



FORM 4: NEW WORK ITEM PROPOSAL (NP)

| | |
|--|--|
| Circulation date Click here to enter a date. Closing date for voting Click here to enter a date. | Reference number: Enter Number (to be given by ISO Central Secretariat) ISO/TC 269 /SC 3 <input type="checkbox"/> Proposal for a new PC N Click here to enter text. |
| Proposer <input checked="" type="checkbox"/> ISO member body: SAC <input type="checkbox"/> Committee, liaison or other ¹ : Click here to enter text. | |
| Secretariat JISC | |

A proposal for a new work item within the scope of an existing committee shall be submitted to the secretariat of that committee.

¹ The proposer of a new work item may be a member body of ISO, the secretariat itself, another technical committee or subcommittee, an organization in liaison, the Technical Management Board or one of the advisory groups, or the Secretary-General. See ISO/IEC Directives Part 1, [Clause 2.3.2](#).

The proposer(s) of the new work item proposal shall:

- make every effort to provide a first working draft for discussion, or at least an outline of a working draft;
- nominate a project leader;
- discuss the proposal with the committee leadership prior to submitting the appropriate form, to decide on an appropriate development track (based on market needs) and draft a project plan including key milestones and the proposed date of the first meeting.

The proposal will be circulated to the P-members of the technical committee or subcommittee for voting, and to the O-members for information.

IMPORTANT NOTE

Proposals without adequate justification risk rejection or referral to originator.

Guidelines for proposing and justifying a new work item are contained [in Annex C of the ISO/IEC Directives, Part 1](#).

- ☒ The proposer has considered the guidance given in the Annex C during the preparation of the NP.

Resource availability:

- ☒ There are resources available to allow the development of the project to start immediately after project approval* (i.e. project leader, related WG or committee work programme).

* if not, it is recommended that the project be first registered as a preliminary work item (a Form 4 is not required for this) and, when the development can start, Form 4 should be completed to initiate the NP ballot.

Form 4: New work item proposal (NP)

Page 2

Proposal (to be completed by the proposer, following discussion with the committee leadership)

| |
|---|
| <p>Title of the proposed deliverable</p> <p>English title Railway Applications - Principles of Train Detection for Operations and Services</p> <p>French title (if available) Applications Ferroviaires - Principes de la Détection des Trains pour l'Exploitation et les Services</p> <p><i>(In the case of an amendment, revision or a new part of an existing document, include the reference number and current title)</i></p> <p>Scope of the proposed deliverable</p> <p>The scope of this document is to provide generic principles of train detection, related operation management principles, and to show the link between them. It provides non-technical guidance for supporting the choice of a suitable train detection method relating to railway operation.</p> <p>It includes:</p> <ul style="list-style-type: none"> - the generic principles of train detection. - a list of operational and environmental conditions affecting train detection. - a list of all train detection methods - possible selection criteria of each type of train detection. - the impact of each train detection method on operational requirements. - related operational management principles, for deficiencies and failures in each train detection method in operation. <p>It excludes:</p> <ul style="list-style-type: none"> - any technical requirements of specific train detection devices which are in the scope of IEC/TC9. - technical aspects of any future train detection technology covered in IEC/TC9. |
|---|

Form 4: New work item proposal (NP)

Page 3

Purpose and justification of the proposal**Purpose**

The purpose of this proposal is to provide guidance for supporting the choice of a suitable train detection method relating to railway operation.

- (1) List operational and environmental conditions affecting train detection.
- (2) List all train detection methods including possible selection criteria, and the impact of each train detection method on operational requirements.
- (3) Make recommendations for operational and maintenance management principles for deficiencies and failures in each train detection method in operation.

Justification

Train detection method is a way to detect the presence of train, which is required where operation is dependent on the position information of trains. Train detection method plays an important role in systems which ensure safeguarding of train operations .e.g. prevention of collision and derailment. The objective is to provide a non-technical guidance on the train detection methods for railway projects in which the choice of train detection has strong impact in the fulfillment of the project performances.

This document presents the main elements or characteristics of these methods. Therefore, it is necessary to develop such a document because:

- 1) Using this document will help to choose the proper train detection method and mitigate related project risks.
- 2) It can ensure the targeted quality of train service and reliability of train operation.
- 3) It helps to give a common view on train detection methods.
- 4) It helps to show the guidance on the implementation and application principles of train detection worldwide.
- 5) It can be used to guide the preparation of subsequent equipment standards.

