



**SEPS Knowledge Transfer System Flexibility**

Contract – SEPS / EGI

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## Contact Sheet

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## Introduction EGI

Elia Grid International (EGI) is an international consulting company that offers services in market development, asset management, power system operations and security, system and market operations as well as owner’s engineering and investment advisory support both to international clients in the power grid sector and the Elia Group itself.

It is a wholly owned subsidiary of the Elia Group, which consists of two transmission system operators (TSOs): Elia in Belgium and 50Hertz in North-East Germany.

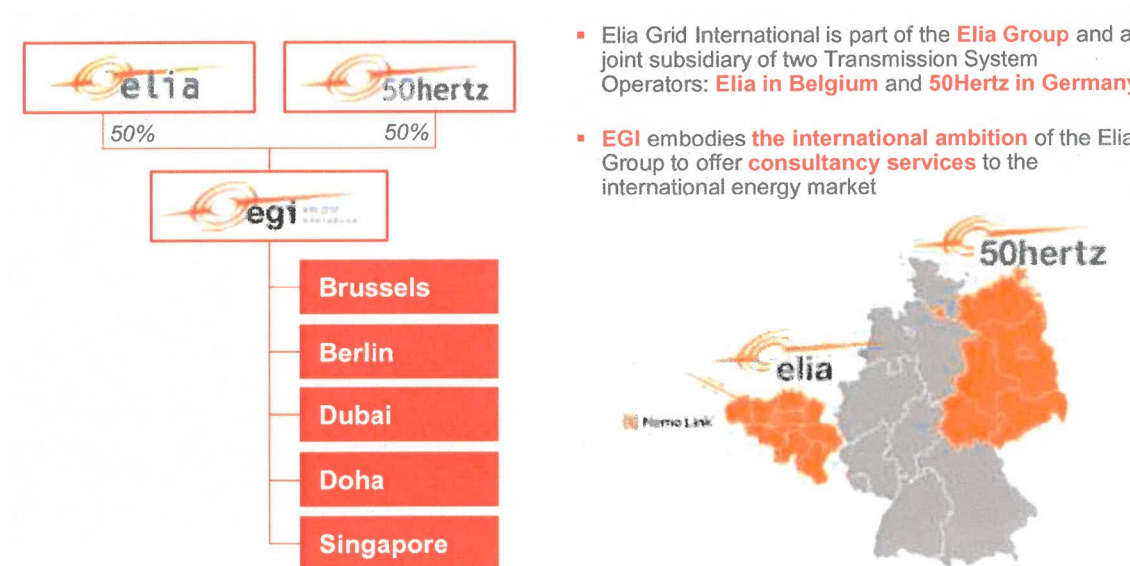


FIGURE 1: EGI AS PART OF THE ELIA GROUP (SOURCE: EGI)

“The digital transformation is in full swing. Start-ups often play a pioneering role with their agile culture. I have learned that corporate culture and start-ups do not exclude one another, but often can be mutually beneficial. It is crucial to take all employees along with the necessary and meaningful changes and implement them in a human way. It is very important to me to make this successful!”

Michael van Rooijen, Elia Group Chief Digital Officer

EGI’s value proposition stems from its unique blend of in-depth, practical experience of two European electricity transmission system operators with a broader industry-wide perspective by operating in different markets all over the world with a varied staff of professional consultants and experts. This makes it possible

for EGI to provide a set of comprehensive and specialised consultancy services based on profound industry knowledge, operational expertise and hands-on TSO experience.

More information on the Elia Group and EGI can be found on their websites:

- <https://www.eliagrid-int.com>
- <http://www.elia.be>
- <http://www.50hertz.com/en/>

## Introduction SEPS

Slovenská elektrizačná prenosová sústava, a.s., a company founded and duly existing in accordance with the laws of the Slovak Republic and registered in the Company Register administrated by the District Court in Bratislava I, Section Sa, File 2906/B with registered office located at Mlynské nivy 59/A, 824 84 Bratislava 26, the Slovak Republic; Registration Number of the Company (IČ): 358 29 141, VAT ID: SK 2020261342, tax ID: 2020261342, hereinafter referred to as "SEPS".

