



TERMS OF REFERENCE

GQSP Colombia/TDR – 0009 (06-08-2026)

Consulting Services in Artificial Intelligence (AI)-Based Automation for the Development of Normative Documents for ICONTEC

1. Background

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability. The mission of UNIDO, as described in the Lima Declaration adopted at the fifteenth session of the UNIDO General Conference in 2013 as well as the Abu Dhabi Declaration adopted at the eighteenth session of UNIDO General Conference in 2019, is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States. The relevance of ISID as an integrated approach to all three pillars of sustainable development is recognized by the 2030 Agenda for Sustainable Development and the related Sustainable Development Goals (SDGs), which will frame United Nations and country efforts towards sustainable development. UNIDO's mandate is fully recognized in SDG-9, which calls to "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". The relevance of ISID, however, applies to a greater or lesser extent to all SDGs. Accordingly, the Organization's programmatic focus is structured in four strategic priorities: Creating shared prosperity; Advancing economic competitiveness; Safeguarding the environment; and Strengthening knowledge and institutions.

Each of these programmatic fields of activity contains a number of individual programmes, which are implemented in a holistic manner to achieve effective outcomes and impacts through UNIDO's four enabling functions: (i) technical cooperation; (ii) analytical and research functions and policy advisory services; (iii) normative functions and standards and quality-related activities; and (iv) convening and partnerships for knowledge transfer, networking and industrial cooperation. Such core functions are carried out in Departments/Offices in its Headquarters, Regional Offices and Hubs and Country Offices.

The Directorate of Technical Cooperation and Sustainable Industrial Development (TCS), headed by a Managing Director, is responsible for the Division of Industrial Policy Advice and Capacity Development (TCS/IPC), and technical Divisions of Circular Economy and Green Industry (TCS/CEG), Energy and Climate Action (TCS/ECA), Climate Innovation and Montreal



Protocol (TCS/CMP); MSME Competitiveness, Quality and Job Creation (TCS/MSME); and Digital Transformation and Artificial Intelligence (TCS/DAI).

This service is located under the Competitiveness, Quality and Compliance Unit (TCS/MSME/CQC) which builds national and regional production and quality infrastructure systems, with an emphasis on providing internationally recognized services, facilitating MSME participation in regional and global value chains; strengthening institutional quality infrastructure capacities (i.e. standardization, metrology, and accreditation); building conformity assessment capacities (testing, inspection, certification, calibration, etc.); and supporting trade facilitation and quality awareness with the public sector, economic operators and consumers, placing a special emphasis on capacitating MSMEs.

GQSP Colombia – Strengthening of quality and standards in the phytotherapeutic value Chain

To consolidate UNIDO/SECO interventions on trade standards compliance within one tool, adding the benefit of a global component facilitating synergies and enhancing coherence among the interventions, UNIDO and SECO have developed a coherent programmatic approach: the Global Quality and Standards Programme (GQSP). GQSP supports selected countries to align the demand for, and supply of quality services required to prove and verify the quality of products. It will have two components (1) Global Knowledge Management (C1) and (2) Country Projects. The project “Strengthening of quality and standards in the phytotherapeutic value chain” is the second phase of the country project in Colombia of the GQSP whose first phase was developed between 2019 and 2023. It has been developed to be considered under component 2, to be developed between 2023 and 2027 and its overall objective is to promote Colombia's integration into subnational, regional and multilateral trade systems by strengthening the National Quality Subsystem (SICAL by its acronym in Spanish) within the framework of priorities of the phytotherapeutic value chain, and will seek to increase and improve the capacities of MSMEs to comply with technical requirements, international quality standards, private and sustainability standards necessary for trade facilitation. The project includes three complementary outcomes that are aligned to the Global Quality and Standards Programme (GQSP), to be implemented over a period of three to four years according to the modular approach introduced for the second phase of the programme:

Outcome 1: The technical competence of the SICAL National Quality Subsystem and its sustainability are improved in areas applicable to the phytotherapeutic value chain to foster access to new markets and increase its competitiveness.



Outcome 2: The capacity of MSMEs, enterprises or other productive units in the phytotherapeutic products value chain to comply with technical requirements, international quality standards, private and sustainability standards are improved.

Outcome 3: Quality culture in Colombia is promoted to improve national quality and the economic competitiveness.

Strengthening ICONTEC's capacities as the National Standards Body, particularly regarding the development and adoption of technical standards, is included under Output 1.3 of the GQSP Colombia logical framework:

Output 1.3 The generation of quality infrastructure products and public goods by the pillars of the National Quality Subsystem (Metrology, standardization, accreditation) is strengthened to support the development and access to markets for the value chain of phytotherapeutic products.