Consider the following:

Is there a verified market need for the proposal?

What problem does this document solve?

What value will the document bring to end-users?

See [Annex C](#) of the ISO/IEC Directives, Part 1 for more information.

See the following guidance on justification statements in the brochure 'Guidance on New work': <https://www.iso.org/publication/PUB100438.html>

Form 4: New work item proposal (NP)

Page 4

Please select any UN Sustainable Development Goals (SDGs) that this document will support. For more information on SDGs, please visit our website at www.iso.org/SDGs."

- ☐ **GOAL 1:** No Poverty
- ☐ **GOAL 2:** Zero Hunger
- ☐ **GOAL 3:** Good Health and Well-being
- ☐ **GOAL 4:** Quality Education
- ☐ **GOAL 5:** Gender Equality
- ☐ **GOAL 6:** Clean Water and Sanitation
- ☐ **GOAL 7:** Affordable and Clean Energy
- ☐ **GOAL 8:** Decent Work and Economic Growth
- ☒ **GOAL 9:** Industry, Innovation and Infrastructure
- ☐ **GOAL 10:** Reduced Inequality
- ☐ **GOAL 11:** Sustainable Cities and Communities
- ☐ **GOAL 12:** Responsible Consumption and Production
- ☐ **GOAL 13:** Climate Action
- ☐ **GOAL 14:** Life Below Water
- ☐ **GOAL 15:** Life on Land
- ☐ **GOAL 16:** Peace and Justice Strong Institutions
- N/A **GOAL 17:** Partnerships to achieve the Goal

Preparatory work

(An outline should be included with the proposal)

- ☐ A draft is attached
- ☒ An outline is attached
- ☐ An existing document will serve as the initial basis

The proposer or the proposer's organization is prepared to undertake the preparatory work required: ☒ Yes ☐ No

If a draft is attached to this proposal

Please select from one of the following options (note that if no option is selected, the default will be the first option):

- ☐ Draft document can be registered at Working Draft stage (WD – stage 20.00)
- ☐ Draft document can be registered at Committee Draft stage (CD – stage 30.00)
- ☐ Draft document can be registered at Draft International Standard stage (DIS – stage 40.00)
- ☐ If the attached document is copyrighted or includes copyrighted content, the proposer confirms that copyright permission has been granted for ISO to use this content in compliance with [clause 2.13](#) of the ISO/IEC Directives, Part 1 (see also the [Declaration on copyright](#)).

Is this a Management Systems Standard (MSS)?

- ☐ Yes ☒ No

NOTE: if Yes, the NP along with the Justification study (see Annex SL of the Consolidated ISO Supplement) must be sent to the MSS Task Force secretariat (tmb@iso.org) for approval before the NP ballot can be launched.

Form 4: New work item proposal (NP)

Page 5

Indication of the preferred type to be developed

- ☐ International Standard
☐ Technical Specification
☐ Publicly Available Specification

Proposed Standard Development Track (SDT)

To be discussed between proposer and committee manager considering, for example, when the market (the users) needs the document to be available, the maturity of the subject etc.

- ☐ 18 months* ☐ 24 months ☒ 36 months

* Projects using SDT 18 are eligible for the 'Direct publication process' offered by ISO /CS which reduces publication processing time by approximately 1 month.

Draft project plan (as discussed with committee leadership)

Proposed date for first meeting:

Proposed dates for key milestones:

Circulation of 1st Working Draft (if any) to experts:

Committee Draft ballot (if any):

DIS submission*:

Publication*:

* Target Dates for DIS submission and Publication should preferably be set a few weeks ahead of the limit dates (automatically given by the selected SDT).

For guidance and support on project management, descriptions of the key milestones and to help you define your project plan and select the appropriate development track, see: go.iso.org/projectmanagement

NOTE: The draft project plan is later used to create a detailed project plan, when the project is approved.

Known patented items (see ISO/IEC Directives, Part 1, [clause 2.14](#) for important guidance)

- ☐ Yes ☒ No

If "Yes", provide full information as annex

Co-ordination of work

To the best of your knowledge, has this or a similar proposal been submitted to another standards development organization?

- ☐ Yes ☒ No

If "Yes", please specify which one(s):

[Click here to enter text.](#)

Form 4: New work item proposal (NP)

Page 6

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized

There is no similar or conflicting work at ISO including existing ISO deliverables.
There are several existing IEC standards focusing on the technical part of train detection. This proposal provides a non-technical guidance for supporting the choice of a suitable train detection method relating to railway operation. It excludes any technical requirements of specific train detection devices or any future train detection technology which are in the scope of IEC/TC9.

