



PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

PROPOSER:

JISC

DATE OF CIRCULATION:

Click or tap to enter a date.

CLOSING DATE FOR VOTING:

Click or tap to enter a date.

A proposal for a new field of technical activity shall be submitted to the Office of the CEO, which will process the proposal in accordance with [ISO/IEC Directives, Part 1, Clause 1.5](#).

Furthermore, a proposal will be considered as complete if every information field is complete and follows the guidelines for proposing and justifying a new field of activity given in the [ISO/IEC Directives, Part 1, Annex C](#).

TITLE

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.2](#))

Human-centered transition pathways

SCOPE

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.3](#))

Standardization in the field of human-centered transition pathways for resolving societal issues, including terminologies, principles general requirements and guidance, metrics and indicators, requirements for organizations, societal systems, and products that support implementation, use of technical enablers and application to specific sectors.

The proposed TC will work in cooperation with existing committees on subjects that may support the human-centered transition.

Note: Human-centered transition is one of the practical pathways of societal and industrial changes that lead to the ideal status where the addressed societal issues are resolved without sacrificing the human well-being of today. Such transition is often achieved with advanced technologies, including cyber physical systems.

Excluded:

Aspects of human-centered transition pathways already covered by existing committees.

PURPOSE AND JUSTIFICATION (Please use the field immediately below or attach an annex.)

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.13](#))

1. General

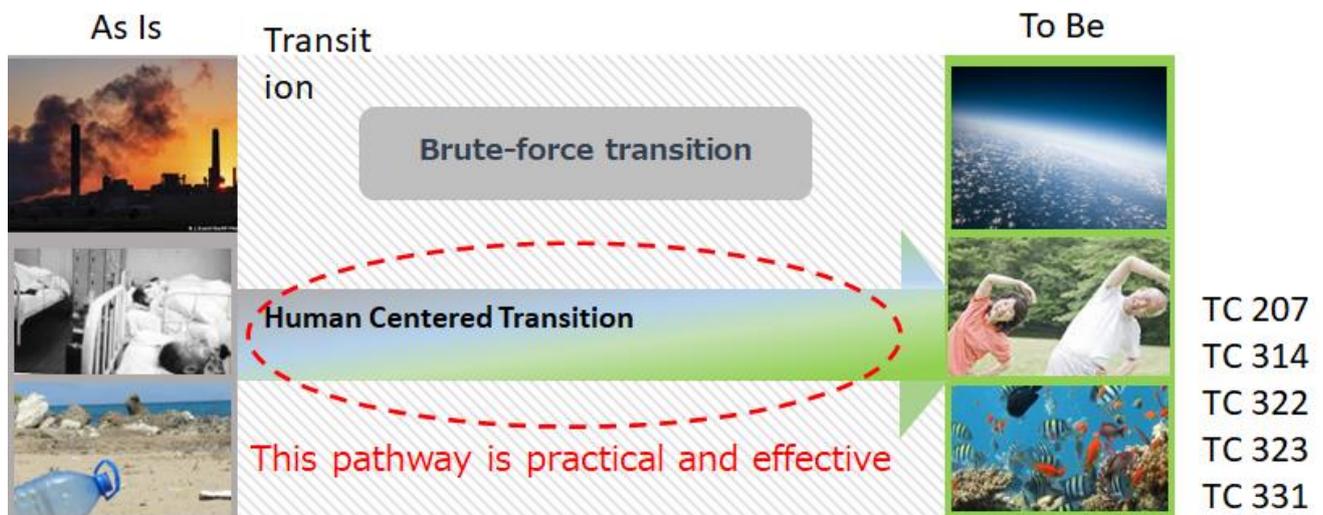
Our human society is always facing various societal issues such as ageing, pollution, poverty, climate change, and biodiversity loss which needs dedicated efforts to implement necessary changes to resolve those societal issues. Since those societal issues are significant and involve diverse stakeholders, designing transition

pathways acceptable to most stakeholders is essential to make the intended transition happen. In many cases, societal issues emerge from the systemic failure of current societal systems that support the life and well-being of human society today. Therefore, drastic and brute-force transitions to an ideal situation tend to cause unbearable pain in our current lives. For example, the mobility sector has been blamed for its carbon emission from the use of fossil fuels, but immediately and completely quitting the use of fossil fuels would be unrealistic and unacceptable for most of the relevant stakeholders because it will deteriorate their quality of life that is supported with the mobility services of today. To this end, the practically feasible transition pathways are limited to human-centered ones without causing unbearable pain to the stakeholders.