## Management consulting agreement

Elia Grid International SA, Rue Joseph Stevens 7, 1000 Brussels, Belgium (the “Consultant”) and Slovenská Elektrizačná Prenosová Sústava a.s., Mlynské nivy 59/A, 824 84 Bratislava 26, Slovak Republic (the “Client”) have today entered into the following agreement (the “Agreement”).

### 1 Engagement

- 1.1 By this Agreement the Client engages the Consultant to provide consultancy services (the “Services”) in the project entitled SEPS Strategic development. The scope and details of the consultancy services are set out in the proposal titled “SEPS Strategic development” (the “Proposal”).
- 1.2 The text of the proposal reports all technical and commercial terms completing the content of the Proposal.

### 2 Scope of Application

- 2.1 The following terms and conditions (hereinafter the “Terms and Conditions”) apply to sales contracts and contracts for services (performance of services or execution of works), and to any contracts that cover a combination of sales and services. These General Conditions govern the relationship between the Seller and the contracting party (hereinafter the “Customer”). The Seller is an Elia group company which could be Elia System Operator SA/NV, Elia Asset SA/NV, Elia Engineering SA/NV, Elia Grid International or any of these companies’ subsidiaries (hereinafter, the ‘Seller’).
- 2.2 These General Conditions always prevail over any of the Customer’s general conditions, regardless of whether there are any other stipulations or conditions contained in the Customer’s order form or any of its documents that may be contrary to these General Conditions, unless the Seller accepts expressly and in writing the applicability of the Customer’s conditions in whole or in part. The General Conditions may not be modified tacitly. Any conduct that is contrary to what is contained in the General Conditions—even if tolerated by the Seller—shall not operate as a waiver of these General Conditions.

### 3 Formation and Elements of the Contract

- 3.1 Only the Seller’s firm offer, which has been accepted unconditionally within the offer’s validity period, shall be binding upon the Seller.

In all other instances (e.g., an offer with no validity period, an acceptance that is notified after the offer’s expiry, conditional acceptance, modifications to the offer, additional items requested by the Customer, etc.), there shall be a valid contract only if there is a Confirmation of the order i.e. a written acceptance by the Seller of the Customer’s order. The Contract shall be subject to the conditions contained in the Confirmation.

If the Customer does not agree with the terms contained in the Confirmation, it must inform the Seller immediately and, in any event, no later than eight (8) calendar days from the date of the Confirmation's sending. Failing which, the Customer is deemed to have accepted the terms of the Order's Confirmation.

- 3.2 The contract between the Customer and the Seller (hereinafter the "Contract") only concerns the delivery of goods and the execution of works and/or performance of services as described in the Contract (hereinafter "the Goods and/or Works and/or Services").
- 3.3 The Customer waives the application of Article 1794 of the Belgian Civil Code.
- 3.4 The Contract is made up of the following documents:
- the Confirmation and—to the extent that the terms contained in the following documents do not depart from those of the Confirmation—the Seller's Offer, the Customer's Order, and any subsequent changes to those documents;
  - where applicable, the Seller's technical descriptions and the Customer's technical specifications only to the extent the latter does not depart from the former;
  - where applicable, the local regulations that apply to works and construction;
  - where applicable, the provisions regarding access, safety, well-being, and the environment;
  - these Terms and Conditions.

## 4 Price

- 4.1 The price always excludes VAT and does not include taxes and duties that are directly levied on the Goods and/or Works and/or Services. Unless otherwise stipulated, the price does not include the cost of transportation, delivery, or collection of the Goods, nor does it include the cost of fitting or installation. All taxes, charges, duties, and costs shall be borne by the Customer.
- 4.2 Unless it has been agreed that the prices are firm and non-revisable, prices are subject to revision pursuant to the Agoria (national) index. The reference index number is that of the month preceding the Seller's offer and the new index number is that of the month preceding the execution of the works, services, or supplies.
- 4.3 An exceptional increase in the prices of raw materials, materials, fuels, or salaries or in the prices that subcontractors and suppliers have charged to the Seller entitles the Seller to revise its own prices to the corresponding amounts.

