ME/P2024/00XX

COMPANY NAME,
VAT: XXXXX,

k.a.: XXX XXX@XXX

Invitation to tender for a Consulting Service within the Activity 1 of the TEASIMED 2 project co-funded by the European Commission through GRANT CONTRACT - EXTERNAL ACTIONS OF THE EUROPEAN UNION NDICI-GEO-NEAR/2022/437-130

Execution of "Very Long-Term Mediterranean Energy perspectives"

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PART A - Technical Specifications

1. Introduction

Med-TSO - Mediterranean Transmission System Operators, is a recognized association established in Rome, on 19 April 2012, involving the Mediterranean companies performing the activity of transmission system operator (TSO).

Med-TSO has its legal headquarters in viale Egidio Galbani 70, 00156 Rome - Italy and its operational headquarters in via della Marcigliana, 911 - 00138 Rome – Italy.

This tender is launched in the frame of TEASIMED 2 (Towards an Efficient, Adequate, Sustainable and Interconnected MEDiterranean power system) Project - NDICI-GEO-NEAR/2022/437-130 (hereinafter the "Project" or “TEASIMED 2”), developed through a grant contract, signed between Med-TSO and the European Commission in December 2022.

The TEASIMED 2 project is the fourth Med-TSO project co-financed by the European Commission after the Mediterranean Project I (2015-2018), the Mediterranean Project II (2018-2020) and the TEASIMED Project (2020-2023).

The development of TEASIMED 2 Project, structured at a local level, requires multilateral cooperation, not only among electricity companies but also between institutions (National Institutions, Regulators and IFIs) and companies.

The activities to be carried out by the selected consulting company are a relevant part of Activity 1 of the Project: Activity 1.3 “Very Long-Term Energy perspectives”, which has the final objective to provide a long-term framework for the scenarios used for the Med-TSO Master Plan studies in the Mediterranean basin (2040 and beyond), hereinafter “E-Highway2” or” The Project”. The Project will have to provide Med-TSOs with justification for the long-term frameworks by seeking regional coherence and overall balanced views on the future intertwined energy sectors.

Technical Committee for Economic Studies and Scenarios (TCESS) will be the technical counterpart of this tender mandated by the Association for:

1. Guide and follow up with External Expert (consisting of a team of experts, hereinafter EE) Organize the work schedule with the EE
2. Coordinate between the EE and TSO members, through the Single Point of Contact (SPoC) identified within Med-TSO members
3. Participate in the Training organised by the EE
4. Monitor and validate all the steps of the Workplan
5. Validate the planned deliverables.

1.1. Background

Predicting the evolution of the power system over a period of five to ten years is usually effective by extending current trends. However, this approach becomes less reliable for longer time horizons. This is particularly true today, as there is a need to electrify sectors traditionally dependent on fossil fuels, such as electric vehicles and heat pumps, and to accommodate new technology-driven electricity usages, like data centres. Historical trends alone cannot account for these disruptive factors, making simple transpositions of development trajectories from mature Mediterranean countries to evolving ones unrealistic. During TEASIMED Project, Med-TSO selected a consultant to support the technical committee Economic Studies and Scenarios (TCESS) for activity 1.3 “Identification and quantification of long-term sectoral perspectives in Mediterranean region” (E-Highway1) in preparation of scenarios for horizon 2040 and beyond, focusing the activities on the following five areas:

- Electric mobility development and impact, both in terms of energy & peak demand.
- Power-to-gas perspectives (focus on green hydrogen production);
- Other new electrification usages (e.g. desalinization, datacentre, industries, etc.);
- Economy, Demography, Industry and Energy efficiency improvement.
- New storage technologies, focusing on development perspectives and price evolution.

The consultant identified internal and external factors likely to accelerate or slow down new developments over a 10 to 20-year horizon (2030-2040) in these areas.

The outcomes included:

- Five reports, each concentrating on MENAT countries, indicating current trends, future trends, and ranges of confidence/uncertainties.
- A dataset and accompanying report describing the methodology used, created for individual countries and aggregated as min-max value ranges for the years 2030, 2035, and 2040. This dataset, incorporated into an Excel model, considered macroeconomic drivers and specific aspects of the power system, such as new electricity demands from desalination, electric mobility, hydrogen production through electrolysis, and electricity storage. Special focus was given to MENAT countries, with European country data provided by the ENTSO-E association.
- For comparison purposes, a historical year (2021) was used for relevant parameters (mainly macro-economic parameters. However, and due to the high uncertainty, the data ranges were very wide.

2. Objective and scope of the tender

The purpose of this tender call is to establish a robust justification for long-term frameworks by promoting regional coherence among selected MENAT countries (Morocco, Algeria, Tunisia, Libya, Egypt, Jordan, Palestine, Israel, Lebanon, Syria, Türkiye). The objective of the tender is to develop long term electricity scenarios for MENAT countries considering other energy sectors that affect electricity demand through basic theoretical and practical trainings, and to develop and use country-based Energy/Demand Forecast Model with the External Expert (EE).

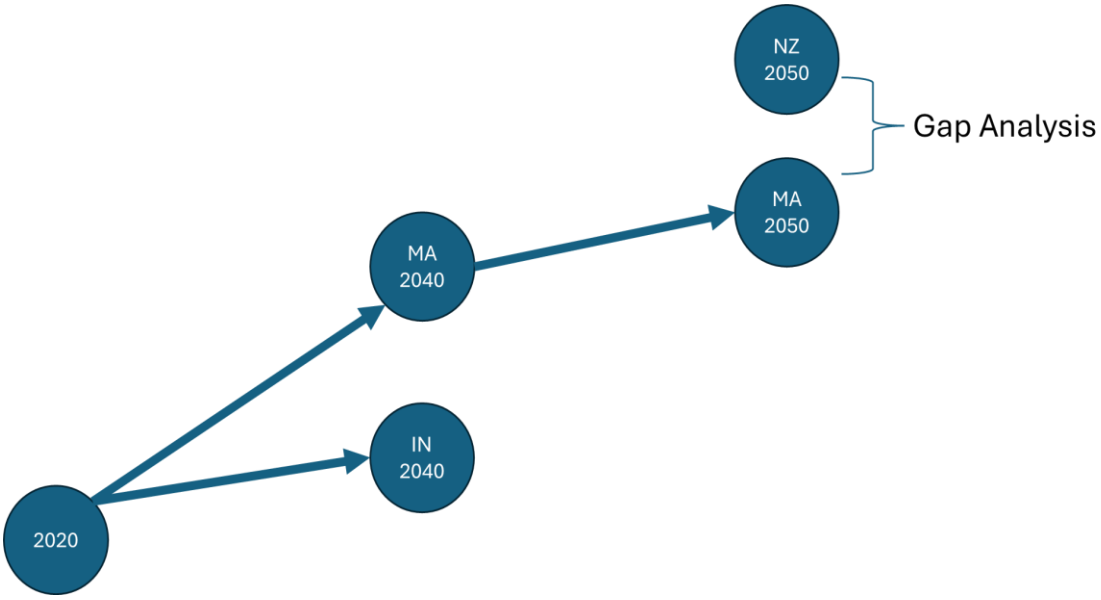
The aim of the work is to develop Electricity scenarios for 2040 and 2050 horizons focusing on the following areas/drivers:

