|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3ITU Logo | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | FG-AI4EE-WG1-O-004 | |
| **Focus Group on Environmental Efficiency for AI and other Emerging Technologies** | |
| **Original: English** | |
| **WG(s):** | | Working Group 1 | e-meeting, 11 November 2020 | |
| **OUTPUT DOCUMENT** | | | | |
| **Source:** | | WG1 Co-Chairmen | | |
| **Title:** | | Fourth FG-AI4EE Working Group 1 e-meeting, held on 11 November 2020 | | |
| **Purpose:** | | Information | | |
| **Contact:** | | Joel Mills WG1 Co-Chairman FG-AI4EE | | E-mail: [jam@osc.no](mailto:jam@osc.no) |

|  |  |
| --- | --- |
| **Keywords:** | Meeting report; WG1 |
| **Abstract:** | This document contains the report of Working Group 1 e-meeting held on 11 November 2020 |

# Introduction

Experts of FG-AI4EE Working Group 1 met virtually on 11 November 2020.

The draft agenda and document allocation were provided in document [FG-AI4EE-WG1-I-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/_layouts/15/WopiFrame.aspx?sourcedoc=%7B54B6F42B-67DE-4D8B-A56E-549C9D060854%7D&file=FG-AI4EE-WG1-I-006.docx&action=default). The agenda was approved without modification.

All documents discussed are available on Working Group 1 SharePoint page: <https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/SitePages/WG1.aspx>

## Attendance list with affiliations

This e-meeting was attended by 18 participants.

# 2. Discussion and Summary of inputs

# 2.1 Opening

FG-AI4EE Working Group 1, Co-Chairman, Joel Alexander Mills, opened the meeting and welcomed everyone to the group.

# 2.2 Roundtable of introductions.

All experts had the opportunity to introduce themselves and their area of expertise.

# 2.3 Presentation on draft deliverables D.WG1-09 and D.WG1-10

Pierre Major gave a presentation on visualization of data model (ML & AI etc.)​​ in relation to D.WG1-09 (see doc [FG-AI4EE-WG1-I-018](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-018.zip)) followed by a presentation on AI for Climate in relation to D. WG1-10 (see doc [FG-AI4EE-WG1-I-019](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-019.zip))

Mei Seok Goh presented her written contribution (see [FG-AI4EE-WG1-I-015](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-015.zip)) which feeds into both deliverables. Mei illustrated her contribution by a presentation on 3D Geospatial AI use cases (available for download, see doc [FG-AI4EE-WG1-I-016](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-016.zip))

# 2.3.1 Discussion on draft deliverable: D.WG1-09: A method for Intuitive Human interaction with data model (ML & AI etc.) (See first draft in doc)

The first draft of this deliverable is available in document [FG-AI4EE-WG1-I-007](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/input_wg1/FG-AI4EE-WG1-I-007.docx). Members are encouraged to send any inputs to this report (ex: executive summary, introduction...etc)

By using a visual description, it is easier to create an understanding of issues that need to be addressed. Visualization provides a more intuitive way of grasping reality. Interactive visualization enhances this intuitiveness by confirming or weakening hypotheses and showing different aspects of the dataset. This report must therefore refer to scientific facts that show the value for intuitive human interaction with computer model using Machine Learning & AI.

More information and examples can be found in the Pierre and Mei’s presentation cited above.

2.3.2 Discussion on D.WG1-10: Guidelines on applying U4SSC KPIs in a digital twin city using ML, AR & AI for better climate mitigation solutions.

The first draft of this deliverable is available in document [FG-AI4EE-WG1-I-008](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/_layouts/15/WopiFrame.aspx?sourcedoc=%7BD9258A71-48F7-46A2-B242-B87A682F0BB3%7D&file=FG-AI4EE-WG1-I-008.docx&action=default). Members are encouraged to send any inputs to this report (ex: executive summary, introduction...etc)

Joel encouraged all members to explore where Machine Learning and AI can be more user-friendly to help us see solutions in a better way. Examples of this can help us in when we need to do maintenance on buildings, how traffic lights can be optimized for traffic.

Joel advised that this deliverable should include examples of how emerging technologies can be used by cities and called for used case examples. It was agreed to establish a clear list of case studies showing examples of how visualization is implemented at the city level.

# 2.4 Discussion on proposed timeline for Working Group 1 activities

Deliverables D.WG1-09 and D.WG1-10 aim to be finalized by Q1 2020. This timeframe very much depends on the availability of Members and number of contributions received.

**3 Next steps & actions**

* The next steps will be to share progress on D.WG1-09 and D.WG1-10 at the Focus Group second meeting on 10 December 2020, and to circulate second drafts ahead of the next working group meeting on 16 December 2020.
* **Mei Seok Goh and Pierre Major** to work together on incorporating their research onto the deliverables
* **Vimal Wakhlu and Malcolm Mason** to send contributions to D.WG10
* **Members** to send use case examples of how AI, ML, and other emerging technologies have been used by cities (using the template [FG-AI4EE-WG1-I-002](https://extranet.itu.int/sites/itu-t/focusgroups/ai4ee/wg/_layouts/15/WopiFrame.aspx?sourcedoc=%7B7DA390A6-403D-4C45-BEE9-09BA70190DCC%7D&file=FG-AI4EE-WG1-I-002.docx&action=default)).
* **Members**to send any inputs on how to define “environmental efficiency” and “energy consumption” to feed into the Standardized Glo​ssary of Terms (deliverable D.WG1.01)

# 4 Next Working Group 1 e-meetings

26 November 2020, 13:00-14:30 (CET)

WG1-04 *List of KPIs/metrics* (Leader: Annik Magerholm Fet [annik.fet@ntnu.no](mailto:annik.fet@ntnu.no))

16 December 2020, 15:00-16:30 (CET)

* D.WG1-09 (Leader: Joel Alexander Mills)
* D.WG1-10 (Leader: Joel Alexander Mills)

# 5 Other business

No other business was discussed.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_