## 5 Guarantee

- 5.1 The Seller can request the Customer to make an advance payment and/or give a security that is adequate for guaranteeing the full payment of the price. Failing to pay this advance or security entitles the Seller to suspend the performance of its obligations without prior and formal notice, and any deadlines imposed on them will be automatically suspended. If the Customer's failure persists, the Seller may terminate unilaterally the Contract and claim damages.

## 6 Payment – Interest and Costs – Protest

- 6.1 Despite any protest made in accordance with these Terms and Conditions, all invoices must be paid within thirty (30) calendar days after they have been received. An invoice is considered received three (3) business days after its sending date.
- 6.2 If an invoice is not paid in full by the above-mentioned period of time, the sum due is increased automatically from its due date by (i) the ECB main refinancing interest rate plus eight percentage points, rounded up to the next half percentage point and (ii) a fixed administrative handling fee of 40,00 euro , and this without prior notice and without prejudice to any claim for damages for collection costs.
- 6.3 Any protest of an invoice must be notified by registered letter within fifteen (15) calendar days from the invoice's sending date. Failing which the invoice shall be considered accepted.

## 7 Performance Deadlines

- 7.1 If the Seller undertakes to fulfil its obligations by a particular date or within a particular period of time (hereinafter the "Deadline"), the Seller shall make every effort that can be reasonably expected of it to meet the Deadline or to minimise any delays. Deadlines are only binding if the Contract expressly stipulates that they are binding or are essential prerequisites of the Contract.
- 7.2 If the Seller is prevented from complying with the Deadline due to circumstances beyond its control, the Seller may extend the Deadline by an appropriate period that is at least equal to the duration of the circumstances that occurred. These circumstances can be, among others, any social conflict, violence, riots, acts of terrorism, assaults, natural or climatic phenomena, war or state of war, delayed in the supply of goods, materials or parts, delays in transport by land, air or waterways, etc., that jeopardizes the Seller's performance of its obligations. Any similar circumstance which is invoked by one of the Seller's suppliers or subcontractors against the Seller is also valid towards the Customer.
- 7.3 The Customer must meet its own the deadlines.

## 8 Intellectual Property Rights

- 8.1 The Consultant shall retain sole and exclusive ownership and all intellectual property rights (including but not limited to copyright) of all (a) know-how, computer software, computer programs, drafts, documents, information, material, inventions, patents or designs owned by the Consultant which the Consultant may use to provide the Services, and (b) the Work Product (as defined below). The Client shall have a non-transferrable, non-exclusive, royalty-free and perpetual license to use any and all Work Product developed pursuant to this Agreement for its business use, which shall include the use by the Client's affiliates. "Work Product" means any code (whether source or compiled), processes, documentation, records, training materials, designs, drawings, specifications, drafts and data developed by the Consultant pursuant to this Agreement.



- 8.2 The Client shall retain sole and exclusive ownership of all know-how, computer software, computer programs, drafts, documents, inventions, copyrights, patents or designs owned by the Client which the Consultant may use to provide the Services ("Client Intellectual Property"); provided, however, the Consultant shall have a non-exclusive, royalty-free and perpetual license to use any and all Client Intellectual Property in the Work Product.

## 9 Performance of the Contract

- 9.1 The Customer guarantees the correctness and completeness of any information, documents, and/or plans that it has provided to the Seller, and exempts the Seller from inspecting or verifying them unless such inspection or verification is explicitly foreseen in the Contract. The Customer shall indemnify the Seller against any damage arising from the use of the information, documents and/or a plan that it has provided to the Seller and shall guarantee the Seller in any third party claims arising therefrom.
- 9.2 The Seller undertakes to execute and/or provide the Works and/or Services in accordance with the rules of practice and standards in force. The Seller is not under a duty to advise.