As part of the work plan agreed with ICONTEC, the National Standardization Body of Colombia, an activity has been included to implement technological tools aimed at updating and optimizing the technical standards development process, particularly for standards that are not based on identical adoption but rather developed from multiple information sources. The objective is to reduce the time required for the development of these standards, ensuring their timely availability and enabling them to keep pace with the rapid evolution of the business environment, including emerging and innovative sectors such as the phytotherapeutic industry.

Artificial Intelligence (AI) has been identified as the most suitable tool to support this initiative, as it enables the efficient use of existing knowledge and resources while facilitating continuous updates and improvements. This approach contributes to increasingly robust, accurate, and efficient standards development processes, strengthening ICONTEC's capacity to respond to evolving market and regulatory needs.

2. Object of the contract

To analyze, design, develop, implement, and build institutional capacities for the use of AI-assisted solutions to enhance the efficiency and effectiveness of the standardization process. The assignment shall ensure that the proposed solutions are supported by adequate governance and digital infrastructure frameworks; address ethical, legal, and intellectual property considerations; align with applicable international standards and best practices; and incorporate mechanisms for monitoring, evaluation, and continuous improvement. The



expected outcome of this assignment is the design, development, configuration, and validation of a pilot-ready Minimum Viable Product (MVP) demonstrating the feasibility and effectiveness of AI-assisted solutions within the standardization process. The scope of the assignment does not include the delivery of a fully production-ready solution or long-term operational support. The contractor shall provide technical support during the pilot execution and validation phase to ensure effective operation, user adoption, knowledge transfer, and assessment of the proposed solution. In addition, the contractor shall provide recommendations regarding governance, infrastructure, security, scalability, operational requirements, and future implementation considerations to support a potential transition from pilot deployment to a production environment, should ICONTEC decide to pursue such implementation. This includes, but is not limited to, the automation of drafting technical documents based on inputs from multiple structured sources (such as normative documents, guidelines, technical manuals, summaries, compendiums, brochures, among others) and unstructured information provided by stakeholders.

For the purposes of these Terms of Reference, the MVP shall be understood as a functional solution capable of supporting the pilot use cases defined herein, demonstrating the generation, review, validation, and improvement of normative documents under controlled conditions. The MVP shall include the functionalities required for pilot execution, testing, and evaluation, but it is not expected to include all capabilities, integrations, operational controls, service levels, or infrastructure components that may be required for full production deployment.

The proposed solution shall:

- Optimize the use of resources within the standardization process.
- Enable the transformation of technical inputs, reference materials, and stakeholder contributions into structured draft normative documents.
- Support the editorial review, validation, and refinement of draft standards prior to their formal publication as Colombian Technical Standards.
- Identify and incorporate automation opportunities across the standardization process to enhance efficiency, reduce manual effort, and improve consistency.

The proposed solution may be based on Microsoft Copilot Studio or alternative artificial intelligence and automation technologies that demonstrably meet the objectives and requirements of the assignment. Given ICONTEC's current Microsoft-based technological environment, solutions leveraging Microsoft Copilot Studio are preferred, provided they adequately address the identified needs.

As part of the technical proposal, bidders are encouraged to present, where feasible, one or two alternative implementation options, including a comparative assessment of their



technical characteristics, estimated implementation effort, integration requirements, scalability, governance considerations, and indicative cost implications. This comparison will enable ICONTEC to evaluate the relative advantages, limitations, and financial feasibility of the available alternatives.

The final selection of the solution will be subject to ICONTEC's assessment of the technical, operational, and financial feasibility of implementation and integration, taking into account interoperability with existing systems, governance arrangements, scalability, traceability, reproducibility, security, and the responsible use of artificial intelligence.

3. Specifications of the required service

The consulting services must be delivered in close coordination with ICONTEC technical and IT teams and should be grounded in a strong understanding of the standardization process. While specific training on ICONTEC methodologies will be provided, the consultant or supplier is expected to have prior experience in standard development processes to effectively identify which activities are suitable for AI-based automation and which require human expertise.

The service is expected to strengthen ICONTEC capabilities through the practical application of AI, with a focus on both process optimization and document development.

3.1 Analysis of the Standardization Process and Identification of AI Opportunities

- Review and understand the end-to-end standardization process, including roles, workflows, and information flows.
- Identify tasks and stages that are suitable for AI-assisted automation, as well as those that should remain human-driven.
- Propose practical and feasible AI-based solutions to improve efficiency, consistency, and use of resources.
- Prioritize opportunities based on impact, feasibility, and alignment with organizational needs.