- **Policy and regulation:** national and international policies, including the Paris Climate Agreement, trade rules with Europe, and relations between regional blocs and national commitments.
- Economy Demography Industry and Energy efficiency improvement.
- Energy transition:
  - Electric mobility development and impact on energy and peak demand, covering individual cars, light and heavy trucks, mobility, rail, and freight.
  - Power-to-gas perspectives, with a focus on hydrogen production.
  - New electrification usages and conversion from fossil fuels to low-carbon electricity, including heat pumps, heating and cooling, cooking, desalination, data centres, and industrial processes.
  - The role of energy storage in the energy transition.

The EE should specify the following scenarios:

- **Reference Scenario.**
- **“Inertial Scenario” (IN) 2040:** The EE should adopt TEASIMED 2 Scenario “Inertial Scenario” (IN) for electricity demand 2040 based on data submitted by the members.
- **Two scenarios for 2050:**
  - **“Mediterranean Ambition Scenario” (MA) 2050**: The EE should Adopt the TEASIMED 2 “Mediterranean Ambition Scenario” for electricity demand in 2040 and evolve it to develop the horizon 2050. This scenario aligns with the current ambitious strategies of each country.
  - **“Net Zero emission scenario” (NZ) 2050:** the EE should develop a comprehensive scenario for 2050 that covers both demand projections and the required generation plan.

The following figure indicating all Scenarios



Scenarios should be developed by the EE

All scenarios are described in detail as following:

- **Reference Scenario**: A Baseline Scenario (current trends), includes but is not restricted to, the following elements:

  - **Past Trends**: Consider historical data on electricity consumption to understand seasonal patterns and trends.
  - **Current Policies**: Incorporate existing policies and regulations that impact electricity demand.
  - **Ongoing Projects**: Account for infrastructure projects and initiatives that affect energy consumption.
  - **Nationally Determined Contributions (NDCs):** Include commitments made by countries to reduce greenhouse gas emissions and promote sustainable energy practices.
  - **Reference year** will be determined during the Kick-off meeting.

- **"Inertial Scenario" (IN) 2040:** This scenario should be built using data provided by the members for Inertial Scenario 2040, in addition to the data and assumptions will be provided by the EE considering the impact of the above-mentioned areas, other energy sectors and key drivers (ex. electrification and energy efficiency, new technologies, ...), the story line of this scenario as following:

In the Inertial scenario (IN), energy policies primarily prioritize local and national levels, largely due to persistent disparities in power sector regulations among Mediterranean regions and countries. The advancement of renewable energy sources (RES) is steadily but moderately progressing, aligning with national energy policies. Within this context, the development of Green Hydrogen exhibits weak trends, primarily due to the absence of robust regional explicit policies and regional integration. There is no distinct inclination towards either small-scale, decentralized plants or large centralized ones. Overall, progress in the adoption of electric vehicles and electrification in other sectors, as well as energy efficiency measures, remains sluggish, except for a select few countries that have implemented strong incentive policies.

- **"Mediterranean Ambition Scenario" (MA) 2050**: This scenario should be built using data provided by the members for "Mediterranean Ambition Scenario 2040", in addition to the data and assumptions will be provided by the EE to adopt this scenario considering the impact of the above-mentioned areas, other energy sectors and key drivers (ex. electrification and energy efficiency, new technologies, ...), then the EE will evolve this scenario to develop horizon 2050.., the story line of this scenario as following:
  With a notable increase in GDP and electricity consumption, there is a heightened aspiration for a more sustainable energy sector, resulting in an intensified development of renewable energy sources (RES) and a stronger commitment to the EU's goal of achieving climate neutrality by 2050. Moreover, there is an improved level of cooperation in Green Transition, encompassing policy integration, financing, industry collaboration, and technology transfer.

  The significant growth of renewable energy sources (RES) is facilitated through utility-scale projects, supported by institutional agreements and international cooperation, including offtake agreements. The abundance of carbon-free energy sources also fosters the exploration of new applications for electricity. Additionally, there is a moderate impetus towards energy efficiency.

- **"Net Zero Carbon emissions Scenario" (NZ) 2050**: The EE will use Top-down approach to develop a comprehensive scenario including electricity demand projection and corresponding generation (using least cost methodology) for horizon 2050, this scenario should be consistent with the EU scenario targeting Zero Emissions in 2050
  Gap analysis between the two 2050 scenarios: The EE will conduct a comprehensive gap analysis between the (MA) and (NZ) 2050 scenarios. This analysis will focus on evaluating discrepancies related to policies, regulations, and other relevant factors.

The EE should describe in the offer the approach to deal with missing data in MENAT countries, such approach could be submitted to TCESS in the initial phase of the activities for discussion and approval.

The EE should provide within its offer a tool for building the model and performing the analysis, indicating the following:

- license details if any (cost, duration/lifetime, all features, all improvements related to this scope)
- Programming environment
- Training, Maintenance.
- All input and output reports to be generated as Excel files.

The EE should conduct knowledge transfer and capacity-building sessions to selected Med-TSO audience to enable them to employ both top-down and bottom-up approaches for creation of very long-term scenarios, which includes the methodology, utilizing the tool, making assumptions, and analysing the outcomes.

