

Terms of Reference

Expert to support the Montenegrin authorities in design and delivery of interrelated trainings in the framework of Digital Academy designated to the following topics: Future of Public Administration: Application of Artificial Intelligence (AI) and Machine Learning (ML) and Application, Challenges and Ethical Issues of ChatGPT.

1. Background

The Regional School of Public Administration (ReSPA) is an inter-governmental organization for enhancing regional cooperation, promoting shared learning and supporting the development of public administration in the Western Balkans. ReSPA Members are Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia, while Kosovo* is a beneficiary. ReSPA's purpose is to help governments in the region develop better public administration, public services and overall governance systems for their citizens and businesses and prepare for membership in the European Union.

ReSPA establishes close cooperation with Ministers, senior public servants and heads of units in Member countries. ReSPA also works in partnership with the European Union, specifically Directorate General for Neighbourhood and Enlargement Negotiations (DG NEAR), other regional actors such as OECD/SIGMA and Regional Cooperation Council (RCC), as well as agencies and civil society organizations. Since its inception, ReSPA, as an international organization and a key regional endeavour in Public Administration Reform, has contributed to capacity-building and networking activities through on-demand support mechanisms, peering and the production of regional research materials.

The European Commission (EC) provides directly managed funds for the support of the ReSPA activities (research, training and networking programmes) in line with the EU accession process. Currently, ReSPA is implementing its fifth EC Grant Contract "Support to the Regional School of Public Administration for implementing PAR Agenda and facilitating EU accession process in the WBs" which is active as of 1 January 2023.

ReSPA works primarily through regional networks which operate at three levels: Ministerial, Senior Officials, and networks/working groups of experts and senior practitioners. There is one network – Programme Committee composed of the senior civil servants representing the ministries responsible for the Public Administration, ministries of Finance, and institutions in charge of the European Integration process coordination of the ReSPA Members and four regional thematic groups: (1) Policy planning, better regulation and coordination of Centre of Government, (2) European integration and accession negotiations; (3) Human Resources Management and Professional Development; (4) Service Delivery (digitalization and quality management).

2. Problem statement and description of the assignment

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and ICJ Advisory opinion on the Kosovo Declaration of independence.

The Public Administration Reform Strategy 2022-2026 of Montenegro identifies the need for the creation of basic training programs through several modules, enabling the acquisition of fundamental knowledge in computer usage, word processing, spreadsheets, presentations, internet use, safe technology practices and online collaboration. Also, the Public Administration Reform Strategy 2022-2026 recognizes the challenges related to digital skills and proposes the identification and implementation of specialized training programs to overcome these challenges within the public administration.

The Digital Transformation Strategy of Montenegro acknowledges the following challenges:

- Digital skills gap is a major obstacle to digital development;
- Formal education lacks digital skills integration, necessitating a curriculum overhaul to prepare future professionals. Despite ICT graduates, the industry faces a shortage of skilled professionals and a brain drain;
- Tailored programs and lifelong learning initiatives are needed for specific groups to bridge the digital skills gap;
- General population lacks basic digital skills for internet use, e-services, and eID utilization;
- Limited access to digital technologies at the individual, institutional, and sectoral levels hampers progress.

Public administration requires employees with basic and specialized digital skills for successful modernization and digitalization efforts. As response to the above-stated challenges, the Ministry of Public Administration has established Digital Academy, an online platform for education and networking among all relevant stakeholders involved in building digital and leadership skills for public officials, students and strategically important vulnerable groups. The essence of the Digital Academy lies in creating fast-track programs to enhance competencies and skills for the digital transformation of Montenegro as well as strengthening digital awareness in Montenegrin society and the digital competitiveness of the ICT sector. The Digital Academy is aimed at supporting the increase of ICT-related knowledge and skills, as well as the development of soft skills.

In order to continue its growth and fulfil its mandate, the Digital Academy has realized online training needs assessment identifying several topics of importance for related target audiences among which are: "Future of Public Administration: Application of Artificial Intelligence (AI) and Machine Learning (ML)" and "Application, Challenges and Ethical Issues of ChatGPT"

The Mid-Term Work Program of the Government of Montenegro for 2022-2024, along with the Work Program for 2023, places significant emphasis on digital transformation, acknowledging it as one of the top five priorities. It underscores the importance of streamlining processes and services to meet the needs of citizens, businesses, and the public administration. Furthermore, the program recognizes the necessity of enhancing the digital skills of Montenegrin society to bridge the digital divide, thereby fostering economic growth and development. Simultaneously, the Digital Transformation Strategy of Montenegro for the period 2022-2026 stands as a pivotal strategic document, aligning the nation's transformation principles with those of the European Union and other developed countries. This strategy dovetails with the Public Administration Reform Strategy 2022-2026, particularly in terms of expanding and modernizing ICT infrastructure, enhancing digital skills, raising awareness among citizens and businesses about digital development, and improving the quality, quantity, and utilization of e-services. The critical challenge of digital skills and competencies in Montenegro is recognized in both of these strategic documents. It's worth noting that the Digital Academy is a key reform measure outlined in the Program of Economic Reforms 2023-2025.