3.2 Design of an AI-Assisted Document Development Framework

- Define a clear and structured methodology to transform diverse inputs, including technical documents, stakeholder contributions, and reference standards available in Spanish or English, into draft normative documents in Spanish or English. The methodology shall ensure the accurate interpretation of source materials,



consistency in terminology, traceability of inputs, and preservation of the intended technical content.

- Design simple and modular workflows for document development
- Ensure alignment with institutional document structures and editorial rules (e.g., E-PS-0005).
- Establish mechanisms to ensure traceability between source information and generated content.

3.3 Development and Configuration of AI Solutions

- Configure AI-based tools using Microsoft Copilot Studio or other suitable technologies capable of meeting the service requirements. Given ICONTEC's existing technological environment, the use of Microsoft Copilot Studio is considered desirable, provided that it adequately addresses the identified needs. Any tools, platforms, or integrations proposed by the bidder shall be subject to review and approval by ICONTEC to ensure compatibility with its information technology policies, cybersecurity requirements, governance framework, and existing digital infrastructure.
- Integrate solutions with existing document repositories (e.g., SharePoint, OneDrive) and workflows (Power Automate) among others.
- Work closely with the IT team to ensure alignment with technical architecture and governance standards.

3.4 Guidelines for the Use of AI and Content Governance

- Develop clear and practical guidance on how AI should be used within the standardization process.
- Define when AI should be used and when it should not and risks associated with AI use (e.g., hallucinations, inaccuracies, lack of context, misinterpretation)
- Develop a set of reusable instructions (prompts) to support document drafting and content organization in a controlled and consistent manner.

3.5 AI-Assisted Review and Quality Improvement

- Design an AI-supported approach to improve clarity, coherence, and consistency of draft documents.



- Support editorial review processes before publication of standards.
- Ensure alignment with editorial and technical requirements.
- Incorporate human validation steps (“human-in-the-loop”) for critical decisions and approvals.

3.6 Capacity Building and Knowledge Transfer

- Deliver training sessions for both technical and non-technical staff on:
 - Practical use of AI tools in document development
 - Use of Microsoft Copilot Studio and related tools
 - Good practices for interacting with AI systems
- Provide reusable materials, including templates, guidelines and examples of use
- Ensure that the organization can independently use, adapt, and scale the solutions after the consultancy ends.

3.7 Quality Assurance and Continuous Improvement

- Define and implement practical mechanisms to assess the quality, reliability, and consistency of AI-generated outputs.
- Establish procedures to identify, document, and mitigate risks such as factual inaccuracies, inconsistencies, unsupported statements, omissions, incorrect terminology, loss of context, or non-compliance with editorial requirements.
- Propose mechanisms for the continuous improvement of prompts, workflows, and AI-assisted processes based on pilot results and user feedback.
- The proposed solution shall support the evaluation of generated outputs against the following minimum quality criteria:
 - Source Traceability: Generated content shall be traceable to the source documents or inputs used during the drafting process.
 - Factual Accuracy: Technical content shall accurately reflect the information contained in the source materials without introducing unsupported technical statements or conclusions.
 - Completeness: Draft documents shall adequately address the required sections, clauses, and elements defined by the applicable document structure and drafting rules.



- Terminology Consistency: Generated content shall consistently apply approved terminology, including terminology provided through institutional glossaries, terminological databases, or reference standards.
 - Editorial Compliance: Outputs shall comply with applicable editorial, formatting, structure, numbering, and drafting requirements, including E-PS-0005.
 - Human Validation: The solution shall facilitate human review and validation of generated outputs and clearly identify sections requiring expert judgment or manual verification.
- As part of the pilot implementation, the bidder shall propose measurable indicators and target values for assessing solution performance, including, where applicable:
 - Percentage of content traceable to source information.
 - Percentage of compliance with E-PS-0005 structural and editorial requirements.
 - Percentage of terminology consistency against approved terminology sources.
 - Number and type of corrections required during human review.
 - Estimated reduction in drafting and review effort compared to the current process.
- Final acceptance of the pilot solution shall be subject to ICONTEC's validation of the quality criteria, performance indicators, and results achieved during the pilot phase.

3.8 Pilot Implementation

Design and implement a pilot to validate the proposed AI solutions through the development of a Minimum Viable Product (MVP) capable of generating normative documents with standardized structure, formatting, editorial and internal specifications.