The consultant shall carry out the following activities:

2.1. Data collection, assessment and gap analysis:

- Review E-highway Output: Examine TEASIMED deliverables and datasets for all MENAT countries.
- Data Aggregation: Compile data at national and regional levels (Med-TSO will provide available data for Group 1).
- Evaluate Available Data: Assess electricity consumption, economic indicators, population growth, and technological trends, considering overall economic trends and policy changes.
- Identify Missing Data: Determine data gaps and assess their impact on forecasts.
- Assumptions for Missing Data: Make explicit assumptions for missing data, clarifying the logic behind them and obtaining approval from the Technical Committee Economic Studies and Scenarios.

2.2. Methodology Selection:

- Granular Data Analysis: Analyse data at detailed levels (e.g., industry, sector, consumer type).
- Modelling Techniques: Choose appropriate modelling techniques for both electricity demand and generation plans for 2050 scenarios.

- Approach Consistency: Ensure consistency between sectoral plans and national strategies/policies.
- Internal and External Factors: Identify factors likely to affect electricity demand development over a 10 to 30-year horizon, focusing on areas such as hydrogen integration, electric mobility adoption, electrification trends, and energy efficiency measures. And in particular the EE should:
    - Hydrogen Integration: Model green hydrogen demand growth, considering factors like renewable energy capacities and electrolysis efficiency and the trends of production at regional level
    - Electric Mobility Adoption: Analyse EV penetration rates based on policy incentives, charging infrastructure, and consumer behaviour, including other forms of passenger mobility and freight transport.
    - Electrification Trends: Quantify shifts towards electrification across various sectors (residential, industry, agriculture, etc.), and assess their impact on load profiles and peak demand.
    - Energy Efficiency: Analyse historical data on energy-saving initiatives and technologies, incorporating policies promoting energy conservation.

2.3. Scenario Development:

- the EE will develop the following scenarios for each MENAT country:
    - Reference Scenario: One scenario for the 2040 horizon.
    - 2050 Scenarios: Two scenarios for the 2050 horizon, including a gap analysis between the scenarios.
    - Assess and Visualize: Evaluate and visualize how each driver influences electricity demand for each scenario.

2.4. Deliverables:

- Detailed Reports: Provide reports including available and missing data, assumptions, chosen models, methodologies, and scenario definitions.
- Scenario Analysis: Include descriptions and analyses of each scenario, with a gap analysis to achieve zero carbon emissions by 2050.
- Country Models: Develop models for all countries.
- Data and Assumptions: Provide sources for missing data and references.
- Source Code: Make source code available upon request.

- Data set: includes scenarios input and output in details as following:
  - Detailed electricity consumption at the end user level for all sectors including (Electric mobility, H2G , Desalination, Data centres, industries, …)
  - Final electricity consumption including system losses
  - Energy intensity
  - GHG emissions (Electrical and Total)
  - Technologies Evolutions (HPs, EVs, H2 ...)
  - Primary Energy Consumption

2.5. Knowledge Transfer and tools

The objective is to empower a Task Force (TF) established by Med-TSO with the necessary skills and understanding to effectively employ both top-down and bottom-up approaches in creating very long-term energy scenarios, by focusing both on Methodologies and Tools.

Activities:

2.5.1. Knowledge Transfer Sessions:

- Conduct comprehensive knowledge transfer sessions to familiarize the TC members with the methodologies, tools, and best practices employed in the project.
- Provide detailed explanations of the methodologies used, including data assessment, scenario development, and forecasting techniques.
- Facilitate interactive sessions to address any queries or concerns raised by the TC members and ensure clarity on all aspects of the project.

2.5.2. Capacity-Building Workshops:

- Organize capacity-building workshops aimed at enhancing the technical capabilities of the TC members in electricity demand forecasting and scenario planning.
- Provide hands-on training on utilizing the tools and models developed for scenario analysis and projection.
- Foster a collaborative learning environment where TC members can actively engage in practical exercises and case studies related to the project objectives.

2.5.3. Tool Implementation and Utilization:

- If needed, provide a license of use to the Association and its Members for a period of 5 years.
- Introduce the TC members to the tool(s) and software applications utilized for data analysis, modelling, and scenario visualization
- Demonstrate the functionalities of the tool(s) and provide guidance on their effective utilization for conducting analyses and generating insights.
- Offer technical support and assistance to the TC members in implementing the tools within their respective organizations and integrating them into their decision-making processes.

2.5.4. *Methodology Adoption and Assumption Making:*

- Guide the TC members in adopting the prescribed methodologies for data assessment, scenario development, and assumption making.
- Assist the TC members in making informed assumptions and judgments based on available data, research findings, and expert insights.
- Encourage the TC members to critically evaluate the validity and reliability of their assumptions and seek validation from relevant stakeholders as needed.

3. Technical aspect

MENAT countries can be divided into two groups as following:

Group1: Where TSOs submitted their data (Generation Plan, and Electricity demand including Green hydrogen and EVs only) those countries are (Morocco, Tunisia, Egypt, Jordan, Lebanon)

Group2: completely missing data for countries (Algeria, Libya, Palestine, Israel, Syria), however their data were estimated by Med-TSO Secretariat using publicly available information gathered following a benchmark and a review of the published strategies.

Code	Country	Available data for 2040		Available Data
		Inertial Scenario	Mediterranean Ambition Scenario	
MA00	Morocco	✓	✓	Generation Plan: Thermal, Nuclear, renewable, Storage capacities, and time series Load Forecast time series: Main demand, EV load, H2 (Electrolyze capacity), Current and future Interconnections
TN00	Tunisia	✓	✓	
EG00	Egypt	✓	✓	
JO00	Jordan	✓	✓	
LB00	Lebanon	✓	✓	
TR00	Türkiye	✓	✓	
DZ00	Algeria			Data estimated by Med-TSO Secretariat
LY00	Libya			
PS00	Palestine			
IL00	Israel			
SY00	Syria			

4. Activities, deliverables and resources

The EE activities can be split into 7 main tasks, as described synthetically in the following table. At the end of each step the EE should report to Med-TSO. Since some of the steps can be also carried out in parallel, in the offer the EE shall provide an indicative time-schedule for all steps.

When producing the offer the tenderer shall also provide its best estimation of the required person/days to fulfil the work program items.

