| NEW WORK ITEM PROPOSAL | |
|---|---|
| Date of presentation<br>**2009-06-13** | Reference number<br>(to be given by the Secretariat) |
| Proposer<br>**JISC** | **ISO/TC 17 / SC** N 2977 |
| Secretariat<br>**JISC** | |

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 **Calculation method of CO2 emission intensity from iron and steel production**

French title
(if available)

**Scope of proposed project**

**Part 1:**

**This standard stipulates calculation methods which producer using blast-furnace to manufacture steel use to calculation CO2 emission intensity per unit of crude steel production of the site.**

**Part 2:**

**This standard stipulates calculation methods which producer using electric arc furnace to manufacture steel use to calculate CO2 emission intensity per unit of crude steel production of the site.**

**The standard includes the following calculation methods.**

**a) Method of calculating CO2 emissions intensity of steel production site**

**b) Definitions of boundaries for the above calculation**

**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)

**This standard stipulates the common methodology to calculate CO2 emission intensity of steel production site. The indirect emission concept is applied to minimize the fluctuation of CO2 intensity resulting from difference in steel works configuration. Common boundary and conversion factor of the standard makes it possible to evaluate CO2 emission intensity of steel production site by common base. This allows improved intensity. (see attached annex)**

**Target date for availability** (date by which publication is considered to be necessary)

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

**Relevant documents to be considered**

**World Steel CO2 Emissions User Guide, Version 5.1 / The World Steel Association**

**Relationship of project to activities of other international bodies**

| **Liaison organizations** | **Need for coordination with:**<br>☐ 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

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) |
|---|---|
| Mr. Hiroki Kudo<br>The Insititute of Energy Economics,Japan<br>13-1, Kachidoki 1-Chome,Chuo-ku,Tokyo 104-0054<br>Japan<br>E-mail:kudo@tky.ieej.or.jp | Mr.Hiroki Kudo<br>Chairman of JISF committee on ISO standard ization of Calculation method for CO2 emission intensity<br>E-mail: kudo@tky.ieej.or.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)

☒ **An Annex for purpose and justification is attached.**

| Date of circulation | Closing date for voting | Signature of the TC or SC Secretary |
|---|---|---|
| **2009-06-13** | **2009-09-13** | **TAKAYOSHI YAGI / Secretary of TC17** |

**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.

# Annex of purpose and justification

Countries worldwide are taking actions to reduce greenhouse gas emissions in order to combat global warming. The steel industry is attracting much attention as a major emitter of $CO_2$. On the other hand, the importance of steel is increasing as a material that is vital to dealing with the climate change problem. For example, high-performance grades of steel reduce fuel consumption in the transportation sector and steel is a basic material in equipment used to tap renewable energy sources. Furthermore, steel is used to build weather-resistant structures that are necessary for adaptations for global warming. At the same time, there are growing demands for production processes that can cut $CO_2$ emissions per ton of steel produced. Using these high-efficiency processes would allow steelmakers to supply steel more efficiently while generating less $CO_2$.

The World Steel Association (worldsteel, formerly the International Iron and Steel Institute), whose members include more than 130 major steelmakers in 55 countries and regions, is determined to meet this demand for more efficient production processes. To accomplish this goal, worldsteel decided that the steel industry should take aggressive measures to help solve the problem of climate change. This is why worldsteel has started using the Global Steel Sector Approach, which aims to achieve global improvements in $CO_2$ emission intensity for the entire steel industry. Using this approach requires gathering and compiling $CO_2$ emission intensity data for steel production in order to facilitate comparisons among countries. To determine how to collect the data, energy technology professionals from major member steel companies discussed this issue starting from 2006 for about one year. An agreement was reached on the methods to be used by worldsteel for this process, and at the October 2007 worldsteel (IISI) annual conference, approval was given to start gathering $CO_2$ emission intensity data using this methodology. Actual data collection activities started from April 2008. As of March 2009, worldsteel had already received data representing 60% of the total crude steel output of worldsteel members and 35% of global crude steel output.

The current proposal to make this methodology an ISO global standard is intended to allow all steelmakers in the world, including companies that do not belong to worldsteel, to use the worldsteel methodology for calculating $CO_2$ emission intensity. Applying this uniform data gathering and

calculating standard, which has already been approved by the world's leading steelmakers, will yield useful information for lowering $CO_2$ emission intensity at steelmakers worldwide. With this goal in mind, the Climate Change Policy Group, a worldsteel unit responsible for studying policies and gathering data involving climate change, approved at its March 2009 meeting to proceed with measures to make the worldsteel methodology an ISO standard.

The methodology for calculating $CO_2$ emission intensity should be developed by steel engineers who have an extensive knowledge of steelmaking processes, which are extremely complex, and requires experience for these processes. In fact, worldsteel used a committee of specialists as noted above to develop its own calculation method. In addition, at the $44^{th}$ meeting of the ISO Technical Management Board, which took place in February 2009, the Resolution 21/2009 concerning energy efficiency and $CO_2$ indicators was approved. The resolution states that; "TMB encourages the relevant technical committees for energy-intensive industries to launch such standardization." Consequently, with regard to activities to make the $CO_2$ emission intensity calculation methodology an ISO standard, JISF believes that, just as the TMB has already requested, the appropriate forum to proceed this should be Technical Committee 17, which is the ISO committee responsible for establishing ISO standards for the steel industry. For these reasons, we hereby submit this proposal to Technical Committee 17.