The pilot shall demonstrate:

- Automated generation of draft normative documents from multiple sources of information.
- AI-assisted review, validation, and improvement of technical documents.
- Application of quality controls, traceability mechanisms, and editorial validation processes.
- Compliance with applicable institutional drafting requirements, including E-PS-0005.



The pilot phase shall include the development of at least two normative deliverables generated with the support of the AI-based solution, demonstrating its applicability within the standardization process:

- A guideline document on phytotherapeutic products.
- One international standard (e.g., ISO or equivalent) to be adapted or adopted as a Colombian normative document.

For proposal preparation purposes, bidders shall consider the following indicative scope:

Guideline Document on Phytotherapeutic Products

- Expected length: approximately 30 to 60 pages.
- Source information: approximately 10 to 20 documents from multiple sources.
- Sources may include technical reports, regulatory documents, scientific publications, guidelines, reference standards, manuals, presentations, and stakeholder contributions.
- Input formats may include PDF, Word, Excel, PowerPoint, web-based content, and structured repositories.
- Source materials may be provided in Spanish and/or English.
- Final deliverable shall be produced in Spanish.

International Standard Adaptation/Adoption

- Expected length: approximately 20 to 50 pages.
- Primary source: one international standard and its associated supporting references, if applicable.
- Source documents may be provided in PDF or editable formats.
- The solution shall support terminology validation against terminology databases and vocabularies supplied by ICONTEC.
- The solution shall verify translation adequacy, consistency of terminology, and compliance with E-PS-0005 requirements for adapted or adopted standards.
- Final deliverable shall be produced in Spanish.

The bidder may propose reasonable adjustments to the indicative scope where justified by the proposed methodology or technological approach. Any adjustment shall be clearly identified in the technical proposal.

3.9 Minimum Qualifications of the Bidder



The bidder, either through the proposed consulting team or, in the case of an individual consultant, through their own qualifications and experience, shall demonstrate capabilities in the following areas:

1. AI and Technology Expertise (mandatory): Proven experience in the application of artificial intelligence to document generation, information analysis, knowledge management, or similar use cases involving complex documentation processes. The team shall demonstrate practical experience with relevant AI and automation technologies, including Microsoft Copilot Studio, Power Platform, Microsoft 365 tools, or equivalent platforms capable of meeting the requirements of the assignment.
2. Implementation and Knowledge Transfer (mandatory): Demonstrated experience in implementing digital or AI-enabled solutions and providing user training and knowledge transfer activities to support their effective use within organizations. Additional experience in organizational change management, user adoption strategies, or process improvement initiatives will be considered an asset.
3. Standardization and Domain Knowledge (desirable): Previous experience in standardization processes, including familiarity with ISO or similar frameworks, and experience in drafting, adapting, adopting, or managing technical and normative documents will be considered an asset. However, the absence of direct experience in standardization shall not preclude participation, provided that the bidder demonstrates the capacity to understand and work within specialized technical environments.

3.10 Modality of Execution.

Consulting services shall be delivered primarily through remote (virtual) modalities, leveraging digital collaboration tools (e.g., Microsoft Teams, SharePoint, or equivalent platforms agreed upon by the parties). The bidder shall ensure availability to operate within Colombian business hours (GMT-5).

1. Mandatory Meetings. The contractor shall participate in two mandatory in-person meetings at ICONTEC facilities in Bogotá: (i) a kick-off meeting at the start of the assignment to align the scope, methodology, work plan, roles, and expectations; and (ii) a closing meeting upon completion of the assignment to present the final deliverables, validate results, and formally close the project. ONUDI shall be notified in advance of these meetings and may participate if it so wishes.



2. Additional Meetings. Any additional meetings, including technical discussions, follow-up sessions, validation activities, workshops, or training sessions, shall be scheduled upon mutual agreement between ICONTEC and the contractor. Such meetings shall be conducted primarily through virtual means unless an in-person format is deemed necessary and agreed upon by both parties. ONUDI shall be informed of the scheduling of these meetings and may participate, as appropriate.

3.11 Intellectual Property and Use Rights

The contractor shall clearly identify and disclose any proprietary components, third-party software, pre-existing intellectual property, licensed technologies, or reusable assets proposed as part of the solution.

All deliverables specifically developed under this assignment, including methodologies, workflows, prompt libraries, training materials, technical documentation, configurations, reports, and functional prototypes, shall be delivered to ICONTEC with perpetual, non-exclusive, royalty-free rights for internal use, modification, adaptation, and further development.