Work program items		**Indicative deliverable** (final set to be agreed in step 0)
Task 0	**Preparatory activities**: Schedule all tasks of the activity 1.3, including the responsibilities between TCESS and EE. Definition of specific deadlines according to the project GANTT. Estimate the necessary meetings, etc. Finalize methodological approaches with TCESS members. Med-TSO submit the	• Report with final working plan (doc, ppt) • Report with final methodological

	available data (Generation plane, Load Forecast), deliverables and dataset of E-highway1 (TEASIMED), and Scenario Storyline (TEASIMED 2)	approaches (doc, ppt)
Task1	EE should examine all documents, identify gaps in the available data assess their impact on the model, develop appropriate assumptions to address these gaps, and define the appropriate methodology. The tool will be used for building scenarios all references should be shared,	• Report with assumptions for each country and described methodology, approval of TCESS
Task2	EE construct the Reference scenario for each country indicating all sources and references of historical data, SC should approve both reference year and historical data. EE should Visualize the reference scenario for each Country indicating all drivers, factors influence load forecast.	• Detailed Report on reference scenario for each country including sources and references of historical data
Task3	EE construct the one scenario (IN) for each country for horizon 2040 using all data for groups 1&2 and the consultant should provide all missing data related to other energy sectors that will influence the electricity demand, TCESS should approve all data provided by the consultant. EE should visualize assess and analyse the scenario model for each country compared to the reference scenario indicating all drivers/factors influence electricity demand.	• Detailed Report on (IN) scenario for each country including sources and references of missing data, and assumptions • The report should include the EE analysis, and assessment for each country

Task4	The EE construct the one scenario (MA) for each country for horizons 2040&2050 using all data for groups 1&2 for horizon 2040 and the consultant should provide all missing data related to other energy sectors that will influence the electricity demand and develop this scenario for horizon 2050 as an evolution of 2040. TCESS should approve all data provided by the consultant. EE should visualize assess and analyse the scenario model for each country compared to the reference scenario indicating all drivers/factors influence electricity demand.	• Detailed Report on the (MA) scenario for each country including sources and references of missing data, and assumptions • The report should include the EE analysis, and assessment for each country.
Task5	The EE construct a comprehensive scenario Net-Zero emissions (NZ) for horizon 2050 (Electric demand and the corresponding generation plan) based on the Top-Down approach to achieve the target of Net Zero Emissions by 2050, the EE will provide all data and assumptions needed for the two scenarios, the SC should approve all provided data and assumptions. For each country the EE should assess, analyse and visualize each scenario indicating how each driver influences the electricity demand. The EE should conduct a gap analysis between the two 2050 scenarios, highlighting how much progress each country will make toward achieving net-zero emissions based on the existing strategy, and the recommended actions should be taken to achieve the goal The EE should visualize, assess and analyse both scenarios for each country compared to the reference scenario indicating all drivers, factors influence electricity demand. TCESS should approve all data provided by the consultant	• Detailed Report on the (NZ) scenario for each country including sources and references of missing data, and assumptions • The report should include the EE analysis, and assessment for the scenario, and gap analysis for each country

Task6	Capacity building & training Task Force members should have a thorough understanding of the methodology, be capable of making reasonable assumptions for missing data, and construct models for very long term horizons.	• Handover models, assigned source codes, reports , tool used, and references • Training sessions • video and audio recordings

When submitting its offer, the EE should describe the approach to deal with missing data in MENAT countries. This approach should be submitted to TCESS during the initial phase of activities for discussion and approval.

Each Task must be provided for a kick-off meeting and for the submission of a set of deliverables (in line with what indicated in the table above). The EE shall also ensure TCESS receive periodic progress report of activities. The nature (e.g. ppt presentation, update call) and the frequency of these updates will be agreed as part of Task 0.

5. Detailed GANTT and project team composition

The EE shall provide to Med-TSO, for its approval, a detailed GANTT of the activities containing (the list is not exhaustive):

- Tasks
- Project Team (eventually defining the support requested to Med-TSO resources)
- Deadlines for each task and associated intermediate and final deliverables and status updates.
- Meetings calendar and the date for a kick-off meeting for each task mentioned in section 5.

The GANTT must be developed in agreement general process outlined in the above figure. The GANTT must also include an indication of the resources allocated to each task (number of resources and level of experience).

6. Experts Profiles requirements

The experts invited to this call for tenders shall have the necessary skills in relation to very long-term energy prospective, Electricity demand forecast, economic fundamentals. The experts profile requirements are the following:

- Proved experience in statistical techniques for load forecasting (e.g., time series analysis, regression), Machine Learning (e.g., artificial neural networks), and ability to handle large datasets and perform robust analyses.
- Proved experience in the development of benchmarking in the field of electricity system
- Proved experience in energy and environmental policies, and regulations in the MENAT countries.
- Proved experience in perspective, energy planning, the trajectory of electricity demand over extended horizons (e.g., 20 - 30 years).
- Proved knowledge in electric mobility, power to gas technology, energy efficiency, electrification, regulations in the MENAT countries
- Proved knowledge in the role of green hydrogen as an energy carrier and its impact on demand,
- Proved knowledge in EV market dynamics, charging infrastructure, and consumer behavior,
- Proved knowledge in energy storage technologies (batteries, pumped hydro) and their influence on load patterns.
- Proved experience of working in electricity sector in MENA countries.
- Experience of working in an EU financed project is considered an asset.
- Skills in communication in three essential languages: (English, French, and Arabic)
- Well described structure of the team of experts with specification of each member role in the tasks to be undertaken
- Proved ability to perform parallel/regional tasks within the structure to be proposed.
- Leadership and communication skills.

The EE shall specify the composition of the team which will execute each activity of the project.

7. Timetable for the tendering process

Stages	Indicative period
a) Sending invitation	July 2024
b) Deadline for submitting applications	5-8 September 2024
c) Signature of the contract	30 September 2024

8. General Conditions

The EE must be aware that the activity is funded by the EC and subject to all EU standard procedures.

All the documents proposed by the EE are subject to approval. The approval does not change the responsibility of the EE on the final result. All the documents can be updated during the activity, whenever unpredictable facts arise. In all cases, major changes introduced by the EE have to be notified to Med-TSO for approval. The final documentation has to be consistent with the activity, in terms of scope and time.

9. Timing

The Grant Contract has started on January 1, 2023, and the implementation of the action is 36 months.

The EE will be contracted upon signing the Contract and until 30 October 2025.

PART B Procedures and evaluation criteria

1. Tenderers

The tender is organized by invitation.