## 10 Price for the consultancy services

- 10.1 Honorary for the knowledge transfer on the system flexibility project is **€90.000,-** (ninety thousand Euros)
- 10.2 Payment schedule
- 50% of the total amount (45.000 € - forty-five thousand euros) due at the signature of the contract.
  - 50% of the total amount (45.000 € - forty-five thousand euros) due at the submission of the findings report in September 2022.

All payments are due 30 calendar days after the date of the invoice. In case of bank holiday or weekend falling on the 30th day, the payment moves to the first working day after the bank holiday or weekend.

## 11 Offer validity

Offer is valid 30 (thirty) days after the issue date.

## 12 Publication and entry into force

Since SEPS is an obliged person pursuant to the Slovak Act No 211/2000 Coll. on free access to information (the "Act on free access to information") and since this legal obligation is to be fulfilled regardless of the governing law of the Agreement, Parties agree that:

- the Agreement itself and related tax documents will be published in the manner required by the Act on free access to information;
- the Agreement enters into force on the day of signature by both Contracting Parties and becomes effective on the day following the day of its publication in accordance with § 47a par. 1 of the Slovak Civil Code.

## 13 Signatures for acceptance

Brussels, 19<sup>th</sup> July 2022

For Elia Grid International:

For Slovenská elektrizačná prenosová  
sústava, a.s

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**Carlo Degli Esposti**  
Business Partner – Member of the  
Management Board

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**Mr. Peter Dovhun**  
Chairman of the Board of Directors

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**Frédéric van Cauteren**  
Head of Business Development – Member of  
the Management Board

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**Mr. Marián Širavec**  
Vice-Chairman of the Board of Directors

## ANNEX – Peer Review: System Flexibility

### Annex A1. Our proposal: scope of work

To provide an in-depth short-term and long-term knowledge transfer regarding system flexibility to the system operations department of SEPS for the upcoming challenges, EGI recommends conducting peer review workshops in August / September 2022. Through this process, quick wins can be identified by EGI and implemented by SEPS before the according deadlines. Within the scope of work, EGI will support the implementation process through additional Q&A sessions and with an additional workshop session to deep dive into potential additional aspects of our methodology during Q4 2022.

### Annex A2. The EGI approach to the solution

Our general approach to system flexibility topics

1. Focus on strategic questions in the domain of system flexibility
2. Our scope will concentrate on the knowledge transfer.
3. We suggest the following approach to implement quick wins via a peer review:
  - a. The work focuses on possible quick wins or quick fixes and to present potential cases by the end of September/mid of October. Our understanding is additional flexibility solutions (e.g., on the ancillary service market) should be implemented as soon as practically feasible.
  - b. To provide a peer review to the ongoing system flexibility topics to propose practical recommendations for improvements i.e., recommendations that could be implemented in a short timeline to provide further options for SEPS regarding the system flexibility and operations (quick wins or quick fixes).
4. The concepts delivered before the summer break will be integrated with an additional session during Q4 which will tackle all concepts of our approach and methodology to system flexibility support and enhancement which have been deemed not essential to cope with the regulatory deadlines in the beginning of September.

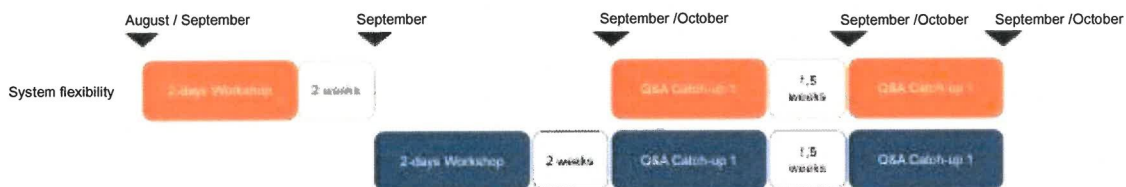
#### Annex A2.1. Methodology for the Peer review