Where the proposed solution relies on commercial platforms, licensed technologies, or proprietary products (including Microsoft Copilot Studio and related services), the contractor shall clearly indicate any applicable licensing requirements, usage restrictions, dependencies, subscription costs, or limitations that may affect the future use, maintenance, scaling, or sustainability of the solution.

The contractor shall ensure that the proposed solution does not infringe the intellectual property rights of any third party and shall be responsible for obtaining any necessary authorizations, licenses, or permissions required for the lawful use of incorporated technologies, data sources, or materials.

The contractor shall also provide recommendations regarding the ownership, governance, maintenance, and long-term management of the solution and its associated assets to facilitate institutional adoption and sustainability.

4. Deliverables and payments

Deliverables



4.1 Diagnostic Report of the Standardization Process

- a. Description of the current end-to-end standardization process;
- b. Identification of key activities, roles, workflows, and information flows;
- c. Analysis of bottlenecks, inefficiencies, and manual tasks, and opportunities for improvement through AI-enabled solutions;
- d. Identification of key technological and organizational considerations that may influence the implementation, adoption, and governance of the proposed AI-assisted solution.

4.2 AI Opportunities and Process Automation Report

- a. Identification of activities within the standardization process that are suitable for AI-based support or automation
- b. Clear distinction between tasks that can be automated and that should remain human-driven
- c. Description of proposed AI use cases for each identified opportunity
- d. Prioritization of opportunities based on impact, feasibility, and expected benefits

4.3 Conceptual Design of AI-Based Solutions

- a. High-level design of the proposed AI solutions for prioritized use cases
- b. Description of how each solution would function in practice
- c. Identification of required data sources and inputs
- d. Definition of expected outputs and benefits
- e. Consideration of risks (e.g., accuracy, reliability, governance)

4.4 AI-Assisted Document Development Framework

- a. Methodology for transforming multiple structured and unstructured sources into draft normative documents
- b. Definition of modular workflows for document development
- c. Alignment with institutional structures and editorial rules (e.g., E-PS-0005)
- d. Traceability approach linking inputs to generated content

4.5 Configured AI Tools and Functional Prototypes



The contractor shall configure and deploy AI tools and functional prototypes, preferably using Microsoft Copilot Studio given ICONTEC's current technological environment, or other suitable AI and automation platforms capable of meeting the service requirements.

The solution shall support normative document drafting, structuring, review, terminology validation, translation validation, and compliance checks. Where applicable, it shall integrate with existing repositories and workflows and be implemented in coordination with ICONTEC's IT team to ensure alignment with institutional infrastructure, cybersecurity, governance, and operational requirements.

The deliverable under this section shall consist of a pilot-ready Minimum Viable Product (MVP) intended exclusively for validation and testing in a controlled environment. The MVP shall demonstrate the feasibility, functionality, and effectiveness of the proposed solution for the pilot use cases defined in these Terms of Reference. The scope of this assignment does not include the delivery of a fully production-ready solution, enterprise-wide deployment, service-level agreements, or long-term operational support.

The contractor shall clearly identify and document:

- The environments, software licenses, subscriptions, cloud services, and infrastructure required for the configuration, testing, and operation of the MVP.
- The responsibilities of the contractor and ICONTEC regarding the provision of licenses, environments, access permissions, cloud services, and other technical resources required during the project.
- Any assumptions, prerequisites, dependencies, or limitations associated with the proposed solution.

Configuration, Architecture, Security, Traceability and Future Operational Requirements

As part of this deliverable, the contractor shall provide:

- Configuration documentation for AI tools, workflows, prompts, integrations, validation mechanisms, and supporting services.
- A high-level solution architecture describing:
 - Components and services used;
 - Information and document flows;
 - Integration points with Microsoft 365, SharePoint, Power Automate, Copilot Studio, or other platforms used;
 - Interfaces with external services, repositories, or AI providers;



- Technical dependencies and interoperability considerations.
- Documentation of security and governance controls, including:
 - Authentication and access-control mechanisms;
 - User roles and permissions;
 - Auditability and logging capabilities;
 - Information security controls;
 - Data handling, storage, retention, and processing considerations;
 - Traceability and governance mechanisms applicable to the proposed solution.
- Documentation describing how source information is linked to generated outputs and how content traceability can be reviewed and validated.
- Operational and technical guidance to support future deployment, scaling, maintenance, governance, and administration of the solution.
- Identification of any third-party services, commercial dependencies, vendor-specific requirements, licensing restrictions, or technology lock-in considerations.
- Technical documentation required to enable future replication, maintenance, or enhancement of the solution by ICONTEC or third parties.