The following tenderers have been invited to apply for this call:

1. **ARTELYS SAS**
2. **ELIA GRID INTERNATIONAL**
3. **NE NOMISMA ENERGIA s.r.l.**
4. **ECONOMIC CONSULTING ASSOCIATES Ltd (ECA)**
5. **MRC ARGE ENERJİ MÜH. KONT. VE TEST HİZM. A.Ş.**
6. **IANUS C&D - Ener21**
7. **EXERGIA Energy and Environment Consultants S.A**
8. **E3-MODELLING S.A.**
9. **ENERDATA**

Consortia are allowed but must include a leader within the companies listed in the table above. Names and CVs of the proposed experts who will work in the contract must be clearly declared. The substitution of an expert can only take place with an expert with similar professional experience and in every case, the substitution must be approved by Med-TSO.

1.1. Procedure for the Submission of Proposals

The offer shall contain four folders, named:

A. [NAME OF THE TENDERER_Folder A]
B. [NAME OF THE TENDERER_Folder B]
C. [NAME OF THE TENDERER_Folder C]
D. [NAME OF THE TENDERER_Folder D]

Folder A - **Administrative documentation**: the following documents shall be included:

1. this request for offer, signed by the legal representative, with a copy of its ID attached; the request can also be signed by a solicitor of the legal representative, and, in this case, a certified copy of the attorney has to be attached;

2. A valid chamber of commerce company registration. This document must have an international format and, in any case, must be in English.

If the Tenderer participates in the tender with other companies, the relative agreement among the Parties must also be attached, with the specifications of the part that will be in charge of the administrative aspect of the project (e.g. contract header, invoicing, etc.) and with the specifications of the parts of the service that will be performed by the individual companies.

Consortia are allowed but must be led by one of the companies invited, listed above (paragraph 1. Tenderers)

Folder B – Economic offer **shall indicate the price of the work**, including VAT, taxes, expenses, contributions and other due fiscal charges, according to the applicable law of the tenderer. The Economic offer shall be signed by the legal representative.

PLEASE NOTE: Med-TSO is an international non-profit Association. Due to its nature and in compliance with Italian tax law, Med-TSO has not VAT number, but only a tax code: 97697840581, like a natural person. Since Med-TSO is unable to manage any VAT transaction (credit and/or debit VAT) deriving from the contractual relationship with the supplier (e.g. reverse charge), Med-TSO pays all services including VAT. Therefore, all offers must include VAT to be added to the price of the offered service.

Considering the type of service, in applying VAT, please take into account the provisions of UE *"VAT-commerce Package"*.

The legal representative of the External Expert, with a copy of its ID attached, shall sign the economic offer; a solicitor of the legal representative can also sign the offer, and, in this case, a certified copy of attorney has to be attached.

In folder C – References – the tenderer shall include all the information considered relevant for evaluating the expert qualifications, experience and competence, taking into account the awarding criteria and procedures described at Section 11. Med-TSO reserves the right to verify self-attested titles, competencies and experiences and the faculty of this Administration to not proceed to the award shall not be affected.

In folder D – Technical offer:

a. ***Experience*****:** the tenderer will illustrate its consulting experience in fields similar to the object of this request, with specific mention of relevant experience and any other information required by the request for offer;

b. ***Services performing*****:** the tenderer shall describe how the activity will be performed including the methodological guidelines, a schedule of the tasks, the date of delivery and the identification of the resources allocated to each task)
c. ***Aaction plan*****:** the tenderer shall describe the time to perform the services, taking into account the specific nature of the Association, indicating specifically the different stages, and, for each stage, indicating the relevant timetable;
d. ***Professional resources*****:** list of the professional resources the tenderer will use to perform the service, attaching the relevant CVs.

The Technical offer shall not include any economic information. Any violation of this requirement will determine the exclusion of the tenderer from the bidding procedure.

The Technical offer shall be signed by the legal representative of the Expert, with a copy of its ID attached; the offer can also be signed by a solicitor of the legal representative, and, in this case, a certified copy of the attorney has to be attached.

References, as well as Economic and Technical offers, shall be drawn in English.

Folders A, B, C and D shall be sent by electronic mail to tenders@med-tso.com. This email shall have as object: "*Very Long-Term Mediterranean Energy perspectives*" and it shall contain a link to download the folders (Dropbox, WeTransfer or similar tools are accepted).

If there is a need to have other information, Med-TSO Secretariat may contact the tenderer for this purpose during the evaluation process.

The proposal, on pain of exclusion, must be sent in the period between 5 and 8 September 2024.

Any queries could be submitted by 19 July 2024 by e-mail writing at tenders@med-tso.com, making clear reference to this tender. Answers to those queries will be sent to all prospects by 23 July.

If there is a need to have other information, Med-TSO Secretariat may contact the tenderer for this purpose during the evaluation process.

1.2. Award Criteria

The award will be assigned to the most economically advantageous tender, following this scoring table.

EVALUATION ELEMENTS		MAXIMUM WEIGHTED SCORE
1	REFERENCES	20
2	TECHNICAL OFFER	50
3	ECONOMIC OFFER	30
TOTAL		100

1.3. Score assignment and Evaluation Procedure

Mandatory criteria section

- All the contract reports and communications will be in English; therefore, a good knowledge of the English language is a prerequisite for the proposed team of experts.
- the Gantt to be proposed must clearly show that all the deliverables should be submitted before end of October 2025

		Max Score	Weight
	1 - References, qualifications and competence of key personnel	40	
References	Knowledge of English is a must, French and Arabic are considered a plus	10	
	Proved knowledge of Power Systems, Energy and Environmental Policies in the MENA Region	10	
	Proved knowledge in Electric mobility, in power-to-gas, and electricity storage technologies and policies	10	
	Proved knowledge in Demography, Economy, Industry and Energy efficiency in MENA countries, and their impact on electricity demand	10	
	2 - Specific knowledge and experience	60	
	• Proved knowledge and experience in the use of computational tools for Market Simulation	20	20%
	• Proved Experience in the development of market simulation tool is considered a strong plus	10	
	• Proved experience in the provision of Trainings and Capacity Building programmes	10	
	• Proved experience in the elaboration of Energy Plans for Countries, International Institutions or organizations	10	
	• Proved experience in benchmarking, prospective and Energy planning and modelling	10	
TOTAL SCORE FOR REFERENCES		100	

