
**Information technology — User
interfaces — Voice commands —**

**Part 4:
Management of voice command
registration**

*Technologies de l'information — Interfaces utilisateurs —
Commandes vocales —*

Partie 4: Gestion de l'enregistrement des commandes de voix

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

ISO/IEC 30122 consists of the following parts, under the general title *Information technology — User interfaces — Voice commands*:

- *Part 1: Framework and general guidance*
- *Part 2: Constructing and testing*
- *Part 3: Translation and localization*
- *Part 4: Management of voice command registration*

Introduction

This part of ISO/IEC 30122 describes supplementary procedural information, requirements and criteria that apply to a collection of voice command standards published as a web-accessible voice command database. It is based on the second paragraph of Annex SL, Procedures for the development and maintenance of standards in database format supplemented to ISO/IEC Directives as Procedures specific to ISO. This part of ISO/IEC 30122 is not in conflict with Annex SL or ISO/IEC Directives.

The advantages of the collection of voice command standards as an electronic database include the following:

- the database represents a serious source one can rely on;
- the database can be easily maintained and updated.

The procedure of voice command standardization is as follows.

- a) According to ISO/IEC 30122-1, the person creating the voice command decides the Title and Function attributes of the proposed voice command.
- b) According to ISO/IEC 30122-2 and ISO/IEC 30122-3, the person creating the voice command decides the Phrase of command attribute of the proposed voice command in at least one ISO/IEC official language.
- c) According to this part of ISO/IEC 30122, VT 30122 validates the appropriateness of the proposed voice command as an international standard. If it is approved as an international standard, the voice command is published as an international standard through the voice command database.

After the standardization, the following procedure may be conducted.

- d) According to ISO/IEC 30122-2 and ISO/IEC 30122-3, each country gives attributes of the standardized voice command in each language.
- e) According to ISO/IEC 30122-2, each country tests the voice command and speech recognition system in each language.

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Information technology — User interfaces — Voice commands —

Part 4: Management of voice command registration

1 Scope

This part of ISO/IEC 30122 defines supplementary procedural information, requirements and criteria that apply to a collection of voice commands published as a web-accessible voice command database. They are based on Annex SL of the IEC supplement to ISO/IEC Directives. This part of ISO/IEC 30122 also defines the method for adding, changing or withdrawing voice commands in an electronic database of standard voice commands.

Annex SL ISO/IEC Directives – Supplement – Procedures Specific to ISO is followed for management of voice command registration unless otherwise specified in this part of ISO/IEC 30122.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 30122-1, *Information technology — User interfaces — Voice commands — Part 1: Framework and general guidance*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 maintenance team

MT

group of experts that may be set up by a parent committee following the rules in the ISO/IEC Directives for the establishment of working groups

Note 1 to entry: The convener of a MT should be the same person as the convener of the validation team (3.2).

Note 2 to entry: The MT may be called upon by the validation team (3.2) convener to provide expertise in the preparation of change requests or voice commands for evaluation or validation.

3.2
validation team
VT

permanent, “executive”, group of individuals appointed by, and acting as, delegates on behalf of their national bodies, A-liaison organizations and committee-internal liaisons committed to execute evaluation and validation of change requests and vote for their release as part of a web-accessible voice command database

Note 1 to entry: All permanent (P) members, A-liaison organizations and committee-internal liaisons have the right to appoint one member to the team. A validation team comprises a minimum of five P-members. Representatives of P-members have the right to comment and vote; representatives of A-liaisons and committee-internal liaisons do not have the right to vote, but may submit comments.

Note 2 to entry: The described procedure asks for very short response times from the validation team members. Therefore, the national bodies should appoint one or more deputies that can take over the task when the official member is unavailable (due to travel, business, etc.).

Note 3 to entry: The appointing bodies decide on the duration of an appointment. They should also organize any supporting network of experts at national level.

Note 4 to entry: The SC 35 secretariat manages the validation team, which is numbered and called VT 30122, for the web-accessible voice command database.

3.3
proposer
body allowed to submit a change request

Note 1 to entry: The proposer is the body having the right to submit the request in terms of ISO/IEC Directives.

3.4
web-accessible voice command database
database standard

standard in database format for which a valid form of publication is a publicly accessible database, containing the standardized voice commands and non-normative translations (where provided by appropriate national bodies)

Note 1 to entry: The term standards as database may be used as a synonym.

3.5
voice command

<of a database standard>separately identified and managed structured object in a database being composed of spoken instruction to control ICT devices

3.6
change request
CR

task description for addition, withdrawal or change of one or more voice commands in a database standard, submitted by an authorized person or body, which will be reviewed and updated by the convener of a validation team, possibly with the support of a maintenance team, for evaluation and validation by the validation team

Note 1 to entry: It is possible that changes to the database standard resulting from several change requests are combined, or that a single change request is subdivided, at any stage in the process.