The contractor shall also provide an indicative assessment of the requirements for a potential future production implementation, including:

- Additional infrastructure requirements.
- Additional security, governance, monitoring, and operational controls.
- Estimated software licensing or subscription costs.
- Estimated cloud hosting and AI service consumption costs, where applicable.
- Additional development, integration, testing, or hardening activities required to transition the MVP into a production environment.
- Risks, assumptions, and constraints that may affect future scalability or operational sustainability.

Minimum Acceptance Criteria

The following acceptance criteria shall be used by ICONTEC to assess the satisfactory completion of this deliverable and the functionality of the MVP.

The MVP shall be considered acceptable by ICONTEC when it demonstrates, at a minimum, the following capabilities:



- Successful generation of normative document content from the source information defined for the pilot.
- Ability to produce documents following predefined templates, structure, formatting, numbering, typographic conventions, and editorial requirements.
- Ability to support the generation of draft normative documents from multiple information sources.
- Ability to perform basic validation of terminology, completeness, consistency, structure, and editorial requirements.
- Ability to support the validation and editorial review of translated international standards using terminology resources provided by ICONTEC, where applicable.
- Traceability between source information and generated outputs.
- Successful execution of the pilot use cases defined in Section 3.8.
- Availability of documented workflows, configurations, architectures, prompts, and operational guidance.
- Compliance with the information security, governance, and access-control requirements agreed with ICONTEC.
- Delivery of technical documentation describing implementation requirements, operational considerations, future infrastructure needs, and licensing implications.
- Validation by ICONTEC that the solution supports the quality criteria defined in Section 3.7, including source traceability, terminology consistency, editorial compliance, and human validation processes.
- Identification and documentation of known limitations, risks, assumptions, and recommendations for future improvements.

The contractor shall document any technical limitations identified during the pilot and provide recommendations for enhancing the MVP should ICONTEC decide to transition the solution to a production environment in the future.

4.6 AI Usage Guidelines and Governance Framework

- a. Practical guidelines on appropriate and inappropriate use of AI
- b. Defined good practices for using AI in the standardization process
- c. Reusable prompt library for document drafting and content structuring
- d. Criteria for ensuring traceability, reproducibility, and controlled use of AI

4.7 AI-Assisted Editorial Review Model



- a. Design of an AI-supported approach for reviewing and improving draft documents
- b. Mechanisms to enhance clarity, coherence, and consistency
- c. Definition of human-in-the-loop validation processes

4.8 Training and Knowledge Transfer Package

- a. Training sessions for staff (technical and non-technical)
- b. The contractor shall deliver a complete technical and operational documentation package in editable and reusable formats (e.g., Microsoft Word, Excel, PowerPoint, Visio, JSON, YAML, configuration files, or other applicable editable formats), allowing ICONTEC to review, update, adapt, maintain, and further develop the solution without dependency on the contractor.

All documentation, configurations, workflows, prompt libraries, templates, architectural diagrams, training materials, and other project artifacts developed under this assignment shall be delivered to and remain under the control of ICONTEC.

The documentation package shall include, at a minimum:

- User Guide describing the functionality of the solution and its intended use cases.
- Administrator Guide covering configuration, management, monitoring, and maintenance activities.
- Configuration Documentation detailing AI tools, prompts, workflows, integrations, parameters, and customization settings.
- Deployment and Implementation Guide describing the steps, prerequisites, dependencies, and considerations required to deploy or replicate the solution.
- Integration Documentation covering interfaces, repositories, workflows, data sources, authentication requirements, and connections with Microsoft 365, SharePoint, Power Automate, or other platforms used.
- Security Design and Governance Documentation describing access controls, user roles, information security measures, audit capabilities, data handling practices, and applicable governance requirements.
- Troubleshooting and Support Guide including common issues, recommended corrective actions, and operational support considerations.
- Known Limitations and Assumptions Register documenting technical limitations, dependencies, constraints, and risks identified during the project.



- Knowledge Transfer and Handover Package containing all relevant documentation, workflows, templates, prompt libraries, configurations, training materials, and recommendations necessary to enable ICONTEC to operate, maintain, adapt, and further develop the solution independently.

The delivered documentation and project artifacts shall be sufficiently complete and detailed to enable ICONTEC personnel to independently administer, operate, maintain, configure, adapt, and expand the solution after project completion, without requiring ongoing dependence on the contractor. Additionally, the contractor shall identify any third-party dependencies, licensing requirements, or external services that may affect the future operation or sustainability of the solution.

