NEW WORK ITEM PROPOSAL	
Date of presentation 2011-03-02	Reference number (to be given by the Secretariat)
Proposer **JISC**	**ISO/TC 122 / SC** **N** 558
Secretariat JISC/ISIRI	

A proposal for a new work item within the scope of an existing committee shall be submitted to the secretariat of that committee with a copy to the Central Secretariat and, in the case of a subcommittee, a copy to the secretariat of the parent technical committee. Proposals not within the scope of an existing committee shall be submitted to the secretariat of the ISO Technical Management Board.

The proposer of a new work item may be a member body of ISO, the secretariat itself, another technical committee or subcommittee, or organization in liaison, the Technical Management Board or one of the advisory groups, or the Secretary-General.

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

See overleaf for guidance on when to use this form.

IMPORTANT NOTE: Proposals without adequate justification risk rejection or referral to originator.
Guidelines for proposing and justifying a new work item are given overleaf.

Proposal (to be completed by the proposer)

Title of proposal (in the case of an amendment, revision or a new part of an existing document, show the reference number and current title)

English title **Direct Marking on Plastic Returnable Transport Items (RTIs)**

French title (if available) Inscription directe sur les éléments restituables en plastique de transport (RTIs)

Scope of proposed project

The objective of this proposal is to provide technical recommendations for a direct marking of two-dimensional symbols on returnable transport items (RTIs) used for logistics and the method of reading these symbols for the identification of RTIs.

Concerns known patented items (see ISO/IEC Directives Part 1 for important guidance)

☐ Yes ☒ No If "Yes", provide full information as annex

Envisaged publication type (indicate one of the following, if possible)

☐ International Standard ☐ Technical Specification ☐ Publicly Available Specification ☒ Technical Report

Purpose and justification (attach a separate page as annex, if necessary)

The most typical returnable transport item (RTI) actually used in physical distribution is probably a pallet. In the logistics industry, carton boxes, which are normally loaded on a pallet and tightly bound with a rope or net, are traditionally used as main packaging tools in numerous applications. In recent years, these carton boxes are being replaced by plastic-made returnable transport items (transport boxes) for environmental purposes. This has been a growing trend especially in the manufacturing industry where RTIs are regarded as important delivery means in transport between production sites and also in the commerce sector where various RTIs are implemented for carrying items from distribution center to retailers. However, due to a lack of well-established structure to control RTIs (owner management system), this movement of RTIs has created a new problem associated with uncontrolled, discarded, lost or stolen RTIs. Generally, in supply chain management, each RTI is filled with items and exchanged among the trading partners in the conventional forward logistics, and this RTI then emptied is collected for reuse in the reverse logistics (return process). Nevertheless, since no efficient RTI management system is available at present, collection of RTIs has not yet yielded successful results and this is adversely affecting the efficiency of overall shipping process. An ideal solution should be the use of identification code that can uniquely identify individual RTIs. Potential data carriers for this management system include OCR, linear symbols, 2D symbols and RFID. For the expansion of data carriers, development of a low cost data carrier in comparison to the price of the RTI is critical. Among the above-mentioned data carriers, the one using OCR technology is not recommended considering the cost of readers. A linear symbol is not suitable for storing a large volume of data and a large-sized symbol is required to encode 35-digit data required by ISO/IEC 15459-5. Therefore, this symbol is not appropriate, either. Likewise, RFID may be acceptable for some high-priced pallets, but considering its cost, using RFID for inexpensive pallets is not practical, and thus this should also be excluded from the candidates. Taking all these factors into consideration, a 2D symbol is assumed to be the most applicable data carrier for RTIs. Two different types of methods, namely a labelling and a direct marking, are available for applying 2D symbols on RTIs. This technical report proposes to mark 2D symbols directly on RTIs. It is undeniable that most labels are accompanied by a risk of coming off during the cycle of use, but using a highly durable label that will be hard to peel off is too costly. In the actual operations, a variety of different colors are used for RTIs and achieving a 100% read rate would be a very difficult task for some colors. This technical report is intended to give advice on the determination of most appropriate marking and reading method that fits the resin color.

Target date for availability (date by which publication is considered to be necessary) 2013-04-01

Proposed development track ☒ 1 (24 months) ☐ 2 (36 months - default) ☐ 3 (48 months)

Relevant documents to be considered

ISO/IEC 18004, Information technology- Automatic identification and data capture techniques - Bar code symbology- QR Code

ISO/IEC PRF TR24720, Information technology- Automatic identification and data capture techniques - Guidelines for direct part marking (DPM)

ISO/IEC 29158, Information technology- Automatic identification and data capture techniques - Direct Part Mark (DPM) Quality Guideline

ISO 28219, Packaging- Labelling and direct product marking with linear bar code and two-dimensional symbols

Relationship of project to activities of other international bodies

The main purpose of ISO/IEC JTC1 SC31 is to develop general standards with respect to print quality for direct marking technologies, while TC122WG7 is dedicated to the establishment of standards related to labels and direct marking technologies applicable to commercially available products.

