not individual comments per se. An Ada commentary contains all information relevant to the point addressed by a language comment, including any recommended action to be taken on the point, the rationale for the recommendation, all written comments relevant to the topic of the commentary, and a history of the commentary's processing. The commentary also provides summary information that can be published.

2.1 Initial Processing of Comments

The ARG editor initially processes received comments. If the comment pertains to any existing language commentaries, the comment is associated with them. If the comment is completely irrelevant (it is an advertisement, a request for help with homework, a comment on the Americans with Disabilities Act, the American Dental Association, or any other ADA, etc.) it is discarded. Otherwise, a new commentary is created to deal with the new topic. Each new commentary is assigned a unique number for identification, and is given a provisional classification (the classes are described in Section 3).

If the Editor, in consultation with the Rapporteur, determines that a comment was satisfactorily answered by e-mail, has insufficient information, or is of interest to only a tiny minority of users, the commentary is given a status of Received No Action. Such commentaries will not be considered by the ARG. 10% of the ARG membership (minimum 2 members) may request that a Received No Action commentary be considered by the ARG, in which case the commentary is given the Received status.

Otherwise, the new commentary is given the Received status and will be considered by the ARG at an upcoming meeting.

2.2 Development of Commentaries

Commentaries are developed by discussion at meetings and/or via e-mail; these usually are assigned to an author to create or update a proposed commentary. Such proposals have the Work Item status.

The outcome of the discussion of a commentary at a meeting is usually a vote on one of the following options:

1. Approve As Is. This changes the status of the commentary to ARG Approved.
2. Approve with Changes. This automatically causes an Action Item on the Editor to apply the agreed changes, as well as changes the status of the commentary to *ARG Approved*;

3. Approve Intent. An Action Item is given to an ARG member to propose amended wording for the commentary. If the revised wording is available before the end of the meeting then the commentary may be considered again at that meeting. Another vote will be required before the commentary is approved;

4. Approve Intent for Prototyping. An Action Item is given to an ARG member to work with one or more Ada compiler implementors to implement some or all of the feature, with the purpose of ascertaining the complexity of implementation in the context of one or more existing Ada compilers, and the usability of the feature through appropriate realistic examples. A report on the results of prototyping of implementation and use will be prepared, and included in the discussion section of the commentary, before the commentary is considered again at an ARG meeting; one or more preliminary ACATS tests will be developed and used to demonstrate the prototyped implementation;

5. Keep Alive. The commentary needs further development outside of the meeting. An Action Item is given to an ARG member to continue working on the commentary for review at the next ARG meeting;

6. Further Study Required. The commentary is not developed enough to be considered by the ARG at this time. An Action Item is given to an ARG member or to the proposer to convene a language study group to discuss and refine the proposal further and report back. The work output of the group will be captured on the ARG website language-study group pages, and reviewed in a subsequent ARG meeting;

7. No Action. This changes the status of the commentary to *No Action*.

Straw polls (which may include non-members) may also be taken during the course of a discussion in order to obtain feedback on whether the discussion is heading in an agreed direction, but these have no binding status.

ARG consideration of a commentary has been completed when the commentary is either accepted or classified as requiring no further action. The ARG disposition of a commentary is determined by a vote of members present at an ARG meeting; the Rapporteur and Editor each may vote. If fewer than 7 members are present, the vote is conducted as if enough members have abstained to bring the total to 7. The vote for an action succeeds (and is considered a consensus for the action) if a majority of members present at an ARG meeting vote in favor of the action and less than 17% of the members present at the meeting vote against the action.
2.3 Approval of Commentaries

After the ARG has approved a commentary, an ARG member may request a letter ballot (even if the commentary is approved unanimously). Letter ballots allow for further discussion and consideration of a proposed action before it is final. If a letter ballot is requested, the commentary is circulated among the ARG for consideration after the ARG meeting and a second vote is taken by mail; the commentary is approved if a majority of members responding to the ballot vote in favor of it, at least 7 members vote on the ballot, and no more than 17% of the voting members vote against it. Disapproval of a letter ballot means the commentary is subject to further discussion and vote at the next ARG meeting.

The Rapporteur may at his/her discretion call for a letter ballot on draft commentaries prior to any discussion of the commentary at a meeting to shorten the process for issues that are either non-controversial or deemed sufficiently discussed by electronic mail exchanges. A request by any member of the ARG for discussion of such a commentary at a meeting shall be honored; in this case, the commentary shall not be forwarded to WG 9, until a vote at a meeting has taken place.

After the ARG has approved a commentary (but prior to conducting any requested letter ballot), a draft of the approved ARG position is prepared and published (on the ada-auth web site) for editorial review and comment. (At the Rapporteur's discretion, non-members may be invited to comment as well.) Editorial comments are due three weeks after the draft has been sent out for review. Comments are incorporated into the draft at the discretion of the Rapporteur. Substantive changes are recirculated for further editorial review. If new issues are raised during the editorial review, further discussion of the commentary may take place. Upon completion of the editorial review and any letter ballot, approved commentaries are forwarded to WG 9 for action. (Commentaries approved by an ARG meeting, but subject to a subsequent letter ballot may be forwarded provisionally for consideration by WG 9; such commentaries are not considered by WG 9 if they fail the letter ballot.)

If a commentary is approved by WG 9, WG 9 may request that the ARG produce a Technical Corrigendum and Defect Report in accordance with ISO format and rules for further handling by WG-9. Generally, WG 9 will request these documents for a group of commentaries at one time. Absent such a request, the approved commentary requires no further action by the ARG. If it is not approved, it is returned to the ARG for further consideration.