The mentioned activity holds strong potential for sustainability and replication at national (local and

central level in Montenegro) and regional (Western Balkans) levels. Due to many regional events as well as analysis it has been stipulated that Public administration organizations often lack the necessary skills i.e. have limited capacities to address complex issues related to digital transformation. Successful digitalization requires investment in knowledge, training and equipment which would in turn position Montenegro and the Western Balkans market in the broader European market. The Digital Academy of Montenegro plays a vital role in bridging the skill and knowledge gap in digital transformation of Montenegro. By offering specific trainings designed to address these gaps, the academy supports the administration in Montenegro, other interested parties (e.g. CSO sector, Academia, Business sector citizens) and can be offered to the wider audiences in the Western Balkans region.

With the assistance of an administrative aide, the Ministry of Public Administration will conduct a meticulous review of the materials prepared by the instructors, thereby ensuring the provision of top-quality digital resources for the module and preselection of participants. Ministry of Public Administration will together with the report on the technical assistance provide the attendance list to ReSPA.

By means of these Terms of Reference (ToR), ReSPA is seeking an expert in Digital Transformation, who would design and deliver the training for "Future of Public Administration: Application of Artificial Intelligence (AI) and Machine Learning (ML)" and "Application, Challenges and Ethical Issues of ChatGPT" and design of materials for the designated topic in Montenegrin language which will be uploaded to the Digital Academy platform, the preparation of final test and preparation of the e-modules of the trainings.

3. Tasks and responsibilities

Based on the main elements above, the Expert shall, indicatively, perform the following tasks:

1. *The design of materials for the Training: "The Future of Digitalization - Application of Artificial Intelligence and Machine Learning (1.5 days)"*

Material will be designed preferably in Montenegrin which will be uploaded to the Digital Academy platform. Selection of recommended e-literature, the preparation of final test. Securing platform where on-line training will be organized.

2. *Preparation of presentations and exercises required for the Training: "The Future of Digitalization - Application of Artificial Intelligence and Machine Learning (2 days)"*

Following information need to be taken into account:

- This training aims to familiarize participants with the fundamentals of artificial intelligence (AI), machine learning, and robotic process automation (RPA), with a specific focus on their application in public administration. Participants will learn about the concepts and benefits of these technologies, as well as the challenges and ethical and legal aspects associated with their implementation in public administration. The course is designed for employees in public administration, civil or business sectors, who are interested in the use of artificial intelligence, machine learning and process automation in public administration.
- Basic concepts of artificial intelligence, machine learning and robotic process automation (RPA),
- Examples of the application of these technologies in public administration and the business sector,
- Benefits and challenges of implementing these technologies in public administration,
- Ethical and legal aspects of using artificial intelligence, machine learning and RPA in public administration,

- Ways in which public administration and society can prepare for the future by utilizing these technologies,
 - Conducting two half day e-training and performing final testing of the trainees. The language of the training will be Montenegrin.
3. *The design of materials for the Training: "Application, Challenges and Ethical Issues of ChatGPT" (1,5 days)*
Material will be designed preferably in Montenegrin which will be uploaded to the Digital Academy platform. Selection of recommended e-literature, the preparation of final test. Securing platform where on-line training will be organized.
4. *Preparation of presentations and exercises required for the Training: "Application, Challenges and Ethical Issues of ChatGPT" (2 days)*
Following information need to be taking into account:
- This training will provide with insights into the application of ChatGPT technology in various fields such as public administration, healthcare, finance, education, etc. with a focus on challenges and ethical considerations. Participants will learn how ChatGPT is used to enhance services and public interaction, analyze data, make predictions and understand the risks associated with ChatGPT usage.
 - Basic concepts of ChatGPT technology and its applications and Examples of ChatGPT implementation in various fields (public administration, business sector, education sector, etc.),
 - How ChatGPT can be used to improve services and public interaction, data analysis and prediction,
 - Ethics and privacy considerations in ChatGPT usage, limitations and challenges in using ChatGPT.
 - Conducting two half day e-training and performing final testing of the trainees. The language of the training will be Montenegrin.
5. *Consultations with Digital Academy representatives. (2 days)*
Organization of pre-testing for applied candidates, providing advices to Digital Academy representatives in the process of selection of up to 30 trainees based on their performance and suitability for the training program.
6. *Conducting two half day e-training (2 days)*
This task will include performing final testing of the trainees. The language of the training will be Montenegrin.