At the same time, human-centered transition should not be used as a get-out-of-jail-free card to not align with the necessary course of changes to resolve the addressed societal issues. A transition pathway must be a continuation of gradual and actual changes to the ideal situation, and the stakeholders should be accountable for it.

In summary of the above, human-centered transition is a concept featuring core elements as follows (the stringent definition will be developed by a global consensus).

- ✓ Mitigate the short-term adverse impacts on the well-being of current human society (Human-centered, inclusive, etc.)
- ✓ Contribute better and less harmful to the achievement of addressed societal issues compared to current societal and technical systems (Harm reduction, etc.)
- ✓ Accountable for not just delaying or escaping from the necessary changes (alignment to the final goal, governance, policy, strategy, anti-wash, evidence-based, traceability, verification, incremental improvement, etc.)



There are various concepts and frameworks are proposed, especially in the field of transition finance. However, these frameworks are not standardized and different from each other. Also, these frameworks do not focus on the human-centered aspects of transition. It is essential to develop a series of standards in this area to accelerate the transition whereby providing a consistent framework for implementation, measurement, reporting and verification.

2. Learning from preceding discussion in ISO

Prior to this proposal, IWA 39 “Gap analysis for standardization on sustainable and human-centred societies enabled with cyber physical systems” (<https://www.iso.org/standard/81618.html>) was conducted. This IWA 39 was launched by raising the issue of slow and limited progress of behavioral changes of stakeholders even though many standards have already been established to define the ideal goals to solve societal issues. In the discussion of IWA 39, it was widely accepted that the transition pathways that are too painful to current

lives will not be accepted and less painful ways need to be provided with the utilization of advanced technologies.

In IWA 39:2022, it was recognized that a generic standardization activity addressing human-centered transition for sustainability through the use of advanced technologies is necessary, which also contributes to facilitating existing sector or domain-specific committees to develop their own documents within their scopes in a harmonized manner.

17 goals of UN SDGs are well-known and various initiatives have been launched since SDGs were adopted. For example, the issue of climate change and carbon emissions has been addressed with the highest priority to protect future generations. However, at the same time, it is crucial to maintain and improve the quality of life and the well-being of the current generation, especially in emerging economies, to realize an inclusive future for our society. For example, zero poverty with associated economic growth is an urgent issue, but naive economic growth can cause an adverse impact on environmental issues. This kind of issue-linkages needs to be decoupled. About 100 experts from 30 countries representing a variety of SDOs (e.g., ISO, IEC, ITU-T, JTC 1) participated in this discussion and published IWA 39 as a result of the discussion on this topic.

This IWA 39 discussion boils down to two key subjects to be dealt with in the future, namely, "transition" and "human-centered", which are also closely related to introducing new cyber technologies to a physical world as enablers or prohibitors. The transition to sustainability needs to be human-centered, in other words, acceptable for the ordinary public without causing too much pain so that accelerate their behavioural change toward sustainability. This transition also needs to be based on practically implementable steps of change and shall not be an indulgence to justify the permanent use of the current societal systems.

Recently published IWA 42 (<https://www.iso.org/standard/85089.html>) also indicates the importance of such pathways to achieve net zero. It also includes key common concepts with this proposal. For example, "science-based pathway" is defined as "trajectory to achieve global net zero greenhouse gas emissions based on scientific evidence" and 5.9 *Equity and justice* states "Mitigation actions take a human-centred approach, safeguarding the rights of the most vulnerable people and communities".