Liaison organizations	**Need for coordination with:**
ISO/IEC JTC1 SC31	☐ IEC ☐ CEN ☐ Other (please specify)

Preparatory work (at a minimum an outline should be included with the proposal)

☐ A draft is attached ☒ An outline is attached. It is possible to supply a draft by 2011-08-01

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

Proposed Project Leader (name and address)	**Name and signature of the Proposer** (include contact information)
Akira Shibata Denso-wave incorporated 1,Yoshiike, Kusaki, Agui-cho, Chita-gun,Aichi 470-2297 Japan E-mail: akira.shibata@denso-wave.co.jp	Japanese Industrial Standards Committee(JISC) E-mail: isojisc@meti.go.jp

Comments of the TC or SC Secretariat

Supplementary information relating to the proposal

☒ This proposal relates to a new ISO document;

☐ This proposal relates to the amendment/revision of an existing ISO document;

☐ This proposal relates to the adoption as an active project of an item currently registered as a Preliminary Work Item;

☐ This proposal relates to the re-establishment of a cancelled project as an active project.

Other:

Voting information

The ballot associated with this proposal comprises a vote on:

☒ Adoption of the proposal as a new project

☐ Adoption of the associated draft as a committee draft (CD)

☐ Adoption of the associated draft for submission for the enquiry vote (DIS or equivalent)

Other:

Annex(es) are included with this proposal (give details)

☐

Date of circulation	Closing date for voting	Signature of the TC or SC Secretary
2011-03-30	2011-06-30	Akira Shirakura

Use this form to propose:

a) a new ISO document (including a new part to an existing document), or the amendment/revision of an existing ISO document;

b) the establishment as an active project of a preliminary work item, or the re-establishment of a cancelled project;

c) the change in the type of an existing document, e.g. conversion of a Technical Specification into an International Standard.

This form is not intended for use to propose an action following a systematic review - use ISO Form 21 for that purpose.

Proposals for correction (i.e. proposals for a Technical Corrigendum) should be submitted in writing directly to the secretariat concerned.

Guidelines on the completion of a proposal for a new work item

(see also the ISO/IEC Directives Part 1)

a) Title: Indicate the subject of the proposed new work item.

b) Scope: Give a clear indication of the coverage of the proposed new work item. Indicate, for example, if this is a proposal for a new document, or a proposed change (amendment/revision). It is often helpful to indicate what is not covered (exclusions).

c) Envisaged publication type: Details of the types of ISO deliverable available are given in the ISO/IEC Directives, Part 1 and/or the associated ISO Supplement.

d) Purpose and justification: Give details based on a critical study of the following elements wherever practicable. *Wherever possible reference should be made to information contained in the related TC Business Plan*.

1) The specific aims and reason for the standardization activity, with particular emphasis on the aspects of standardization to be covered, the problems it is expected to solve or the difficulties it is intended to overcome.

2) The main interests that might benefit from or be affected by the activity, such as industry, consumers, trade, governments, distributors.

3) Feasibility of the activity: Are there factors that could hinder the successful establishment or global application of the standard?

4) Timeliness of the standard to be produced: Is the technology reasonably stabilized? If not, how much time is likely to be available before advances in technology may render the proposed standard outdated? Is the proposed standard required as a basis for the future development of the technology in question?

5) Urgency of the activity, considering the needs of other fields or organizations. Indicate target date and, when a series of standards is proposed, suggest priorities.

6) The benefits to be gained by the implementation of the proposed standard; alternatively, the loss or disadvantage(s) if no standard is established within a reasonable time. Data such as product volume or value of trade should be included and quantified.

7) If the standardization activity is, or is likely to be, the subject of regulations or to require the harmonization of existing regulations, this should be indicated.

If a series of new work items is proposed having a common purpose and justification, a common proposal may be drafted including all elements to be clarified and enumerating the titles and scopes of each individual item.

e) Relevant documents and their effects on global relevancy: List any known relevant documents (such as standards and regulations), regardless of their source. When the proposer considers that an existing well-established document may be acceptable as a standard (with or without amendment), indicate this with appropriate justification and attach a copy to the proposal.

f) Cooperation and liaison: List relevant organizations or bodies with which cooperation and liaison should exist.