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| **Title:** | | Minutes of the first meeting of the Adhoc Group on the FG Commons Proposal | | | |
| **Purpose:** | | Information | | | |
| **Contact:** | | Ahmed Said NTRA Egypt | | | E-mail: [asaid@tra.gov.eg](mailto:asaid@tra.gov.eg) |

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| **Keywords:** | Minutes, Adhoc; Proposal; Focus Group; Commons; |
| **Abstract:** | This report summarises the discussions during the first meeting of the Adhoc Group on the FG Commons proposal. The rationale and problem statement, scope, objectives, specific tasks and deliverables and relationships have been revised by the source of the contribution and are included in Annex 1. |

**First meeting**

The Adhoc Group on FG Commons met on Tuesday 24 September 2019 from 12:50 until 14:40 and was chaired by Mr Ahmed Said.

The Adhoc Group set out to solve the following questions:

1. Is there consensus to create a Focus Group on AI and Data Commons.
2. To go through the “Rationale and Scope”, “Objectives”, “Specific Tasks and Deliverables” of the proposed Terms of Reference (C63) to get a clear understanding of the proposal
3. To determine how to coordinate with ongoing work in other SDOs.

The group agreed to first discuss “Rationale and Scope”, “Objectives”, “Specific Tasks and Deliverables” of C63.

During the meeting a number of questions were raised, which are summarized with corresponding answers below.

The meeting did not finalize its objectives and decided to have a second meeting of the AHG on Wednesday 24 September 2019 13:00-14:30.

The meeting agreed that the Chairman would issue a meeting report which would include in an Annex 1 revised Terms of Reference taking into account the discussion in the first meeting of the Adhoc Group.

**Questions and Clarifications**

**1. What is the problem statement?**

AI brings about a paradigm shift in problem solving. The ICT/telecommunications sector has a number of challenges that can be more efficiently solved using AI. We notice that this has started in an ad hoc fashion in various SGs and FGs in ITU-T; however, to scale and accelerate problem solving, a new approach is needed:

* Requiring domain experts (automotive, health, finance) to work together with ICT/AI experts on identifying solutions
* The availability of more data does not automatically translate to more collaboration and problem solving, therefore access to discoverable, relevant, labelled data is an obstacle
* Evaluating collectively solution feasibility, before scaling

**2. Is the proposal for an “AI and Data Commons”, or a “Data Commons for AI Commons”, or a “Commons of AI and Data” or something else? What is the right title?**

The intention is to create an AI Commons. The current opportunity is to look at data and AI jointly, in order to achieve an AI Commons.

**3. Does the scope include private data? There seems to be a contradiction in the written Terms of Reference with what is explained orally.**

The Terms of Reference need to be clarified. The main goal is to make metadata discoverable, not the actual data. The metadata would simply label data as private or open.

**4.** **Is the FG proposed to work on ethics?**

No. There is already work by IEEE Standards (P7000 Ethical design of AI) that will be referenced as needed.

**5. Would the FG work on creating new data?**

No.

**6. What exactly is decentralized?**

The problem-solving sandbox is decentralized; the decentralization does not concern the data. Many organizations can adopt the specifications to implement their own sandboxes.

**7. There are existing data repositories and portals already, why do we need AI and Data Commons?**

There are today many data collaboratives, data trusts, and open data portals. However there is no tie between them and AI models that could benefit from them. AI and Data would need to be seen as combined. So, from a problem-solving perspective, it is important to know what relevant data are available to support AI solution building.

**8. How about data ownership, and governance of data?**

The Focus Group does not address ownership of data. The ownership and governance of data remains with data owners and creators.

**9. Will ITU create a global data repository?**

No, the Focus Group will not create a global data repository. The goal is to create specifications, syntax, headers, and signaling protocols that allows existing data repositories to be discoverable to potential problem solvers using AI.

**10. What does AI commons have to Telecommunications and ICTs?**

Although a lot of data sits in existing data repositories a very interesting source of data for AI problem solving would be real time data coming from IoT sensors transmitted over both legacy and future telecommunications networks used in various scenarios like smart cities, intelligent transport systems, agriculture, energy management systems, etc.

**Annex 1 to the Chairman’s Report: Clarifications on the Rationale and ToR**

**Rationale**

On 28-31 May 2019, ITU convened the third AI for Good Global Summit in Geneva, which served as a platform for exchange of experts’ views toward developing a better understanding of the future of machine intelligence. During the course of the three AI for Good Global Summits from 2017-2019, there has been observed and requested a consistently growing need for common practices and collaboration in order to ensure the development of safe and transparent AI solutions.

Additionally, the global AI competition organized by XPRIZE and its partners (IBM, AAAI, IEEE, Intel, and many Academic institutions) has identified across 150 projects in 42 countries the need for a standardized approach to evaluate how AI can help accelerate solution building.

The scope of problem witnessed from above efforts showed that many “somehow different” problems have in fact very similar and common approaches in their resolution using AI.

In fact, from an AI impact perspective -while problems initially seem different because of socio-economic, geographic, or cultural contexts- their solutions are based on similar patterns and elements (problem scoping, relevant data availability, evaluation and iteration with AI models in a collaborative environment between experts and problem owners).