- c. Delivery of reusable materials (templates, prompts, guidelines, examples)
- d. Recommendations for scaling and internal adoption

4.9 Quality Assurance and Continuous Improvement Framework

- a. Criteria for evaluating AI-generated outputs
- b. Risk identification and mitigation approach
- c. Recommendations for ongoing improvement of AI solutions

4.10 Pilot Implementation Report

The contractor shall submit a Pilot Implementation Report documenting the execution and results of the pilot phase. The report shall include, at a minimum:

- a. Design and execution of the pilot implementation;
- b. Description of the application of the AI-based solution to the development of at least two normative products;
- c. Results of the pilot implementation, including performance assessment and lessons learned; and
- d. Recommendations for scaling, sustainability, and institutional adoption of the proposed solution.

In addition to the Pilot Implementation Report, the normative documents developed during the pilot phase shall be submitted as separate deliverables. These shall include: (i) a guideline document on phytotherapeutic products; and (ii) one international standard (e.g., ISO) to be adapted or adopted.



Payments

The payment schedule and specific payment terms shall be agreed upon with the selected contractor and reflected in the corresponding contractual documents or Purchase Order. Payments may be linked to the satisfactory completion and acceptance of agreed deliverables.

Each invoice shall be subject to review and written approval by the Project Management Unit (PMU). Payment will be processed within thirty (30) calendar days following receipt of the corresponding invoice, the countersigned Purchase Order, and formal approval by the PMU, in accordance with the agreed payment terms.

5. Schedule.

The project is expected to commence in September, with an indicative implementation period of approximately four (4) months. During this period, the contractor shall design, develop, test, and deploy the proposed AI-based solution, ensuring the delivery of the agreed outputs in accordance with the milestones and phases established for the assignment.

The schedule presented below is tentative and intended to provide a preliminary framework for achieving the objectives of these Terms of Reference. Bidders are encouraged to propose their own implementation schedule, including key phases, milestones, and the estimated total duration of the assignment, based on their proposed methodology, technical approach, and previous experience with similar projects. The proposed timeline will be considered as part of the evaluation of the feasibility and adequacy of the technical proposal.

The final work plan and implementation timeline shall be agreed upon with the selected contractor, taking into consideration the proposed approach, technical requirements, and project needs.

General Activity	Specific activity	Mon th 1	Mon th 2	Mon th 3	Mon th 4
Process Understanding and Opportunity Identification	Review of the end-to-end standardization process				
	Stakeholder discussions and information gathering				
	Identification of inefficiencies, bottlenecks, and repetitive tasks				
	Initial exploration of AI use cases				
	Prioritization of AI use cases				



Solution Design and Framework Development	Conceptual design of AI-based solutions				
	Design of the AI-assisted document development framework				
	Definition of governance approach and AI usage guidelines				
Development and Configuration of AI Solutions	Configuration of AI tools in Microsoft Copilot Studio				
	Development of functional prototypes				
	Integration with Microsoft 365 environment and workflows				
	Design of AI-assisted editorial review approach				
Pilot Implementation, Validation, and Knowledge Transfer	Execution of pilot implementation (two use cases)				
	Validation of results and refinement of solutions				
	Definition of quality assurance and improvement mechanisms				
	Training and knowledge transfer sessions				

Progress Monitoring and Milestones

To facilitate project monitoring and performance assessment, the contractor shall report progress against the work plan on a monthly basis. Progress shall be measured through the completion of the planned activities and the achievement of the corresponding deliverables and milestones.

At a minimum, the following milestones shall be considered:

Month	Milestone	Expected Outcome
Month 1	Process Understanding and Opportunity Identification completed	Diagnostic findings validated and AI opportunities identified
Month 2	Solution Design and Framework Development completed	AI solution design and document development framework delivered
Month 3	Development and Configuration of AI Solutions completed	Functional prototypes configured and available for testing



Month 4	Development and Configuration of AI Solutions completed	Pilot executed, deliverables validated, and training completed
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The contractor shall provide periodic progress updates including:

- Percentage of completion of planned activities.
- Status of milestones and deliverables.
- Risks, issues, and mitigation actions.
- Deviations from the agreed schedule, if any.
- Planned activities for the subsequent reporting period.

Successful completion of each project phase shall be evidenced through the submission and acceptance of the corresponding deliverables described in Section 4

6. Submission requirements

Proposals may be submitted by bidders that are either legal entities (companies, organizations, or firms) or individual consultants with demonstrated capacity and experience relevant to the scope of this assignment.