Additionally, the IWA 39 discussion underlines the fact that although advanced technologies including cyber physical systems are effective enablers to resolve the issue-linkages in a transition, they also may have societal and environmental adverse impacts. For example, there is a remarkably rapid implementation of a metaverse in various areas of societal systems. The metaverse can be a good enabler for releasing the physical constraint of people (e.g., aged, handicapped or suffering from illness), promoting gender equality and inclusivity, as well as contributing to decrease GHG emission by making physical transportation unnecessary. However, it can bring various potential risks of adverse impacts on other sustainability issues, including mental and ethical ones; thus, stringent criteria are needed to protect humans from the adverse impacts of metaverse under the context of human-centered transition for sustainability. Moreover, other use cases have been identified, such as high energy consumption associated with cryptocurrency and the risk of infringing basic human rights associated with unlimited use of AI and big data.

3. Utilization of market mechanism

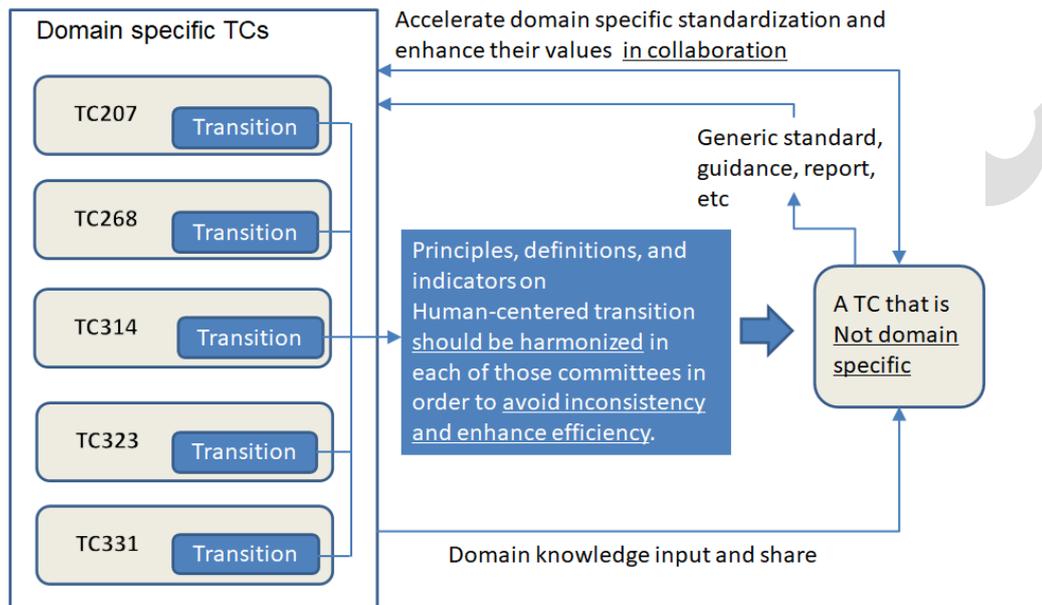
Our current lives are supported by various products and services that are provided by private and public sectors. So as to promote the behavioral change toward the ideal status to solve societal issues, it is essential to develop transition pathways for those products and services as well as the operation of their providers and gradually improve them according to the transition pathways. As explained earlier, the transition does not take place in one night. So, it would be necessary to ensure that even each step of improvement is a part of the transition pathway and surely leads to the final goal. For the communication and responsibility to the relevant stakeholders, the providers of the products and services need to be accountable for their products, services and operations to be aligned with and part of the predetermined transition pathways.

A series of standards that defines Human-centered transition pathways will provide service providers with a common framework to explain to their shareholders and customers that their products and services are on the human-friendly way toward the ideal status, even if not perfect at present. This will promote the commercial success of products and services that are aligned and contribute to the progress of the behavioral change to solve societal issues. This will also provide opportunities for better financing.

