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| A black and white logo  Description automatically generated with low confidence | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2022-2024 | FG-AI4EE-WG1-O-014 |
| **Focus Group on Environmental Efficiency for AI and other Emerging Technologies** |
| **Original: English** |
| **WG(s):** | Working Group 1 | e-meeting, 23 March 2022 |
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| **Contact:** | FG-AI4EE Secretariat | E-mail: tsbfgai4ee@itu.int  |

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| **Abstract:** | This document contains the Report of the Working Group e-meeting held on 23 March 2022. |

# Introduction

Experts of Working Group 1 (WG1) met virtually on 23 March 2022. The draft agenda can be found in document [FG-AI4EE-WG1-I-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-054.docx). The agenda was approved without modifications.

All documents discussed are available on WG1 SharePoint page at:

 <https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/SitePages/WG1.aspx>

1.1 Participants

This e-meeting was attended by 18 participants. The final list of participants is available in Annex 1 of this report.

# Opening

ITU welcomed participants to the call and provided an update on the **Fifth FG-AI4EE meeting** that will be held in Vienna, Austria, and online, **4 May 2022**

The Meeting will be proceeded by a full day **Workshop on 3 May 2022**, at the same location. Both events are kindly hosted by Vice-Chairmen, Dr Barbara Kolm. Further details will be shared with the Group by e-mail in the coming days. Participants are invited to register here as soon as possible:

* [Registration](https://www.itu.int/net4/CRM/xreg/web/Login.aspx?src=Registration&Event=C-00011272)

Working Group 1 Co-Chairman, Joel Alexander Mills, was unable to join the meeting, and Pierre Major, AugmentCity AS, chaired it on his behalf. Pierre proceeded to introduce the agenda and extended a welcomed all new FG members.

The purpose of this meeting was to discuss progress on D.WG1-05, D.WG1-06, and D.WG1-08

**3 Discussion and Summary of inputs**

**3.1** **Draft Technical Specification D.WG1-05 Reporting templates on AI, AR, and ML, [see doc** [FG-AI4EE-WG1-I-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/_layouts/15/WopiFrame.aspx?sourcedoc=%7B1CB40831-8E05-440E-AB12-4E427D305623%7D&file=FG-AI4EE-WG1-I-051.docx&action=default)] Leader: Annik Magerholm Fet.

On behalf of deliverable leader Annik Magerholm Fet, Norwegian University of Science & Technology, Pierre Major presented the progress on this deliverable.

Pierre highlighted that Annik’s presentation during the 28 January 2022 meeting [see doc. [FG-AI4EE-WG1-I-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/_layouts/15/WopiFrame.aspx?sourcedoc=%7B95E33ABE-599F-4E74-A678-2A4BDE42F224%7D&file=FG-AI4EE-WG1-I-052.pptx&action=default)] was extremely rich in methodology, and claimed that further progress on this deliverable was dependent on the input of other WG1 members. In doing so, he called on participants to offer some guidance on which standard KPIs to use to build this reporting system. As agreed during last meeting. Three KPIs from two FG-AI4EE [Technical Specification D.WG1.05; Technical Specification D.WG2-02] will be used. Feedback on their analyses and target is needed from experts

**3.1.1 Comments**

None.

**3.1.2 Main Action Points**

* Members are invited help out Annik and Pierre by indentifying standard KPIs to use to build this reporting system, and review/ select KPIs from [TS D.WG1.05; and TS D.WG2-02] for inclusion in this report.
* Editors to pursue completion of deliverable and present a first draft of D.WG1-05 at the next Working Group 1 meeting on 21 April 2022.

**3.2** **Draft Technical Specification D.WG1-06 Neutral Navigational Matrix for AI-driven Technologies for Smart Sustainable Cities, [see doc** [FG-AI4EE-WG1-I-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-056.zip)] Leader: Barbara Kolm

Deliverable leader Barbara Kolm, Austrian Economics Center, presented the updated version of the matrix for the draft technical specification D.WG1-06. She thanked Rüdiger Stix, DX-Danube Excellence, and Victoria Schmid, Austrian Economics Center, for putting the matrix into one final document. Barbara highlighted that this matrix incorporates the state of the art of the EU, of Asia, and of the Americas, and hence offers a global image, claiming that it is a tool that can be used by all stakeholders.

**3.2.1 Comments**

* Pierre thanked Barbara and team for the tremendous job of putting together the matrix. All members applauded the work of Barbara and Team
* ITU highlighted that the next step would be to fill out the template document. The template document is intended to provide guidance on how to use the excel file, providing use cases.
	+ Ludovic Noblet, Fondation B-COM, offered to help in putting together the document.
* Malcolm Mason, Sure International, asked how far along the X-axis the document is intended to go. He recommended that Siamese Networks and Transformers (GPT, BERT, T5) be added.
* Some concerns were raised about the number technologies listed which might fall beyond the scope of the document and of smart sustainable cities. It was suggested to remove some variables to keep to the scope of the document.
	+ Rüdiger underscored that they tried to make the matrix as complex as necessary, but not more.
	+ Victoria offered to split the document into separate technologies, in order to facilitate the use of the matrix and not to lose any of the information in it.