3.7
work package

set of one or more voice commands associated with a change request

4 Procedures

4.1 Overview

The procedure described in this part of ISO/IEC 30122 assumes the use of a web-accessible database and electronic communication. As far as possible, automated database functions shall be applied to ensure that the content of the database is consistent. Due care shall be taken to ensure that the content is correct, especially if it is used directly by computer applications.

Depending on the difficulty of registration to the database, the VT 30122 convener will take care about organizing a MT or the VT will evaluate and vote on the proposed changes to the web-accessible voice command database.

The procedures support two main processes, namely:

- a) the maintenance process initiated by a change request (CR), which consists of the preliminary activities, followed by either the normal database procedure 1 or the normal database procedure 2;
- b) the withdrawal process initiated by a CR, which consists of the preliminary activities followed by the normal database procedure 1.

4.2 Preliminary activities

4.2.1 General

Any changes to the normative ISO/IEC standards information in a web-accessible voice command database shall be completed with the following preliminary stages.

National bodies may propose changes involving non-normative translations in non-official ISO/IEC languages to be processed by the convener of the validation team, without the need to follow these procedures.

4.2.2 Initiation of a CR

A CR shall be submitted by a proposer and then entered by the VT 30122 convener in a web-accessible voice command database.

4.2.3 Preparation for evaluation

Preparation by the VT 30122 convener to ensure that all mandatory entries of the CR are appropriately filled-in and that any necessary accompanying items are of a quality sufficient for evaluation.

For pragmatic or technical reasons, e.g., a close relationship between items with a different level of maturity, the VT 30122 convener may decide to combine items proposed under more than one CR into one work package or to separate items submitted under one CR into several work packages for processing as a unit.

NOTE 1 If required, a MT may be called out to assist the VT 30122 convener with the preparation activities.

NOTE 2 The term MT refers to a group of experts set up by the secretariat of SC 35 to carry out the maintenance of a web-accessible voice command standard.

The time required for this work should normally not exceed one month, but might exceptionally be longer if the original proposal is not mature enough. In such a case, the preparation is comparable to "stage 0" work and the time has to be counted from final agreement with the proposer.

NOTE 3 It is expected that the MT will only be established when the preparation activities make up a substantial amount of the total work required. When the standard covers a wide range of technical domains, the MT may rely on domain expertise for checking and revising the content of the voice command(s) associated with the CRs.

4.2.4 Evaluation of the CR

Action by VT 30122 determines whether the CR is within the scope of the database standard and valid for further work or whether it should be rejected.

When the quality of the information provided at the preparation stage is satisfactory, the status identifier of the CR is changed to *for evaluation* and the members of VT 30122 are informed (with copies to the proposer and possibly other relevant TCs/SCs) and asked by the VT 30122 convener to make an evaluation and to comment. The evaluation of the CR should be completed within two months.

The commenting is equivalent to comment and vote on a Committee Draft document within ISO or IEC.

4.2.5 Resolution

Observation by the VT 30122 convener on the comments and general opinions of the members of the VT 30122 is followed by the conclusion on whether the CR should be:

- a) continued with the normal database procedure 1 (procedure 1),
- b) continued with the normal database procedure 2 (procedure 2),
- c) improved and *re-evaluated*, or
- d) *rejected* altogether.

NOTE 1 The entry of a new voice command in the database is not seen as “new work”, but rather as part of the continuous maintenance of the existing collection of voice commands. Therefore, to arrive at the conclusion, a simple majority of the submitted votes can be used at the evaluation stage, applying to the choice between continuation/rejection as well as to two types of process.

NOTE 2 If the original CR references many items, and if some of these could be acceptable for continuation with procedure 1 or with the procedure 2 while others are not, the original CR could be divided into two or more new CRs and processed separately. Such new CRs start at the status level already achieved.

[Figure 1](#) provides an overview of the preliminary activities in [4.2](#) and the normal database procedures in [4.3](#) and [4.4](#).