NOTICE: Experts will also provide advices to Digital Academy representatives in the process of selection of up to 30 trainees based on their performance and suitability for the training program, suggestions for the webinar content, including topics, examples and exercises. The materials should be delivered in a digital format. The language of the trainings will be Montenegrin.

The abovementioned tasks and responsibilities represent the milestones of the assignment to be delivered within the time framework of **11 working days**, but the expert may propose slight changes/adaptations upon agreement with the ReSPA Programme Manager in charge as well as the Ministry of Public Administration.

4. Necessary qualifications of the required expert

The expert must have diverse but compatible experience working for or with the public sector, preferably in positions/assignments and tasks related to emerging technologies and development of strategic documents, etc. More specifically, the expert shall possess the following profile:

Qualifications and skills:

- At least Master's Degree in Electronic Engineering, Computer Science or other related fields
- PhD will be considered an asset.

General professional experience:

- At least 10 years of experience working in or with the public sector and related assignments/positions, as public servant, consultant, expert, advisor, etc.

Specific professional experience:

- At least 5 years of extensive experience of AI technologies such as machine learning, natural language processing and computer vision in the Western Balkans or in the EU;
- Specific experience in dealing with use of algorithms and natural language processing techniques to simulate human-like conversations and provide automated responses to user queries or requests.

Skills:

- Written and oral communication skills in English and Montenegrin;
- Ability to write clear and coherent methodological and guidance documents;
- Ability to prepare and deliver well-structured presentations/trainings;
- Ability to analyze complex information and convey clear messages;
- Ability to work with people of different nationalities, religions and cultural backgrounds.

5. Timing and Location

The assignment foresees work from the home/office and on-site in Ministry of Public Administration (Podgorica, Montenegro). Digital Academy will provide quality assurance and intensive support to logistics. The assignment is expected to be performed tentatively during October – December 2023.

6. Remunerations

The assignment foresees engagement of up to 11 (eleven) expert days in the amount of up to 5.500 EUR.

The final outputs will be subject to approval from ReSPA before the payment is executed.

The payment will be done in one instalment upon completion of the assignment. The final outputs will be subject to approval from ReSPA before the execution of the payment.

Note: No other costs will be covered apart from the expert cost per day. The expert cost per day comprises of expert's fee per day and (if needed) a lump sum for covering related costs which include travel, accommodation, local transport, meals and other incidentals.

7. Reporting and Final Documentation

The Expert will be requested to deliver the following documents before the payment is conducted:

Outputs

1. Design of video teasers (up to 30 seconds video announcement of the webinar) for each training,
2. Digital documents (not exhaustive list) prepared (documentation is preferable to be in Montenegrin language, however, in the absence of Montenegrin versions of the documents, English versions are also acceptable):
 - Main principles/trends in the subject area, inspirational practices in the region (if applicable),
 - inspirational practices worldwide (1-2 or more),
 - links and descriptions of professional networks and associations (if applicable to the field – directly or indirectly),
 - events related to the topic at the national, regional, and international levels such as conferences / workshops/ webinars (if applicable),
 - any scientific papers on the subject and/or analytical studies in the field,
 - final tests,
 - securing e-learning platform (e.g. Zoom, MS teams, etc.).
3. Power point presentations and interactive exercises designated to:
 - Basic concepts of ChatGPT technology and its applications,
 - Basic concepts of artificial intelligence, machine learning, and robotic process automation (RPA),
 - Examples of ChatGPT implementation in various fields (public administration, business sector, education sector, etc.),
 - Examples of the application of these technologies in public administration and the business sector,
 - How ChatGPT can be used to improve services and public interaction,
 - How ChatGPT can be used for data analysis and prediction,
 - Ethics and privacy considerations in ChatGPT usage,
 - Limitations and challenges in using ChatGPT,
 - Benefits and challenges of implementing these technologies in public administration,
 - Ethical and legal aspects of using artificial intelligence, machine learning, and RPA in public administration,
 - Ways in which public administration and society can prepare for the future by utilizing these technologies.
4. Final brief report on the performance of the assignment, main achievements and lessons learnt.

Documents required for payment

- Invoice (signed original);
- Timesheets (signed original);
- Final brief report on the assignment