**3.2.2 Main Action Points/Agreed way forward**

* Rüdiger’s Team to kindly:
	+ Create a subset on the excel of relevant use cases to enhance readability of the Matrix/ Create different "chapters" in different tables to preserve the data inputted.
	+ Divide the matrix by technologies, and focus on a given set of technology fields
* Abdlenasser Abdelaal to kindly:
	+ Help filling out the publication template
		- Work on an updated scope for the document
		- Submit a contribution on uses cases to illustrate the usability of the matrix.

**3.3 Draft Technical Report D.WG1-08 Connecting Environmental Efficiency of Digital Technologies to the Sustainable Development Goals.** Leader: Daniela Tulone.

New deliverable leader Daniela Tulone, ecoSurge, took the opportunity to introduce herself to the WG1 members. Daniela gave a presentation [see doc. [FG-AI4EE-WG1-I-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-055.zip)] containing her intended direction for the deliverable, while also proposing a structure for it.

She underscored that the report intends to address two topics, namely the use of new technologies for approaching the SDGs and making these technologies more sustainable. Daniela identified as a potential output of the report the highlighting of the risks of a short-sighted analysis in developing new products and services can have.

In terms of the proposed preliminary outline, D.WG1-08 would start by introducing the problem and the need for a multi-dimensional assessment, then moving on to studying common misleading approaches. Following this, the report would turn to highlighting potential risks and competing narratives, and conclude by offering some recommendations.

 **3.3.1 Comments**

* Pierre thanked Daniela for her presentation and opened the floor for comments.
* Vimal Wakhlu, ITU-APT Foundation of India, asked whether it would be necessary to start by mapping each SDG with emerging technologies, to see which would have the greatest impact. He underscored that challenges vary from region to region.
* Abdelnasser noted that the scope might be too wide.
* Ludovic offered to help with this deliverable.

**3.3.2 Main Action Points**

* Gabrielle Samuel to support Daniela’s work on the deliverable.
* ITU to connect Ludovic with Daniela for support on completing the deliverable.

# 4 Next steps

* Annik and team to complete a first draft of draft technical specification D.WG1-05 by next Working Group 1 meeting.
* Rüdiger and team, with the help of Abdelnasser, to work on D.WG1-06 in order to present first draft of the deliverable by the next Working Group 1 meeting.

# 5 Next e-meeting

The next WG1 e-meeting was agreed for **21 April 2022, 15:00-16:30 CEST**. The objectives of this meeting will be to:

* Present the first draft of D.WG1-05.
* Present the first draft of D.WG1-06.
* Present the progress on D.WG1-08
* Any other contributions

# 6 Closing

Pierre closed the e-meeting by thanking the participants for participating.

# 7 Other business

ITU updated WG1 on the details of fifth FG-AI4EE meeting to take place on 4 May, 2022, prior to the opening of the WG1 meeting.

**Annex 1**

**List of participants[[1]](#footnote-2)**

| Prefix | Last Name | First Name | Company | Country |
| --- | --- | --- | --- | --- |
| Mr. | Abdelaal | Abdelnasser | King Faisal University | Saudi Arabia |
| Ms. | Ahmeti | Fatime | International Telecommunication Union | Switzerland |
| Mr. | Barrionuevo | Pablo | Telefónica S.A. | Spain |
| Mr. | Dr. Iur. Stix, PhD | Rüdiger | DX-Danube Excellence | Austria |
| Mr. | Gabarda Balaguer | José Esteban | jose esteban gabarda balaguer | Spain |
| Ms. | Kolm | Barbara | Austrian Economics Center | Austria |
| Mr. | Maas | Markus | Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway | Germany |
| Mr. | Major | Pierre | AugmentCity AS | Norway |
| Mr. | Mason | Malcolm | Sure International |  |
| Mr. | Mujica | Sergio | International Telecommunication Union | Switzerland |
| Mr. | Noblet | Ludovic | Fondation B-COM | France |
| Mr. | Pallan | Madhavan | United Nations Research Institute for Social Development | Switzerland |
| Ms. | Restivo | Charlyne | International Telecommunication Union | Switzerland |
| Ms. | Samuel | Gabrielle | King's College London | United Kingdom |
| Ms. | Schmid | Victoria | Austrian Economics Center | Austria |
| Mr. | Seynat | Nicolas | ESTD motors | France |
| Ms. | Tulone | Daniela | ecoSurge | Italy |
| Mr. | Wakhlu | Vimal | ITU-APT Foundation of India | India |

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1. Information extracted from MyMeetings platform, please contact tsbfgai4ee@itu.int for support. [↑](#footnote-ref-2)