A listing of relevant existing documents at the international, regional and national levels

N/A

Please fill out the relevant parts of the table below to identify relevant affected stakeholder categories and how they will each benefit from or be impacted by the proposed deliverable

| | Benefits/impacts | Examples of organizations/companies to be contacted |
|---|---|--|
| Industry and commerce – large industry | <ul style="list-style-type: none"> - Help to choose the proper train detection method. - Help to develop operation management principles of train detection. - Reduce project risks. - Ensure the safe operation of trains. - Ensure the targeted quality of train service and reliability of train operation. | Operator, constructor, designer and integrator. |
| Industry and commerce – SMEs | Click here to enter text. | Click here to enter text. |
| Government | Click here to enter text. | Click here to enter text. |
| Consumers | Click here to enter text. | Click here to enter text. |
| Labour | Click here to enter text. | Click here to enter text. |
| Academic and research bodies | Click here to enter text. | Click here to enter text. |
| Standards application businesses | Click here to enter text. | Click here to enter text. |
| Non-governmental organizations | Click here to enter text. | Click here to enter text. |
| Other (please specify) | Click here to enter text. | Click here to enter text. |

Form 4: New work item proposal (NP)

Page 7

| | |
|---|---|
| Liaisons A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable. Keep existing liaison with IEC/TC9 | Joint/parallel work Possible joint/parallel work with <input type="checkbox"/> IEC (please specify committee ID) <input type="checkbox"/> CEN (please specify committee ID) Click here to enter text. <input type="checkbox"/> Other (please specify) Click here to enter text. |
| A listing of relevant countries which are not already P-members of the committee Click here to enter text. NOTE: The committee manager shall distribute this NP to the ISO members of the countries listed above to ask if they wish to participate in this work | |
| Proposed Project Leader (name and e-mail address) Ming Jiang jiangming@crscd.com.cn China Railway Signal & Communication Research & Design Institute Group Co., Ltd. | Name of the Proposer (include contact information) Yixuan Yang yangyixuan@crscd.com.cn China Railway Signal & Communication Research & Design Institute Group Co., Ltd. |
| This proposal will be developed by <input type="checkbox"/> An existing Working Group (please specify which one: Click here to enter text.) <input checked="" type="checkbox"/> A new Working Group (title: Principles of Train Detection for Operations and Services) (Note: establishment of a new WG must be approved by committee resolution) <input type="checkbox"/> The TC/SC directly <input type="checkbox"/> To be determined | |
| Supplementary information relating to the proposal <input checked="" type="checkbox"/> This proposal relates to a new ISO document; <input type="checkbox"/> This proposal relates to the adoption as an active project of an item currently registered as a Preliminary Work Item; <input type="checkbox"/> This proposal relates to the re-establishment of a cancelled project as an active project. <input type="checkbox"/> Other: Click here to enter text. | |

Form 4: New work item proposal (NP)

Page 8

Maintenance agencies (MA) and registration authorities (RA)

☐ This proposal requires the service of a **maintenance agency**.

If yes, please identify the potential candidate:

[Click here to enter text.](#)

☐ This proposal requires the service of a **registration authority**.

If yes, please identify the potential candidate:

[Click here to enter text.](#)

NOTE: Selection and appointment of the MA or RA is subject to the procedure outlined in the [ISO/IEC Directives](#), Annex G and Annex H, and the RA policy in the ISO Supplement, Annex SN.

☒ Annex(es) are included with this proposal (provide details)

Annex A: Proposal for an outline of the planned document

Additional information/questions

[Click here to enter text.](#)

Form 4: New work item proposal (NP)

Page 9

Annex A

OUTLINE

FOREWORD

INTRODUCTION

1. Scope
2. Normative references
3. Terms and definitions
4. Symbols and abbreviated terms
5. Generic principles of train detection
6. Functions involving train detection
7. Environmental requirements affecting train detection
8. Classification
 - 8.1 Train detection methods
 - 8.2 Possible selection criteria of train detection
 - 8.3 Impact of train detection method on operational requirements
9. Operation management guidance in degraded situations

Annexes

Annex A (informative) Implementation examples for general rules

Annex B (informative) Implementation examples for operation management guidance

Bibliography