Information technology — User interfaces — Voice command — Part 4: Management of voice command registration

Technologies de l'information — Interfaces utilisateurs — Commande de voix — Partie 4: Gestion de l'enregistrement des commandes de voix

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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.

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The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

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This part of ISO/IEC Principal voice commands was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 35, User Interfaces.

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

— Part 1: Framework and general guidance
— Part 2: Procedures for constructing and testing
— Part 3: Translation issues and inter-language issues for voice command
— Part 4: Management of spoken command registration
Introduction

This International Standard ...
Information technology — User interfaces — Voice command — Part 4: Management of voice command registration

1 Scope

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

Annex ST ISO/IEC Directives – Supplement – Procedures Specific to ISO is followed, or otherwise differences are specified in this standard for management of spoken command registration.

2 Normative references

The following referenced documents are indispensable for the application 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.


3 Terms and definitions

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

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 Convener of MT should be the same person as convener of VT.

NOTE 2 MT may be called upon by the VT convener to provide expertise in the preparation of change requests or spoken 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 spoken command database.

NOTE 1 All 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 5 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 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 The appointing bodies decide on the duration of an appointment. They should also organize any supporting network of experts at national level.

NOTE 4 The SC 35 secretariat manages the validation team, which is numbered and called VT Spoken command for the web-accessible spoken command database.

3.3 proposer
body allowed to submit a change request

NOTE The proposer is the body having the right to submit the NP in terms of ISO/IEC Directives.

3.4 web-accessible spoken command database

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

NOTE The term Standards as database may be used as a synonym.

3.5 spoken command (of a database standard)
separately identified and managed structured object in a database being composed of ...

3.6 change request
CR

task description for addition, withdrawal or change of one or more spoken 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 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 spoken commands associated with a change request

4 Procedures

4.1 Overview

The procedure described in this part of ISO/IEC Spoken command International Standard 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.

Depends on the difficulty of registration to the database, VT Spoken command Convenor will take care about organizing MT or direct to VT Spoken command will evaluate and vote on proposed changes to the web-accessible spoken command database.
The procedures support two main processes:

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 change request (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 spoken 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 of following these procedures described below.

4.2.2 Initiation of Change Request

A Change Request shall be submitted by a proposer and then entered by the VT Spoken command convener in a web-accessible spoken command database.

4.2.3 Preparation for evaluation

Preparation by the VT Spoken command convener to ensure that all mandatory entries of the Change Request (CR) are appropriately filled-in and that any necessary accompanying items (such as graphic images) are of a quality sufficient for evaluation.

For pragmatic or technical reasons, e.g. close relationship between items or different level of maturity, the VT Spoken command 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, an MT may be called out to assist the VT Spoken command convener in the preparation activities.

NOTE 2 The term “Maintenance Team” (MT) refers to a group of experts set up by the secretariat of SC 35 to carry out the maintenance of a web-accessible spoken command standard.

NOTE 3 The time required for this work should normally not exceed 1 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 4 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 spoken command(s) associated with the Change Request(s).

4.2.4 Evaluation of the CR

Action by the VT Spoken command to determine whether the Change Request is within the scope of the database standard and valid for further work, or should be rejected.

When the quality of the information provided at the preparation stage is satisfactory, the status identifier of the Change Request is changed to for evaluation and the members of VT Spoken command is informed (with copies to the proposer and possibly other relevant TCs/SCs) and asked by the VT Spoken command convener to make an evaluation and to comment. The evaluation of the Change Request should be completed within 2 months.
4.2.5 Resolution

Observation by the VT Spoken command convener on the comments and general opinions of the members of the VT Spoken command followed by the conclusion whether the Change Request should be:

a) continued with the normal database procedure 1 (procedure 1); or

b) continued with the normal database procedure 2 (procedure 2); or

c) improved and re-evaluated; or

d) rejected altogether.

NOTE 1 The entry of a new spoken command in the database is not to be seen as “new work”, but rather as part of the continuous maintenance of the existing collection of spoken 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 Change Request references many items, and if some of these might be acceptable for continuation with the procedure 1 or with the procedure 2 while others are not, the original CR might be divided into two or more new CRs and processed separately. Such new CRs start at the status level already achieved.

Figure 1 provides overview of the preliminary activities in 4.2 and the normal database procedures in 4.3 and 4.4.
Figure 1 — Process for the spoken command registration

Start

Initiation:
Change Request (CR)
(by proposer)

Preparation of CR for
evaluation
(by VT convener)

Evaluation of CR
(by VT)

Resolution on
acceptance

Accepted

Rejected

Not Accepted
(Improved and
re-evaluated)

Easy

Procedure 1

Difficult

Procedure 2

Validation of CR and Vote (by VT, voting period: 2 months)

Preparation of CR for
validation
(by MT)

Result of
Voting

Approved

Rejected

Not approved

Register to database
(by VT convener)

End

End
4.3 Normal database procedure 1

4.3.1 Overview

The normal database procedure 1 (procedure 1) is faster than the normal database procedure 2 (procedure 2) as described in 4.4 and relies on the use of VT Spoken command acting on behalf of the National Bodies for the final voting on proposals.

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

4.3.2 Validation

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

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

If the proposed spoken command(s) are accepted, the status identifier of the spoken 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 FDIS. Abstention from voting means that the vote is not counted.

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

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

4.3.3 Result of voting

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

4.3.4 Report to SC 35

SC 35 secretary in consultation with VT Spoken command convener shall inform its members on the result of activity of VT Spoken command in the past year at the plenary.

4.4 Normal database procedure 2

4.4.1 Overview

If the VT Spoken command judges during evaluation stage that the CR is difficult to validate, Maintenance Team (MT) is called to provide help for VT Spoken command 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.

### 4.4.3 Validation

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

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

If the proposed item(s) are accepted, the status identifier of the item(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 FDIS. Abstention from voting means that the vote is not counted.

After setting the final status identifiers for the items and noting the reasons, the status identifier of the change request is set to *resolved*, and the procedure 2 is finished (maximum two weeks).

With the procedure 2 it is possible for proposals to be approved within approximately three months.

### 4.4.4 Result of voting

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

### 4.4.5 Report to the P-members

SC 35 secretary in consultation with VT Spoken command convener shall inform its members on the result of the CRs in the past year at the plenary.

## 5 Requirement of Change Request with associated spoken commands

### 5.1 Requirement of Change Request

To prepare a CR, the following minimum set of elements shall be specified as appropriate.

a) **Type of request**: Either editorial, technical new or technical modification

b) **Proposal**: Explanation in texts on technical contents of the proposal

c) **Reason**: Justification of the proposal

d) **Proposer**: Identification of the proposer by name, e-mail address and proposing body

e) **Supplementary information**: Optional element(s) to facilitate evaluation and validation

### 5.2 Requirement of the proposed changes to the spoken command database

If the Change Request prepared in accordance with 5.1 falls in the categories such as introduction of a new spoken command, editorial or technical modification of the existing spoken command, the elements required in … shall be specified in the Change Request.
6 Appeals

If, at any time after acceptance of a spoken command as released, a proposer is dissatisfied with the result of the validation process on spoken command(s), it may bring forward a change request to a web-accessible spoken command database with a proposal for further changes to the spoken command(s), which will re-open consideration under the procedures described above.