3. Classification and Status of Language Commentaries

Language commentaries are categorized as shown below. The purpose of the classification is to distinguish among the following points: is a change to the text of the Standard desirable? Should the recommendation affect the status of validated compilers? Is the commentary one that can be deferred until the Standard is undergoing a general revision?
Presentation  Non-technical revisions to the Standard, typographical errors, improvements to examples or notes, etc. are included in this class. No decision proposed here affects the status of any validated compiler.

Pathology  Detailed resolution is not thought to have any benefit to Ada users. The ARG strongly recommends that no validation test depend on commentaries in this class.

Confirmation  The point raised in the commentary can be resolved by direct reference to the Standard. Many commentaries of this class are not considered to be of general interest.

Ramification  The point raised in the commentary can be resolved by referring to the Standard; the conclusion is unexpected or the reasoning justifying the conclusion is not obvious. Commentaries of this class are considered to be of general interest and should be published widely.

Binding Interpretation  Although the wording of the Standard may be unclear, inconsistent, or incorrect, the intent is considered clear. Changes to the Standard should be made to forestall confusion in the future; these usually will be published as a Technical Corrigendum. Commentaries in this class will generally be published widely.

Non-binding Interpretation  The recommended interpretation can, but need not, be obeyed by validated compilers. The recommendation is likely to be incorporated in the next revision of the Standard. Commentaries are placed in this class when it is considered unreasonable to force implementations to conform to the recommended interpretation, but the usability of Ada is increased if implementations do conform to it. Commentaries in this class will be published widely.

Amendment  A comment proposes a change to the Standard. Such proposals are developed for possible inclusion in the next revision of the Standard. Development of these proposals allows compilers to implement needed functionality in a consistent way, fostering portability of Ada applications. Commentaries in this class will be published widely.

Correction  A comment proposes a change to a commentary previously approved by WG 9.

In addition to its classification, a language commentary is tracked according to its processing status:
Received No Action

A comment has been received that is not relevant to an existing commentary, so a new commentary is created together with a provisional classification. The comment is deemed answered satisfactorily by e-mail discussion, is of little interest to Ada users, or (for an amendment) does not contain a proposal. Commentaries in this class will not be considered by the ARG. A commentary in this class will be changed to the Received status (and thus be considered by the ARG) at the request of 10% of the ARG's membership. Only commentaries not considered at any ARG meeting can have this status; once a commentary is considered at an ARG meeting, it must have another status.

Received

A comment has been received that is not relevant to an existing commentary, so a new commentary is created together with a provisional classification of the point addressed by the comment. A classification is provisional until approved by the ARG. The purpose of a provisional classification is to help direct attention to those comments that present potentially substantive points. In particular, subsequent discussion of a comment initially classified as binding interpretation might result in its classification as ramification or confirmation.

Work Item

Preliminary analysis of the commentary has been performed. The commentary is ready to be placed on the agenda for a ARG meeting.

Promising

Only used for Amendment-class commentaries. The commentary has been worked on, is not thought to need further work, and is thought to be a good candidate for a future version of the Standard.

Hold

Only used for Amendment-class commentaries. The commentary is thought to not be a good candidate for a future version of the Ada standard, and it may not be correct or complete.

Deleted

A commentary has been deleted, generally because it has been combined with another commentary.

No Action

No further action is needed on a commentary, because the ARG has agreed that no action is required or desirable. This status differs from Received No Action as the ARG has considered the commentary and voted this status, while Received No Action is determined by the Editor and Rapporteur alone.

ARG Approved
This category reflects the disposition of a commentary at the ARG level. Approved commentaries are forwarded for further action by WG 9.

WG 9 Approved
This category reflects action by WG 9 on commentaries that have been approved by the ARG. If a commentary is not approved, it is returned to the ARG as a work item. WG 9 may give provisional approval to a commentary, meaning that all parts of the commentary are approved except the discussion section. The commentary must be considered again for final, full approval.

Corrigendum nnnn
This category reflects that a WG 9 approved commentary has been included in a Technical Corrigendum. "nnnn" reflects the year of the Corrigendum. A Technical Corrigendum corrects defects in a standard by providing changes to the text of the standard, and is processed by ISO procedures. A Technical Corrigendum approved by ISO is an official part of the Ada standard. If a Technical Corrigendum is not approved by ISO, it is, in general, referred back to the ARG as a work item.

Response nnnn
This category reflects that a WG 9 approved commentary has been included in a Records of Response document. "nnnn" reflects the year of release of the document. A Records of Response document records interpretations of the standard that do not require a wording change to the standard. Records of Response documents are processed by SC 22. If a Records of Response document is not approved by SC 22, it is, in general, referred back to the ARG as a work item.

Amendment nnnn
This category reflects that a WG 9 approved commentary has been included in an Amendment or Revision to the Ada standard. "nnnn" reflects the year of the Amendment or Revision. An Amendment may introduce new features and modify existing ones (beyond the simple correction of defects allowed in a Technical Corrigendum). It is processed by ISO procedures. An Amendment approved by ISO is an official part of the Ada standard. A Revision of the Ada standard replaces the previous Ada standard. If an Amendment or Revision is not approved by ISO, it is, in general, referred back to the ARG as a work item.
4. Availability of Commentaries

Commentaries at all stages of development shall be available to all interested parties by electronic access. Since January 1, 1999, the version control system for commentaries is available on the web at

http://www.ada-auth.org/ais.html