4. Relationship and complementarity with existing TCs

There is a possibility that existing TCs addressing societal issue-related scopes develop their own transition schemes. However, without harmonized principles and methodologies, their approaches will likely be slightly different and inconsistent, which indicates the necessity of a horizontal function as proposed by this document. This proposed new TC can provide harmonized common principles, terms and definitions, generic requirements and guidance with metrics and indicators. Each TC will be able to utilize the deliverables of this proposed TC to develop standards on their domain-specific frameworks for human-centered transition pathways.

The reason why a horizontal committee is needed



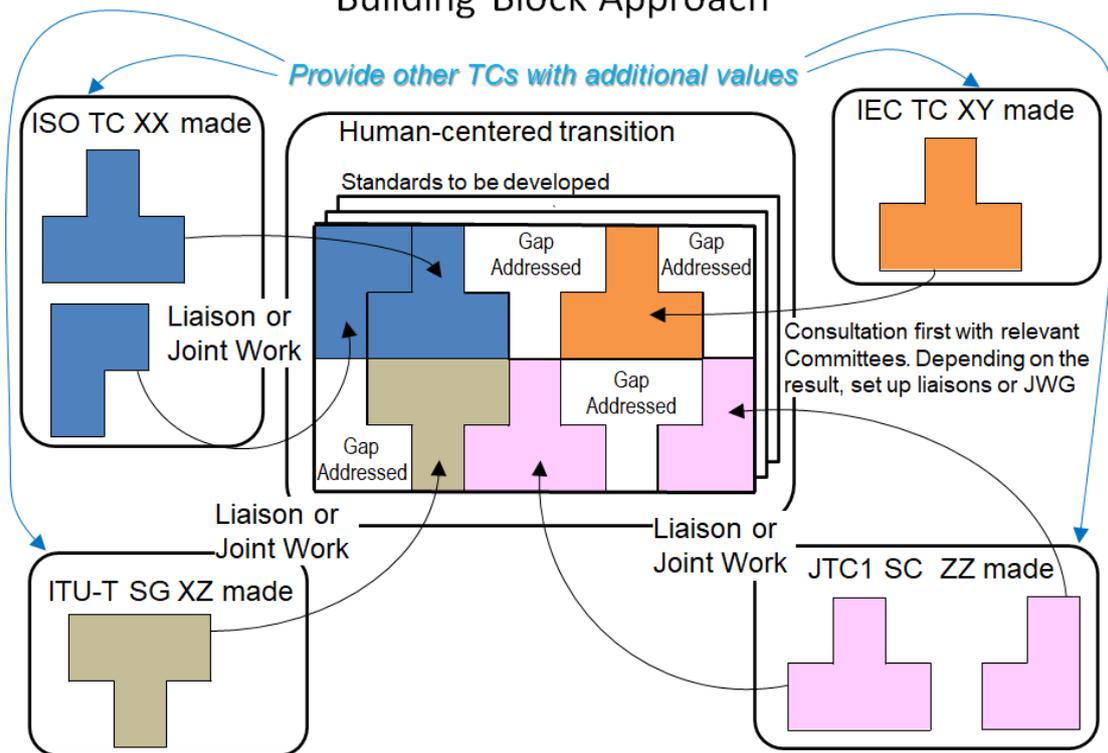
This proposed TC provides relevant TCs that mainly address societal issues with the following benefits.

- Opportunities to work on the same subject, "Human-centered transition", together with diverse experts such as environment, ageing societies, circular economies, biodiversity and smart cities.
- Able to harmonize the same concept, principle and framework in different societal-issue domains.
- Expedite the development of transition standards in each committee by utilizing co-developed documents in an essential part while focusing on the requirements, guidance and examples, which are based on its domain-specific expertise.

The reason for proposing a new TC instead of a coordination group is that the coordination group cannot develop and maintain documents that other committees can adequately utilize as references for requirements or terms and definitions when developing their standards.

This proposed committee will adopt "Building block approach", where the development of a document starts with consultation between relevant committees. Depending on the result, the choice may be setting up either liaisons (one way/two way) or JWG with the relevant committees. This proposed new committee will work on only the remaining gaps.