		Max Score	Weight
Technical Evaluation	3 -Quality of technical offer	100	
	Project Management	**30**	
	• Clarity of Task Schedule Detailed time schedule of the work, number of physical meeting and number of experts	10	
	• Responsibility Allocation: Clear assignment of responsibilities between TCESS and EE.	10	
	• Risk Management: identification of the main risks and clear definition of the possible remedial actions to overcome them	10	50%
	Methodological approach:	**20**	
	• Explicit and detailed description of the methodological approach to be implemented for the elaboration of the scenarios	10	
	• Description of the actions proposed to collect or estimate data from Missing Countries	10	
	Simulation Tool:	**20**	

	• Description of the Simulation Tool that will be used and provided to Med-TSO	10	
	• Online tool will be considered a plus	5	
	• Describe the technical support and assistance that will be provided to the TC members in implementing the tool	5	
	Training and Capacity Building	**20**	
	• Description of the training methodology that will be used for the capacity building	5	
	• Description of the program of training that will be provided (with a definition of number of Meetings, Workshops)	5	
	• Description of the methodology that will be used for evaluating the effectiveness of the training	5	
	• Description of the support that will be provided to the Members (Including the time also exceeding the contract duration)	5	
	Offer improvement of the ToR	**10**	
	TOTAL SCORE FOR TECHNICAL OFFER:	**100**	

The evaluation process is undertaken through the following three steps:

Evaluation procedure			
Step	1st step		2nd step
	Pre-Evaluation based on References (folder C)	Evaluation of the Technical Offer (folder D)	Evaluation of the Economic Offer (folder B)
Weight	20%	50%	30%

The first step of the process include:

pre-evaluation, implemented only in case Med-TSO receives more than 4 (four) offers from the tenderers. The minimum requested References score is 70 points (and more than 0 for each reference criterion).

Only the tenderers that receive more than 70 points at the pre-evaluation phase pass to the second step, for evaluating also the quality of their technical offer. The maximum number of offers passing to the second step is 5 (five). Tenderers' offers not passing the first step will be rejected.

Evaluation of the technical offer for the tenderers having passed the pre-evaluation phase. The minimum requested score for the Technical Quality of the offer is 70 points (and more than 0 for each technical quality criterion).

Only the tenderers that receive more than 70 points at the Technical Quality phase pass to the second step, for evaluating the Economic offer. Tenderers' offers not passing the second step will be rejected.

The formula for Economic offer evaluation is:

$$ES = 100 \times CP/EP$$

where ES is the Economic Score, CP is the value of the cheapest proposal and EP is the value of the Economic Proposal under consideration.

The tenderer obtaining the highest combined technical and Economic score will be awarded the contract – already foreseen and signed by the tenderer for acceptance provided in Annex B.

1.4. Confidential Information

Any non-public information of confidential or proprietary nature; whether of a commercial, financial or technical nature related to the object of this call, or all information otherwise exchanged between Med-TSO and the tenderers shall be deemed to be "Confidential Information".

"Confidential Information" shall not be used or exchanged for purposes other than in direct relation with the object of this call as specified in the relevant article of the draft contract (Annex 1).

It is also considered the possibility that any Med-TSO Member could require a specific NDA to be signed by the EE.

1.5. Disputes

For any and all disputes that may arise between the tenderer and the Association, the Court of Rome has exclusive jurisdiction for the interpretation, execution and for everything that is relevant for this assignment.

Draft Contract

Company

Name

Address

Subject: Consulting Service within the Activity 1.3 of the TEASIMED 2 project co-funded by the European Commission through GRANT CONTRACT - EXTERNAL ACTIONS OF THE EUROPEAN UNION NDICI-GEO-NEAR/2022/437-130

1. DEFINITION OF THE PARTIES

This Contract is stipulated in the context of the TEASIMED 2 Project (hereinafter "Project"),

between:

Med-TSO Mediterranean Transmission System Operators, fiscal code 97697840581, with registered office in Viale Egidio Galbani 70, 00156 Rome and operational headquarters in Via della Marcigliana 911, 00138 Rome – hereinafter referred to as the "Customer", represented in this Contract by the Secretary General, Mr. Angelo Ferrante,

and

XXXXXXXX. —, VAT number/Fiscal Code **XXXXXXXXX**, with registered office in **XXXXX, XXXXXXXXX** – hereinafter referred to as the "Service Provider", represented in this Contract by **XXXXXXXX**, as Legal Representative of the Company.

2. SUBJECT OF THE CONTRACT AND DESCRIPTION OF THE ACTIVITIES

2.1. Subject of the Contract

The purpose of this Service Contract is to establish a robust justification for long-term frameworks by promoting regional coherence among Med-MENA countries. The detailed description of the activities to be carried out are reported in the terms of reference of the tender (ME/P2024/**XXXX**), which constitutes an integral part of this contract.

2.2. Activities description

The activity to be performed by the Service Provider is described in the terms of reference of the tender (ME/P2024/**XXXX**) and in the technical offer submitted by the Service Provider (ME/A2024/**XXXX**), which is inherent part of this Contract. The substitution of an expert can only take place with an expert with similar professional experience and must be always approved by Med-TSO.

3. DURATION AND CHRONOLOGICAL SCHEDULE

This Contract comes into force on the date of its signature and ends on 30 October 2025.

The activities referred to in the above art. 2.2 shall be fulfilled according to the work program defined in the terms of reference of the tender and agreed with Med-TSO.

4. CONTRACT MANAGEMENT

The Secretary General of Med-TSO is responsible for providing the management of this Contract.

All the communications between the Service Provider and the Customer concerning this Contract shall be forwarded exclusively in writing, by e-mail to angelo.ferrante@med-tso.com or by post to the following address:

Med-TSO

Via della Marcigliana 911

00138 Rome

to the kind attention of Mr. Angelo Ferrante

The reference person of the Consultant is **XXXXXX** and all communication will be forwarded to: **XXXXX, XXXXXX - XXXXXX, XXXXX, XXXXXX, XXXXX.**

5. IMPLEMENTATION IN ACCORDANCE WITH BEST PRACTICE

With the acceptance of this Contract, the Service Provider undertakes to guarantee the Customer that all activities will be carried out according to the best available techniques and best practice, in relation to the quality level assumed for the activities themselves.

6. FEES AND AMOUNTS OF THE CONTRACT

For the accomplishment of the activities referred to in paragraph 2 of this Contract, Med-TSO will pay the total amount of **XXXXXX EUR**, including VAT and any tax and duty, withholding tax and social security contributions, where due.