To be considered, bidders shall comply with the following minimum requirements:

a) Demonstrable experience of at least three (3) years in the provision of services related to artificial intelligence, digital transformation, process automation, knowledge management, document-intensive processes, or other services relevant to the scope of this assignment. Bidders shall provide documentary evidence supporting such experience through contract completion certificates, client references, letters of recommendation, contracts, purchase orders, or other equivalent documents demonstrating the successful delivery of services similar to those requested under these Terms of Reference.

b) Submission of a technical proposal aligned with these Terms of Reference, including, at a minimum:

- The proposed methodology and technical approach;
- The proposed AI tools and technologies to be used, including justification for their suitability;
- The composition of the consulting team and the roles and responsibilities of key personnel, where applicable;
- The curricula vitae (CVs) or professional profiles of the key experts proposed for the assignment, highlighting their qualifications and relevant experience related to the scope of work;



- The proposed implementation schedule, including key phases, milestones, and the estimated total duration of the assignment, in accordance with Section 5 of these Terms of Reference;
- During the minimum 45-calendar-day post-implementation support period, the contractor shall:
 - Acknowledge critical incidents within one (1) business day.
 - Provide an initial assessment and proposed corrective actions within two (2) business days.
 - Correct defects attributable to the implemented solution at no additional cost to ICONTEC.
 - Support ICONTEC in resolving operational issues related to the delivered configuration, workflows, prompts, integrations, and documentation.
 - Clearly differentiate between warranty-type defect correction and future enhancements or new functionality requests, which shall be considered out of scope.
- Any assumptions, dependencies, or requirements considered critical for the successful implementation of the project.

c) Submission of a financial proposal detailing the costs associated with the execution of the assignment.

d) Recent experience working with organizations of the United Nations system and/or government entities will be considered an advantage.

The following documents must be attached to the proposal, as applicable:

For legal entities:

- Tax Registration Certificate (RUT) or equivalent tax registration document applicable in the bidder's country of registration;
- Certificate of Incorporation and Legal Representation, or equivalent document demonstrating the legal existence of the bidder;
- Copy of the legal representative's identification document.

For individual consultants:

- Tax Registration Certificate (RUT) or equivalent tax registration document applicable in the bidder's country of registration;
- Copy of the bidder's identification document.

Proposal Evaluation Criteria



The evaluation of proposals will be conducted based on a combined assessment of the technical and financial submissions. Only proposals that comply with the minimum submission requirements established in these Terms of Reference will be considered for further evaluation.

The evaluation shall take into account, at a minimum, the following criteria:

A. Technical Proposal

The technical proposal will be assessed considering:

- Understanding of the assignment objectives and requirements.
- Soundness and feasibility of the proposed methodology and technical approach.
- Suitability of the proposed AI tools, technologies, and architecture.
- Consideration of information security, governance, traceability, scalability, and interoperability requirements.
- Quality and completeness of the proposed pilot implementation approach.
- Experience and qualifications of the proposed consultant(s) or consulting team.
- Approach to capacity building, knowledge transfer, and sustainability.
- Realism and adequacy of the proposed implementation schedule and work plan.

B. Financial Proposal

The financial proposal will be assessed considering:

- Overall cost-effectiveness of the proposed solution.
- Consistency between the proposed budget and the scope of work.
- Adequacy of resource allocation in relation to the proposed methodology and deliverables.
- Long-term operational, licensing, and implementation cost considerations, where applicable.

C. Added Value

Additional consideration may be given to proposals that demonstrate:

- Previous experience implementing AI solutions in standardization, regulated environments, or document-intensive processes.
- Experience working with international organizations, public institutions, standards bodies, or quality infrastructure organizations.
- Innovative approaches that enhance functionality, sustainability, usability, security, or institutional adoption.



- Comparative analysis of alternative implementation options and their associated benefits, limitations, and cost implications.

D. Clarifications and Presentations

ICONTEC and UNIDO reserve the right to request clarifications, supporting evidence, demonstrations, interviews, or presentations from bidders during the evaluation process in order to better assess the technical and operational suitability of the proposed solution.

UNIDO, as an agency of the UN system, is granted full tax exemption

IMPORTANT:

1. Deviations from these Terms of Reference are not recommended.
2. However, any additional alternatives or proposed modifications must be explicitly agreed upon between UNIDO and the contracting company.
3. It is understood that the proposed price includes all costs related to the product or service to be contracted.

The technical and financial proposal, together with the documentation mentioned above, must be submitted to m.cepedaherrera@unido.org no later than 30-08-2026.