WORKING DRAFT – VERSION 1.0
July 2024

WORKING GROUP ON OPEN-SOURCE GENERATIVE ARTIFICIAL INTELLIGENCE FOR PUBLIC SERVICES
TERMS OF REFERENCE

Background:
As part of the work under the ITU Open-Source Programme Office (OSPO) and the AI for Good Track on Open-Source AI for Digital Public Goods, ITU is working to foster safe, ethical, and human-centric deployment of open-source, generative AI to improve public services delivery.

Enhancing the quality, coverage, and efficiency of public services is crucial for advancing the Sustainable Development Goals (SDGs), as many SDG targets critically depend on public sector action. Artificial Intelligence (AI) is an emerging technology poised to accelerate digital transformation. However, the effective application of AI in the public sector comes with a range of risks and challenges, including ethical considerations, safety concerns, lack of common regulations, integration issues with broader digital infrastructure, high costs, and technical capacity limitations. There is also a strong need to promote accessible and transparent AI that is community-driven and adheres to documented standards and principles. Addressing risks associated with vendor lock-in and reliance on centralized solutions is also critical, particularly for public institutions in developing countries.

To address these risks and challenges, ITU, together with its partners, is seeking to develop and implement a blueprint solution based exclusively on open-source models and frameworks and could be easily customized and used by public institutions in a safe, efficient, and responsible way.

To help drive this effort, ITU is convening **a multi-stakeholder working group** that would be tasked with designing and coordinating the implementation of the blueprint solution.

Objective of the working group:
Develop a blueprint and conduct a reference implementation of an open-source generative AI (minimum viable product) that:

- *Addresses Key Public Sector Use Cases*: Effectively meets the specific needs and challenges faced by public sector applications.
- *Builds on State-of-the-art Developments in Generative AI Applications:* Effectively leverages state-of-the-art technologies and methods, such as Retrieval Augmented Generation (RAG), to serve the identified public sector needs.
- *Matches or Exceeds Commercial Performance*: Achieves or surpasses the performance standards of existing commercial solutions for the identified use cases.
- *Ensures Safety, Transparency, and Reliability*: Is designed to be safe, transparent, and robust, providing reliable outcomes.
- *Facilitates Quick, Low-Cost Deployment*: Can be rapidly deployed with minimal to no cost.
- *Simplifies Configuration and Maintenance*: Is user-friendly in terms of configuration and ongoing maintenance.
- *Integrates Seamlessly*: Can easily interface with broader digital public infrastructure and/or existing platforms and services.
- *Adheres to Relevant AI and Software Standards and Best Practices*: Is compliant with relevant common standards, recommendations, and best practices that allow to fulfill all of the above criteria.

Tasks:

To fulfill the above objective, the working group shall engage in the following tasks:

1. Identify priority use cases of public sector generative AI applications that could be addressed through reference implementation.
    a. Collect inputs and insights from the target audience.
    b. Analyze and evaluate the potential use cases.
2. Identify and document the necessary functional requirements and technical specifications that the solutions must meet.
    a. Analyze relevant recommendations and international best practices to define functional requirements and develop technical specifications.
    b. Validate the proposed requirements and specifications with a representative community of stakeholders.
3. Develop and validate the reference implementation in close collaboration with the community.
    a. Design and develop an MVP of the solution that meets functional requirements and technical specifications and builds on the results of the ITU community challenge held in April-May 2024.
    b. Test the solution with the community of developers. Gather inputs and improve.
4. Pilot the reference implementation in one or more countries and gather feedback on usability and performance.
    a. Identify interested country(ies).
    b. Work with local stakeholders to conduct a reference implementation.
    c. Support local capacity building and training for maintenance and support.
5. Build and maintain a community of practice for long-term sustainability of the solution and next steps.

Deliverables:

- Priority use case(s) and requirements are identified – Q3 2024
- Technical specs formulated and aligned with relevant standards – Q4 2024
- MVP 1.0 developed and published – Q2 2025
- Pilot implementation initiated in selected country(ies) – Q4 2025

Composition of the working group:

To ensure the necessary level of representativeness and expertise, the working group shall include:

- Representatives of public sector stakeholders (institutions) and/or other intended end-users of the envisaged solution;
- Representatives of international development partners or NGOs engaged in capacity building and promotion of open-source technology and safe and responsible AI;
- Members of the developer community with relevant experience in developing and deploying open-source AI tools;
- Representatives of the private sector who support and contribute to the open-source AI ecosystem;

Timeline:

The working group is convened in July 2024 and is expected to deliver the blueprint by Q2 2025.

If interested, please reach out: david.manset@itu.int
roman.chestnov@itu.int