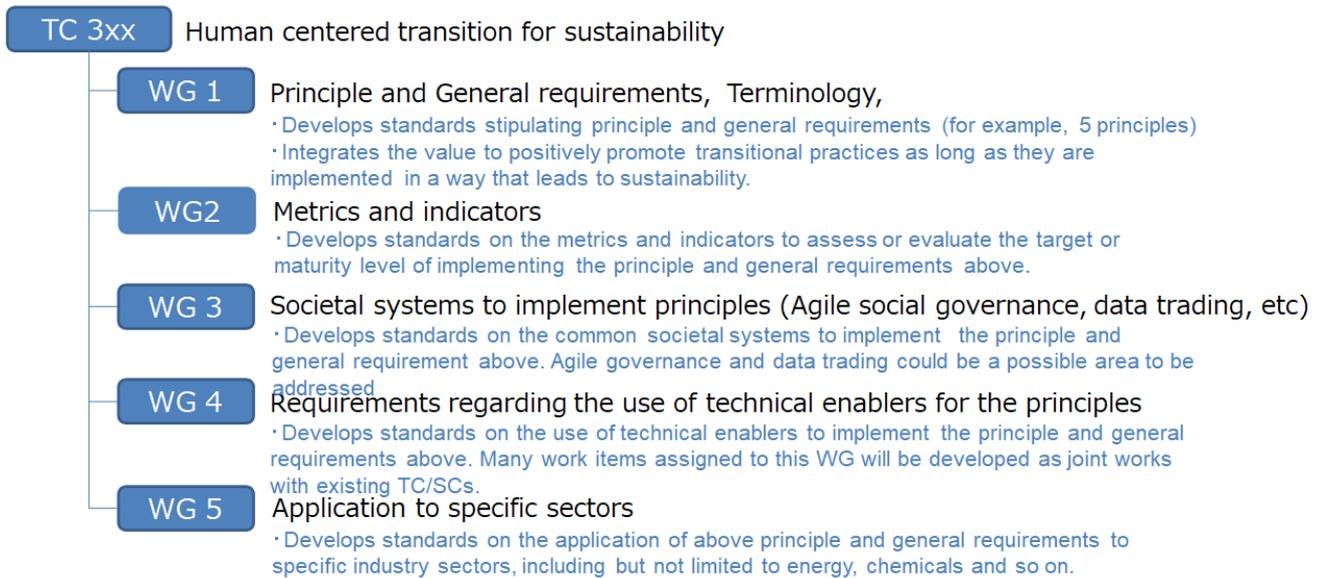
Building Block Approach



PROPOSED INITIAL PROGRAMME OF WORK (Please use the field immediately below or attach an annex) (Please see the [ISO/IEC Directives, Part 1, Annex C.4.4 and C.4.5](#)) For each item, the initial work programme shall define the deliverable type and target dates. The initial work programme shall also assign priorities to the different items.

This proposed committee may have multiple separated themes for programmes of work, as shown below. The initial work program will be conducted in WG 1 addressing "Terms, principles and general Requirements for human-centered transition pathways".

However, other potential work items will be proposed later, such as under WG4 and WG 5. The work items addressed in those specific areas will often overlap with the scope of an existing TC. In such a case, as described above, no duplication of work will be confirmed, and in addition, cross-collaboration should be established through liaison or joint work.



RELATION OF THE PROPOSAL TO EXISTING INTERNATIONAL STANDARDS AND ON-GOING STANDARDIZATION WORK

- The proposer has checked whether the proposed scope of the new committee overlaps with the scope of any existing ISO or IEC committee or JTC1 sub-committee
- If an overlap or the potential for overlap is identified, the affected committee has been informed and an agreement has been reached between proposer and committee on
 - i. modification/restriction of the scope of the proposal to avoid overlapping,
 - ii. potential modification/restriction of the scope of the existing committee to avoid overlapping.
- If agreement with the existing committee has not been reached, please explain why the proposal should be approved.

Click or tap here to enter text.

