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|  | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2025-2028 | | | | | TSAG-TD211 |
| TSAG |
| Original: English |
|  | | |  | | | Geneva, 26-30 January 2026 |
| **TD**  **(Ref.:** [**SG5-LS14**](https://www.itu.int/ifa/t/2025/ls/sg5/sp18-sg5-oLS-00014.docx)**)** | | | | | | |
| **Source:** | | | ITU-T Study Group 5 | | | |
| **Title:** | | | LS/i/r on the activities and studies on sustainable digital transformation (reply to TSAG-LS7) [from ITU-T SG5] | | | |
| **LIAISON STATEMENT** | | | | | | |
| **For action to:** | | | | TSAG | | |
| **For information to:** | | | | – | | |
| **Approval:** | | | | ITU-T Study Group 5 meeting (Geneva, 12 June 2025) | | |
| **Deadline:** | | | |  | | |
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| **Abstract:** | Study Group 5 reviewed and discussed the liaison received from TSAG on “The activities and studies on sustainable digital transformation” |

This liaison statement replies to [**TSAG-LS7**](https://www.itu.int/ifa/t/2025/ls/tsag/sp18-tsag-oLS-00007.docx).

ITU-T Study Group 5 would like to thank TSAG for their liaison statement.

ITU-T Study Group 5 is the lead Study Group on:

* Circular economy and e‑waste management
* ICTs related to the environment, energy efficiency, clean energy and sustainable digitalization for climate actions

In this regard, ITU-T Study Group 5 has developed a series of standards and supplements available here: <https://www.itu.int/ITU-T/recommendations/index_sg.aspx?sg=5>

Additionally, ITU-T Study Group 5 would like to highlight the Recommendations and ongoing work as shown in the Annex 1.

ITU-T Study Group 5 looks forward to continuing collaboration with TSAG.

**Annex 1  
Activities and studies related to sustainable digital transformation from Study Group 5**

| **Sector/Domain** | **Study group or**  **SDO** | **Title of deliverable** | **Scope of deliverable** | **Link to sustainable digital transformation** | **Current status** | **Reference/URI** |
| --- | --- | --- | --- | --- | --- | --- |
| digital transformation for sustainable development is applied | ITU-T SG5 | L.SDT – Definition on Sustainable Digital Transformation | This Recommendation will provide a definition for sustainable digital transformation. The definition will take into consideration the environmental and sustainability aspects of digital technologies, starting from the design phase and the way in which circular principles can be implemented, and emphasize the role of environmental sustainability in digital transformation. This Recommendation will also provide an overview on the current state of digital transformation and the lack of discussion on its environmental cost. It will also highlight a series of recommendations for achieving sustainable digital transformation, from leveraging renewable energy to power digital infrastructure to reducing the energy demand while improving energy efficiency of ICT equipment, as well as the material effects of ICT equipment across their lifespan, from the extraction of primary and secondary materials, their lifespan, and final recycling and e-waste management. |  | Ongoing work | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=21842> |
| digital transformation for sustainable development is applied | ITU-T SG5 | L.1480 - Enabling the Net Zero transition: Assessing how the use of ICT solutions impacts GHG emissions of other sectors | The present document establishes a methodology for assessing how the use of ICT solutions impacts GHG emissions of other sectors. |  | Consented | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=21898> |
| digital transformation for sustainable development is applied | ITU-T SG5 | L.1370 - Sustainable and intelligent building services | This Recommendation sets out the services and data required for a sustainable and intelligent building to improve the quality of life of citizens, as well as the specification of its functional features and the technical requirements to be met by the device that provides these services and data. |  | published | <https://www.itu.int/ITU-T/recommendations/rec.aspx?rec=13724> |
| digital transformation for sustainable development is applied | ITU-T SG5 | L.1371- A methodology for assessing and scoring the sustainability performance of office buildings | This Recommendation specifies a methodology for assessing and scoring, and subsequently improving, the sustainability performance of existing office buildings. |  | published | <https://www.itu.int/ITU-T/recommendations/rec.aspx?rec=14304> |
| digital transformation for sustainable development and protection of biodiversity | ITU-T SG5 | L.Carbon\_SLP - Guidelines for the Construction of Smart Low-Carbon Power Supply Facilities Adapted to Island Biodiversity | This Recommendation defines the construction of smart low-carbon power supply facilities adapted to island biodiversity and is applicable to guide the process and construction program of smart low-carbon power supply facilities in island areas. |  | Ongoing work | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=22394> |
| digital transformation for sustainable development in cities | ITU-T SG5 | L.TR\_DG-assessment - Assessment method of sustainable transition in cities using ICTs | This draft Technical Report specifies the assessment method of sustainable transition in cities using ICTs, so providing a reference for stakeholders to accurately judge the process of digital sustainable transition in cities. |  | Ongoing work | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=21927> |
| digital transformation for sustainable development is applied | ITU-T SG5 | L.NZ\_Indicator & BP  Enablement indicator of information and communication technologies to other sectors and best practices to achieve Net Zero goal | This draft Recommendation describes best practices aimed at enablement indicator of information and communication technologies (ICT) to other sectors and best practices, and provides an ICT enablement evaluation method. |  | Ongoing work | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=21914> |
| digital transformation for sustainable development is applied | ITU-T SG5 | ITU-T L. ICT4LGTL Guidelines of Using ICTs for Low Carbon Transition of Logistics | This Recommendation specifies the basic principles, application methods and key performance indicators (KPIs) of using ICT for low-carbon transition of logistics. It focuses on the application of ICT in energy conservation and GHG emission reduction throughout the entire process of logistics such as warehousing, loading and unloading, sorting and distribution. It provides implementation guidance for logistics enterprises, industrial parks and governing authorities. It aims to promote the low-carbon transition of the logistic industry through digital technologies and enhance climate resilience capabilities. This Recommendation covers;  (1) Basic principles for using ICT for the low-carbon transition of logistics;  (2) Application methods of ICT in low-carbon transition of the entire logistics process such as warehousing, transportation, loading and unloading, sorting, packaging, distribution and reverse logistics;  (3) Evaluation indicators for stakeholders to assess the effectiveness of using ICT for low carbon transition of logistics. |  | Ongoing work | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=22395> |
| digital transformation for sustainable development is applied | ITU-T SG5 | L.ENV\_AI - Guidelines for Assessing the Environmental Impact of Artificial Intelligence systems | This Recommendation provides guidelines for assessing the environmental impact from Artificial Intelligence (AI) systems objectively and transparently. The scope includes: - Overview of the impacts of AI on environment;  - Solutions and framework for evaluating the environmental impact of AI |  | Ongoing work | <https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=21908> |

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