Any expense incurred and duly documented for the accomplishment of this Contract will be reimbursed to the Service Provider only prior written authorization from the Customer.

The contractually defined prices are proposed and accepted by the Service Provider in complete and thorough knowledge of the quantity and kind of work to be fulfilled; for this reason, the Service Provider declares to waive any claim of an economic nature that should result from incorrect assessment or lack of knowledge of the quantities, modalities and characteristics of the works object of the Contract.

7. ARRANGEMENTS FOR INVOICING, PAYMENTS, TRACEABILITY OF FINANCIAL FLOWS, ASSIGNMENT OF CREDITS

7.1. Arrangements for invoicing

The amount of the Contract in the previous art. 6 relative to the activities referred to in the paragraph 2.2 of this Contract, may be invoiced by the Service Provider, as follow:

- **XXXXXX**

The VAT and/or any tax and duty, withholding tax and social security contributions, where due, shall be highlighted in the invoices. In case of exemption, contemplated pursuant to current tax laws and/or existing Agreements against double taxation, shall be sent to the Customer:

- a certificate of the foreign authority attesting the residence for tax purposes in the foreign State, with the details of the relative VAT number or tax code;
- a declaration of having made the service to Med-TSO in the foreign State;

- in the event that there is an Agreement against double taxation, a certificate proving the existence of the necessary conditions to benefit from the convention scheme.

7.2. Payments

Payment of invoices issued by the Service Provider will be made within the term of 30 days from the date of receipt of the invoice, subject to approval by Med-TSO and by European Commission of the services rendered and the regular performance of the requested activities. The payments are subject to the Contracting Authorities yearly pre-payments.

The reference data of this Contract and the reference data of the Main Contract NDICI-GEO-NEAR/2022/437-130 shall be indicated in each invoice, as well as the code and the details in order to allow payment.

Each invoice will have to be headed to:

Med-TSO

Viale Egidio Galbani, 70

00156 Roma

Tax code 97697840581

and sent in original to

Med-TSO

Via della Marcigliana, 911

00138 Roma

to the kind attention of: Mr. Gherardo Alfonso Vichi

7.3. Traceability of financial flows

In order to guarantee the traceability of financial flows finalized to prevent criminal infiltration, pursuant to and for the effects of article 3, paragraph 1 of Law 136/2010, financial transactions relating the activity referred to in the Contract in question, must be carried out exclusively through the bank or postal transfer instrument, or else with other payment instruments suitable to allow full traceability of transactions.

7.4. Assignment of credits

Parties expressly agree – pursuant to and for the effects of article 1260, paragraph 2 of the Civil Code- that the credits deriving from the execution of this Contract are not transferable to third parties.

Such credits shall not be also the object of any act of disposition by the creditor, even if invested with power of representation and/or management.

8. OBSERVANCE OF LAWS, REGULATIONS AND RULES

This contract is governed by Italian laws. The Service Provider, under its sole responsibility, must comply with the legislative provisions as well as to observe all the regulations, rules, requirements of the competent Authorities in the field of services, labour contracts, safety and work hygiene and of how much else can, in any way, affect the execution of this Contract.

Moreover, for the entire duration of the Contract, the Service Provider must guarantee the continuation of the qualification/eligibility requirements agreed when assigning the Contract and the continuation of non-exclusion requirements provided by the General Conditions for the supply of services subsidized by the European Union.

Failure to comply by the Service Provider with the requirements and obligations charged by it pursuant to the present article, legitimizes the Customer to terminate the Contract pursuant to and for the effects of article 1456 of the Civil Code.

9. PARTICULAR CLAUSES

9.1. Confidentiality

All information collected during the course of this Contract, as well as all documents and reports prepared within the same, shall be considered and treated as confidential and shall not be used for purposes other than the execution of the activities covered by the Contract itself, nor disclosed or otherwise communicated to third parties without the prior written consent of the Customer. Except in cases where:

- it is necessary to comply with regulatory or legal obligations;
- Italian or foreign authorities request it, and a motivated refusal could not be opposed;

- the information is already in the public domain;
- the information was already known at the date of issue of this assignment;
- the information has become public knowledge during the assignment for causes other than failure to comply with confidentiality obligations referred to in this article.

At the end of the Contract, the Service Provider will have to immediately cease to use and destroy, or return, all “Confidential Information” to the Customer.

It is understood that the above confidentiality clause retains its effectiveness even after the conclusion of this Contract.

9.2. Privacy

It is understood that, with reference to the fulfilment by the Service Provider of the activities provided for in this Contract and in compliance with the provisions of the European Regulation on the protection of personal data (Regulation EU 2016/679), the data already taken or that will be subsequently communicated from the Service Provider will be used for the sole purpose of carrying out the activities entrusted to it.

Such data, which may be partly on paper files and partly on electronic files, will have to be kept in compliance with the security measures provided for in the European Regulation on the protection of personal data (Regulation EU 2016/679), and shall not be disclosed to the outside except in cases in which this will be necessary in the performance of a legal obligation.

In cases in which it is necessary to acquire information or data from third parties for the performance of the activities referred to in this Contract and this requires the consent of the interested parties, it will be the Customer’s responsibility to obtain this consent.

It is understood that the Service Provider has the faculty to exercise, regarding the existence and processing of personal data concerning it, the rights provided for by the European Regulation on the protection of personal data (Regulation EU 2016/679).

It is also noted that the data controller in question is Med-TSO and that the responsible for data processing is the Secretary General, with domicile for the office in Viale Egidio Galbani, 70 – 00156 Rome.

9.3. Property of the works

All the material prepared for the completion of the work is of property of Med-TSO. The Service Provider will also guarantee the Customer the full availability of each component of the works, even after the end of the contract.

9.4. Liability for damages

The Service Provider is responsible for the correct execution of the service.

The responsibility of the Service Provider during the performance of the service, and until the end of the contractual relationship, must be understood as referring to the damage done to the Customer's people and things and/or third parties, strictly connected to the methods of carrying out the service and to the object of the same. Are included in the responsibility of the Service Provider any damages that should occur in the different phases to provide the service in accordance with the provisions of the Contract.

The assessment, the evaluation and the settlement of claims for damages shall be performed by the Service Provider in contradictory with the damaged.