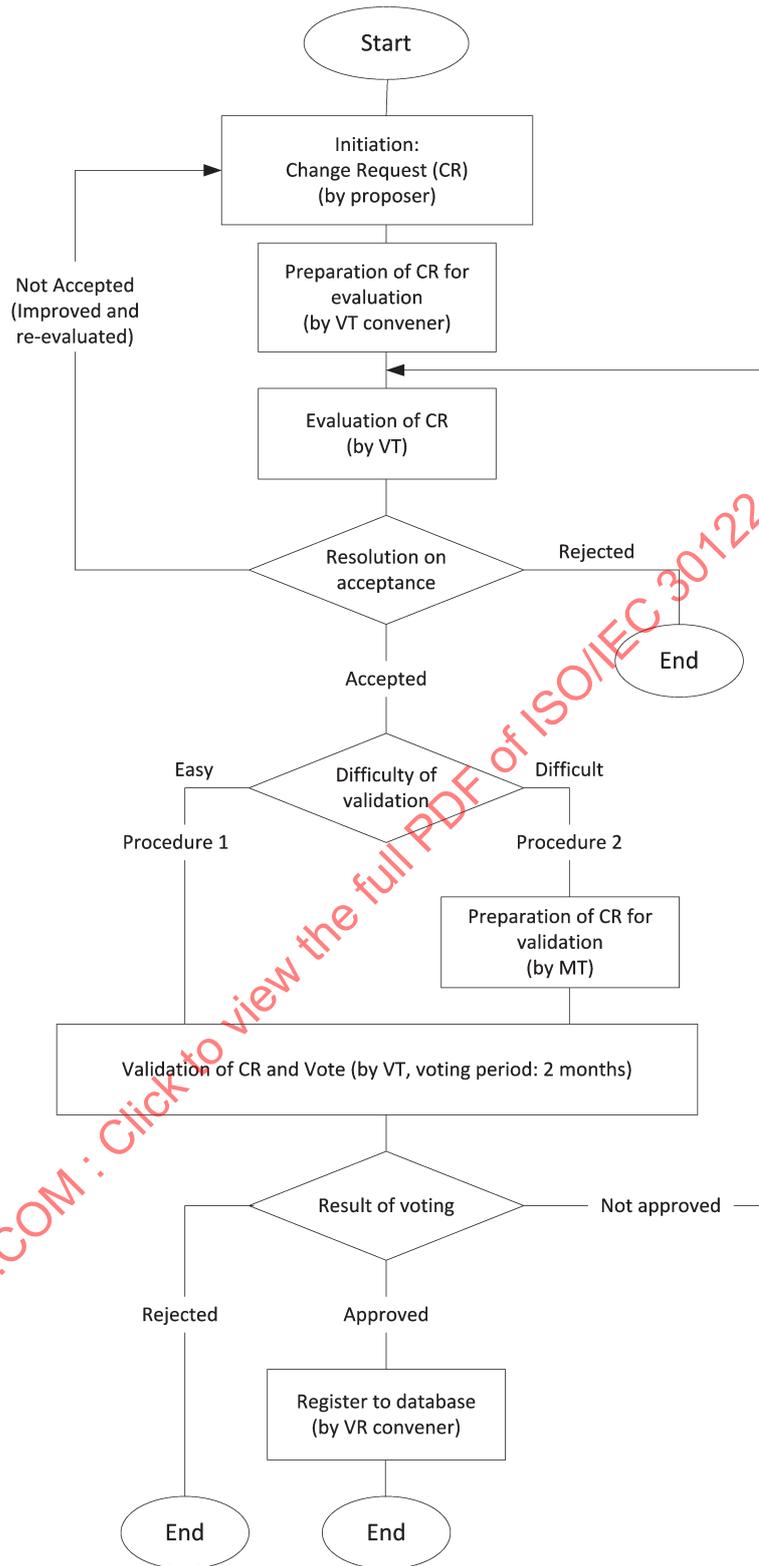


Figure 1 — Process for voice command registration

4.3 Normal database procedure 1

4.3.1 Overview

Normal database procedure 1 (procedure 1) is faster than normal database procedure 2 (procedure 2) as described in 4.4 and relies on the use of VT 30122 acting on behalf of the national bodies for the final voting on proposals.

Procedure 1 is typically applicable to changes for the withdrawal of existing voice commands or for additions of new voice commands within the scope of a web-accessible voice command database or in cases where there is an urgent need for changes to the voice command database.

4.3.2 Validation

When the quality of the information is satisfactory, the status identifier of the CR is changed to *for validation*, and the VT 30122 is called by the VT 30122 convener to vote, with copies to the proposer, the P-members of SC 35 and possibly other relevant TCs/SCs.

The members of VT 30122 should have visibility of all item(s) under validation as well as of the final vote result by the VT 30122. Voting should be completed within two months.

If the proposed voice command(s) are accepted, the status identifier of the voice command(s) is changed to *released*.

If they are not accepted, then the reason(s) are noted and the status identifier of the item(s) is set to *rejected*.

The criteria applied are the same as those for the voting on a normal Final Draft International Standard within ISO or IEC. Abstention from voting means that the vote is not counted.

After setting the final status identifiers for the voice commands and noting the reasons, the status identifier of the change request is set to *resolved* and normal database procedure 1 is finished (in a maximum of two weeks).

With procedure 1, it is possible for proposals to be approved within approximately two months.

4.3.3 Result of voting

If the CR is approved, it shall be reflected in the database by changing the associated status identifier. If the CR is not approved, it shall be returned to the preliminary stage or rejected.

4.3.4 Report to SC 35

The SC 35 secretary, in consultation with the VT 30122 convener, shall inform its members on the result of the activity of VT 30122 in the past year at the SC 35 plenary meeting.

4.4 Normal database procedure 2

4.4.1 Overview

If, during evaluation, the VT 30122 judges that the CR is difficult to validate, the MT is called to provide help for the VT 30122 convener to carry out the preparation for validation of the CR.

4.4.2 Preparation for validation

The MT revises the proposal in line with the comments received during the evaluation stage and checks that the item(s) associated with the CR are, after possible changes, sufficiently and properly described, within the scope of the database standard and consistent with already existing items. This preparation should be carried out within one month.