- Have proposals on this subject been submitted into an existing committee and rejected? If so, what were the reasons for rejection?

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LISTING OF RELEVANT DOCUMENTS (SUCH AS STANDARDS AND REGULATIONS) AT INTERNATIONAL, REGIONAL AND NATIONAL LEVEL

(Please see the ISO/IEC Directives, Part 1, Annex C, Clause C.4.6)

ISO IWA 39

ISO IWA 42

OECD Guidance on Transition Finance: Ensuring Credibility of Corporate Climate Transition Plans

Transition planning | Glasgow Financial Alliance for Net Zero (gfanzero.com)

ASEAN Taxonomy for Sustainable Finance - ASEAN Main Portal

Climate Transition Finance Handbook » ICMA (icmagroup.org)

Hedonistic sustainability

(https://worldarchitecture.org/articles/cgcez/bjarke_ingels_on_hedonistic_sustainability.html)

LISTING OF RELEVANT COUNTRIES WHERE THE SUBJECT OF THE PROPOSAL IS IMPORTANT TO THEIR NATIONAL COMMERCIAL INTERESTS

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.8](#))

India, Indonesia, Slovenia, United Kingdom and other developed and emerging economies

LISTING OF RELEVANT EXTERNAL INTERNATIONAL ORGANIZATIONS OR INTERNAL PARTIES (OTHER THAN ISO AND/OR IEC COMMITTEES) TO BE ENGAGED AS LIASONS IN THIS WORK

(Please see the [ISO/IEC Directives, Part 1, Clause C.4.9](#))

- TC 207 “Environmental management”
- TC 268 “Sustainable cities and communities”
- TC 309 “Governance of organizations”
- TC 314 “Aging society”
- TC 322 “Sustainable finance”
- TC 323 “Circular economy”
- TC 324 “Sharing economy”
- TC 331 “Biodiversity”
- IEC/TC 111 “Environmental standardization”
- ISO/IEC JTC 1

IDENTIFICATION AND DESCRIPTION OF RELEVANT AFFECTED STAKEHOLDER CATEGORIES

(Please see [ISO Connect](#))

	Benefits/Impacts/Examples
Industry and commerce – large industry	New markets of products and services for Human-centered transition pathways will be established and will provide a wide range of business opportunities for industry and commerce.
Industry and commerce – SMEs	SME is especially relevant to the human-centered aspects of the transition. The inclusivity principle will help their transition without pain and burden.
Government	Common principles and implementation guidance for Human-centered transition will prevent different industries or domains from establishing similar standards separately. Such common principles and guidance will improve policy effectiveness and promote efficient state budget execution, including procurements.
Consumers	Consumers will be able to recognize products and services, as well as companies that are accountable for the human centered transition to the addressed societal issues without "wash".

Labour	New markets of products and services for Human-centered transition pathways will be established, and labours will enjoy new employment opportunities in line with decent work stated in UN SDG's goal 8.
Academic and research bodies	Common principle and implementation guidance will provide multiple use cases of Human-centered transition reported in the same framework and data format. This will benefit academia and research bodies to conduct comparative or statistical research.
Standards application businesses	Common principles and implementation guidance for Human-centered transition will prevent different industries or domains from establishing similar standards separately. Such common principles and general requirements will reduce the burden of providing or referring to multiple standards of transition for various industries or domains.
Non-governmental organizations	NPO will be able to distinguish products and services, as well as companies that are accountable for the human-centered transition from those that are not accountable for aligning to the course of change to resolve the addressed societal issues.
Other (please specify)	Click or tap here to enter text.

EXPRESSION OF LEADERSHIP COMMITMENT FROM THE PROPOSER

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.12](#))

JISC is willing to provide the committee secretariat if the proposal is approved.

- The proposer confirms that this proposal has been drafted in compliance with iso/iec directives, part 1, annex c**

SIGNATURE OF THE PROPOSER

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COMMENTS OF THE ISO CENTRAL OFFICE (IF ANY)

Click or tap here to enter text.