The increased availability of data on a global level does not always translate in more data usage. To be relevant for AI models, datasets requires additional metadata layer and context of usage that signals applicability and long-term readiness of data for solution scalability.

To help disseminate more problem-solving approaches that benefits from the growing capabilities that AI offers, providing collaboration opportunities and incentives to share practices and knowledge are important.

In order to utilize the momentum gained by the above, we would like to perform pre-standardization efforts that will form the basis for future international standardization activities, there is a need for a Focus Group to study and develop work items of AI Commons.

#### Annex A: Terms of References: ITU-T Focus Group AI Commons (Scope, Objectives, Specific Tasks and Deliverables, Relationships clarified)

**1. Scope**

The “AI Commons” is an open collaboration that aims at specifying how to approach problem solving with AI and make it available as a commons.

The AI Commons will work towards proposing solution building “sandboxes” (i.e., collaborative environments including cloud, compute, and AI model examples) with support of curated, discoverable and interoperable data repositories organized by topic, community or interest.

Other Standardization efforts around problem statements, data sharing and usage, interfaces and interoperability that are undertaken by other organizations and SDOs will be considered collaboratively in the scope of this work.

AI Commons bring together via the specifications and the sandbox model a way to connect problem owners and the community of AI practitioners, and facilitate collaboration to identify solutions.

A wide range of actors[[1]](#footnote-1) need to collaborate to make AI globally equitable and an international collaboration is needed. As the goal is to solve for systematic ways to utilize AI in a relevant and beneficial manner, an ITU-T Focus Group would help this initiative to be open to everyone and gathering relevant information and tests coming from both member states and industry members.

**2. Objectives of the FG-AI Commons**

The objective of the Focus Group is to conduct analysis and specification work in order to create an open framework for collaboration and sharing of expertise and know how to use AI to solve meaningful challenges at scale, while identifying relevant gaps and issues in standardization activities related to this topic.

More precisely, the objectives include:

* To analyse the requirements for creating an easy-to-access decentralized AI Commons for collaboration and cooperation between problem stakeholders and problem solvers;
* To study problem-statements and problem-capture (expression) mechanisms from an AI standpoint, to facilitate matching with problem solvers, and usage of existing solutions;
* To work in conjunction with other organizations to:
  + identify the design principles and requirements on functionality, interfaces and capabilities to develop a platform for AI Commons;
  + analyse security and trust concerns in data sharing and AI capabilities;
* To support deployment and collaboration of identified solutions in a sustainable way;
* To identify tools and mechanisms for promoting participation and supporting incentives to be available to all stakeholders, and to leverage the global reach of the AI for Good Global Summit in this regard;
* To identify challenges in the standardization activities for the AI Commons;
* To stimulate international collaborative efforts to maximize the social benefit of AI and establish liaisons and relationships with other organizations which could contribute to the standardization activities for AI Commons.

**3. Specific Tasks and Deliverables**

* To **study, review and survey** existing technologies, platforms, guidelines and standards for AI Commons and related data usage requirements;
* To **develop a report** containing definitions of terminologies and taxonomies for AI Commons. This guide can also help identify the various stakeholders involved and with an interest in the AI Commons ecosystem;
* With the objective of developing an open and decentralized platform for AI Commons:
  1. To **identify and analyze use cases**;
  2. To **develop a requirement document** derived from the use cases;
  3. To **develop a framework** of AI Commons based on the identified requirements;
  4. To **develop an architecture** of an open and decentralized platform including core functions and interfaces based on the framework;
  5. To **develop specifications** for trusted AI Commons sandboxes;
  6. To **develop specifications** for relevant and usable data; including criteria for discoverability and usefulness for AI models
  7. To **analyze standardization gaps** related to AI Commons and **develop a future standardization roadmap**.

In doing so, the following aspects needs to be taken into account:

* To **investigate and identify technical enablers** (e.g., tools, mechanisms, data sets, sandboxes) for participation, collaboration and incentives and analyze feasibility of identified technical enablers;
* To **analyze security and trust concerns**;
* To **take into consideration the activities currently undertaken by the various standards developing organizations (SDOs) and forums**. In this regard, to develop a list of standards bodies, forums, consortia and other entities dealing with aspects of AI Commons and liaise with organizations, which could contribute to the standardization activities on AI Commons;
* To **organise thematic workshops** on AI Commons, which will bring together all stakeholders, and promote the FG activities and encourage both ITU members and non-ITU members to join its work.

**4. Relationships**

This Focus Group will work closely with all ITU-T study groups, especially SG5, SG11, SG13, SG16, SG17 and SG20. Based on outcomes of the FG-DPM (FG-DPM already developed 15 deliverables on data, including security, privacy, risk and governance), FG-AI Commons will utilize results of FG-DPM and enhance them if necessary, in the AI commons context. Also, this FG-AI Commons will coordinate with FG-AI4H and FG-ML5G. Furthermore, the FG-AI Commons will collaborate with other relevant groups and entities, in accordance with Recommendation ITU-T A.7. These include non-governmental organizations (NGOs), non-profits or local governments, policy makers, SDOs, industry forums and consortia, companies, academic institutions, research institutions and other relevant organizations.

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1. Academic researchers, Entrepreneurs, Investors, NGOs, Governments, Industry players [↑](#footnote-ref-1)