The Service Provider assumes full responsibility towards the Customer for all obligations deriving from the Contract, ensuring also for the work of the expert referred to in the previous articles. Therefore, the Service Provider undertakes to keep the Customer unharmed and free from any liability for accidents and/or injuries which in the execution of the Contract may be caused to the staff of the same and/or of Med-TSO, or to the Service Provider.

To this end, the Service Provider will have to underwrite and maintain the following insurance policies for the duration of the present Contract:

1. Medical insurance that indemnifies the Customer from any liability related to medical expenses;
2. Insurance for damages to cover risks in sickness or accident, including the cost of repatriation for health reasons.

The Service Provider will have to provide proof of the insurance policies and of the regular payment of the insurance premiums, without any delay, at the Customer's first request.

The Service Provider guarantees and undertakes to keep the Customer unharmed and relieved against any claim that should be advanced by third parties as a result of breaches, even partial, of the contractual rules and/or legal rules by the same or by the Service Provider.

The Service Provider undertakes to act with the utmost diligence and to take any necessary and/or opportune initiative to avoid damages of any kind and nature to people and things. In the case these should occur, the same will have to provide in any case for the complete and prompt compensation of them.

The compensation for any damage caused by the Service Provider to people and things, during the course of the activities referred to the present Contract, is entirely borne by it.

Such compensation must be made within a short time and copy of the receipt must be delivered to the Customer within one month from the date of completion of activities.

However, the Service Provider, in cases of wilful misconduct or gross negligence, is obliged without time limits to provide for his care and expenses for the compensation of any damage to its charge that should be claimed, avoiding harassment to the Customer and keeping the Customer relieved of any action initiated against him.

9.5. Domicile

We acknowledge that the Service Provider, to all contractual effects, elects legal domicile at the address to which this Contract is sent. In relation to this, the Customer, for the entire duration of the same, will make any notification and/or communication to the aforesaid legal domicile.

In the event of a change in this legal domicile, the Service Provider undertakes to inform the Customer about it by registered letter; in the event of lack of this, notifications and/or communications will be considered such as regularly carried out once they are received at the previously notified legal domicile of the Service Provider.

10. PENALTIES

In case of delay with respect to the terms of completion referred to in previous art. 3, a daily penalty equal to the ratio between the value of the Contract and the days of carrying out the activities. It is expressly made without prejudice to reimburse further damage in addition to the amount of the penalties.

The relevant amounts will be retained when the invoices are paid in correspondence with the services for which the contractual terms and/or the contractual conditions are disregarded, or at the time of payment of any amount due in connection with the Contract.

The penalties are cumulative, but the relative amount shall not exceed in any case 15% of the total value of the Contract.

When the amount of the penalty has reached the aforementioned limit of 15%, the Customer has the faculty to use the termination clause.

The application of the penalties does not exempt from the observance of all contractual and legal obligations concerning the correct execution of the Contract.

The parties recognize that the implementation of measures to contain the Coronavirus (COVID-1-9) epidemic in Italy {see law 13/20, decree law 18/20 and any other future} and in

XXXX could result in the debtor's liability being excluded, under Articles 1218 and 1223 of the Italian Civil Code.

11. DISPUTES

All disputes arising from this Contract, including those relating to its validity, interpretation and execution, shall be entrusted to a board of three arbitrators, of which two named, one by the Service Provider and one by the Customer, and the third one, having functions of President, by the arbitrators so named.

In case of failure to appoint the arbitrator of the party, or failure to agree on the appointment of the President, the appointment itself will be referred to the President of the Rome Court, on the request of the most diligent party.

The College shall judge by right with the application of the articles 806 and following of the Code of Civil Procedure and shall have seat in Rome (Italy)

12. TERMINATION

In all cases of non-fulfilment by the Service Provider of the obligations arising from the Contract, the same can be terminated by the Customer, pursuant to the provisions of the Civil Code. The termination works by right in the cases provided for in articles 7, 8, 9 of this Contract and in the cases provided for in the General Conditions for the Supply of services financed by the European Union. It is also the Customer's right to terminate this Contract in the cases provided for art. 80, par. 5, lett. c), c-bis), C-ter of the Legislative Decree 50/2016

In the above-mentioned cases, the Customer reserves the right to suspend the Contract, demanding the reimbursement of sums eventually paid, without prejudice, in this case also, to the compensation for damage.

Particularly, the damage may consist of both the emerging damage and the loss of profit, notwithstanding that the total amount of compensation for damages shall not, except in cases of wilful misconduct or gross negligence, exceed the double total value of this Contract.

13. WITHDRAWAL

It is understood that the Customer has the right to withdraw from this Contract, in whole or in part, at any time and at its sole discretion. In this case, the Customer shall correspond to

the Service Provider exclusively the amounts relating to the expenses occurred on the date of withdrawal.

Such sum, as a comprehensive and flat-rate indemnity, is meant to be paid to acknowledgment of each and any claim or right from the Service Provider, without the latter being able to demand another compensation or indemnity, according to the article 1671 of the Civil Code or for any cause or title or reason.

14. COMPLETION

This Contract is concluded pursuant to the article 1326 of the Civil Code, with full acceptance and without any reservation from the Service Provider and on condition that the requirements set forth in the following points are fulfilled.

Hereinafter the address at which the Service Provider shall send the following documentation:

Med-TSO

Via della Marcigliana 911,

00138 Rome

To the kind attention of Mrs. Simona La Cioppa

One original of this Contract, stamped and signed by the Legal Representative of the Service Provider in each sheet for acceptance (attached).

Rome, XX XXXXX 2024

Med-TSO	THE SERVICE PROVIDER
The Secretary General	The Legal Representative

Pursuant to and for the purposes of the articles 1341 and 1342 of the Civil Code, are specifically approved the following clauses relating to this Contract:

Art. 7.2 “Payments”

Art. 7.3 “Traceability of Financial Flows”

Art. 8 “Observance of laws, regulations and rules”

Art. 9.4 “Liability for damages”

Art. 10 “Penalties”

Art. 11 “Disputes”

Art. 12 “Termination”

Art. 13 “Withdrawal”

Place and date…….

THE SERVICE PROVIDER

The Legal Representative

Attachments:

1. Draft Contract
2. Call for Tender Network Studies (ME/P2024/**XXXXX**);
3. Offer of the Service Provider (ME/A2024/**XXXX**).