1. The peer review will be conducted by two workshops (each 2-days duration), in the general approach. These workshops are designed as working sessions enabling a peer-to-peer exchange/interviews focusing on the key challenges SEPS need to tackle.
2. The main topic of the workshops will touch the system operation and system flexibility areas within SEPS.
3. Kick-off steps:
  - a. Before the kick-off, EGI will review the key documentation on the processes in order to get acquainted with the current implementation and status of completion.
  - b. We will then sit together with SEPS in a pre-workshop online meeting, to align on our experts' understanding on the key objectives and scope, to indicate any potential additional material that we need to review and the key topics that should be the focus of the workshop sessions according to the strategic priorities.
4. The structure of each workshop will be based on the review of each fundamental aspect of the topic, organised in working sessions, in the light of the local challenges and drivers for development.
5. The approach of each session will be in the form of peer-to-peer interviews of the SEPS experts, discussing the key challenges. The workshops will aim to map the key challenges in the processes and to discuss recommendations (quick wins) that could be implemented in the short timeframe. We propose to structure the exchange as follows:
  - a. A short introduction on the different market timeframes, the available system flexibility products and respective challenges and how it has been tackled by SEPS. This introduction will not aim to present extensively best practices, but rather confirm the

understanding on how each point is tackled in the current implementation in the SEPS processes.

- b. A peer-to-peer interview/discussion with SEPS experts, to put the evaluation in the context of SEPS and discuss the key challenges. Our experts will tackle these issues trying to assess possible gaps, new products and opportunities and discuss these with the SEPS experts, taking into account the existing framework (identification of quick wins). We believe that such an open and collaborative approach is needed in order to identify solutions, which can be implemented in the short term.

After the workshop we will review the key findings and identify possible actions for the short-term (quick wins): actions that could be implemented in the current ongoing process. After each workshop, we will plan the possibility of two online catch-up with the experts, indicatively of 2-3 hours (depending on the number and criticality of the questions to be tackled and the quick wins identified), to round-up the outcomes of the discussion.



In the timeline here above, the white boxes represent the lag time between the events, to review the last discussion and organise the next one.

- 6. Each workshop and catch-up session will be followed up by a written review of what has been discussed, so to keep track of the key gaps identified in each session and the recommendations to mitigate them.
- 7. We will not undertake actions to design any new procedure or system: we believe that it is fundamental that SEPS experts assess internally how to best close the gaps we have been highlighting, so to realise a first part of the knowledge transfer process.
- 8. We will conduct a final deep dive session (1- or 2-days' workshop, not detailed in the work program here above) during Q4 2022 to tackle all topics and elements related to our methodology for supporting and enhancing system flexibility which have been considered unessential for supporting SEPS in the view of the regulatory delivery term of beginning of September.

The plan is to have the two workshops for the peer review within August / September and to conduct the catch-up session in September / October 2022.

### Annex A2.II. Deliverables

After the two days workshop	Report about the identified gaps and high level suggestions on the action plan to fill them
After every Q&A session	Q&A session report with the questions from SEPS and the answers from EGI experts

## Annex A3. The team

The key experts on the proposed Project Team have been specifically selected by EGI for their deep technical knowledge, analytical skills, and experience, to fully satisfy the requirements of the project. We are further fully confident that this team with its unique TSO and strategic expertise, will deliver services of the highest quality, on time and within budget.

Role in the Project	Name of Expert
<b>Project Director</b>	Carlo Degli Esposti
<b>Project Manager</b>	Gregor Herndlhofer

TABLE 1: EGI EXPERT TEAM

Role in the Project	Name of Expert
<b>Expert</b>	Dr Aymen Chaouachi
<b>Expert</b>	Bernard Malfliet

### Carlo Degli Esposti – Director Strategy, Market & Regulation - EGI

Carlo has been gathering a multifaceted international career as senior team leader and gas and electricity expert across Italy, Belgium and Germany, where he has been working for top-tier utilities (Terna, E.ON, Uniper, TenneT and others) across the whole of the energy value chain (generation, trading, transport). His broad set of competencies and knowledge ranges from electricity and gas market design, tariff design and commodity pricing, asset management, portfolio optimization, investment decision-making and project financing, power system operation and market entry strategies, especially for new business related to electricity generation and P2X.

Carlo has been leading several multiparty projects to the delivery of key pieces of European energy regulation (the ETSO proposal Inter TSO Compensation for Transit, which represents the equivalent for electricity of the EU Roaming agreement for telecoms, signed by 42 European TSOs and being translated by the European Commission in Regulation 838/2010, impacting on transmission asset capped valued to 100mEUR ; coordination of the TSOs for the Central Western European Region – France, Germany, Netherlands, Belgium and Luxembourg – for the creation of a single electricity market area in the region, trading yearly more than 500 TWh of power, with 275 members over 8 countries after its expansion to Switzerland, Austria and UK). Carlo has been supporting TenneT TSO in Germany to draft the Regulatory and Financing principles for a meshed HVDC grid in the North Sea to facilitate the integration of Offshore wind power with the perspective of reaching 400 GW of installed power in 2050. In the perspective of a radical change of how energy will be used in the future decades, Carlo has been helping several utilities in Italy and Germany, especially distribution system operators, in redesigning their asset management policies and operations, so to optimize their regulatory result and improve the overall efficiency in maintenance and grid development.

Carlo hold both Italian and German nationalities, holds a master's degree in Electrical Engineering with honors from University of Bologna (Italy, 1999) and an Executive MBA from HEC Paris (France, 2010). He speaks fluently and writes proficiency in five languages.

### **Gregor Herndlhofer – Senior Consultant - EGI**

Gregor has more than 10 years of experience in Consulting, out of which 8 years he worked in the energy industry. His focus has been on strategy and long-term investment planning, including modelling of electricity and gas markets, financial valuation and risk and sensitivity analysis.

He has been responsible for the Project Management of various commercial, technical and HSE Due Diligences in the energy industry, including, but not limited to thermal generation units, electricity, gas and district heating networks in addition to renewables and hydrogen. Furthermore, Gregor supported clients in the development of offshore HVDC infrastructure to electrify oil and gas platforms.

He has more than 8 years of wholesale electricity market modelling experience, next to the impact analysis of power plants and electricity infrastructure, incl. Cost-Benefit Analysis and decarbonization studies. Gregor has an MSc of the University of Tilburg and a BSc from WU (Vienna University of Business and Economics) and speaks fluently German and English.

### **Dr Aymen Chaouachi - Senior Expert Power System Operations and Security - EGI**

Dr. Aymen Chaouachi is Senior Expert Power System Operations and Security at Elia Grid International. He holds a PhD in electrical engineering from the University of Tokyo in Japan and Master of Science in Electrical Engineering from the University of Tunis in Tunisia. Aymen has around 13 years of experience in power system operation, connection of renewable generation units and renewable energy integration. Prior to joining the Elia Group, he worked for the European Commission as a scientific officer dealing mainly with renewable energy integration, European transmission system modelling, techno-economic assessments and security of supply in the EU as well as smart grids standardization. In his current position as a senior expert at EGI, his activities cover a wide range of topics, e.g. grid connection studies, grid codes, system security assessment, emergency and restoration design. Aymen has been involved in dynamical simulation and modeling using Digsilent, migration and tuning of user defined models toward Power Factory format and merging of dynamical crowns of external networks with respect to the Belgian one. Aymen is highly experienced in EU network code requirements and implementation with special focus on system stability, frequency management related requirement covering operational, market and connections codes (RfG, DCC, HVDC, SO GL, E&R ) and implementing them into the processes of transmission system operators. Aymen has actively supported implementation of several Grid Codes in the middle east, north Africa and Europe bringing best practices and international expertise to client with focus on integrating RES and new technologies as storage. Aymen is member of various ENTSO-e working groups representing Elia: including Sub Group System Frequency working on Load Frequency Stability aspects, definition and implementation of SAFA Policy 1. He is actively involved in definition of technical requirements and monitoring tasks (frequency containment activation, FRCE requirements, EAS monitoring, DfD mitigation measures) as well as participation into add-hoc expert working group working on inter area synchronization and specific events analysis. Aymen is a French native speaker and is therefore able to communicate and provide his knowledge to all relevant project stakeholders in either French or English. Aymen's second mother tongue besides French is Arabic.