



**SEPS Knowledge Transfer Artificial intelligence and
organisational design**

Contract – SEPS / EGI

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Contact: Carlo Degli Esposti

Contact Sheet

Full legal name of lead organisation/ individual:	Elia Grid International SA/NV
Country of registration:	Belgium
Address of registered office:	Joseph Stevensstraat, 7 1000 Brussels Belgium
Telephone number (including country code):	+32 477 988 367
Main contact person for this assignment:	Carlo Degli Esposti
Main contact person's position in the organisation:	Business Partner, Member of the Management Board
Contact person's email address:	Carlo.degliestposti@eliagrid-int.com
Website of the organisation:	http://www.eliagrid-int.com/en

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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.

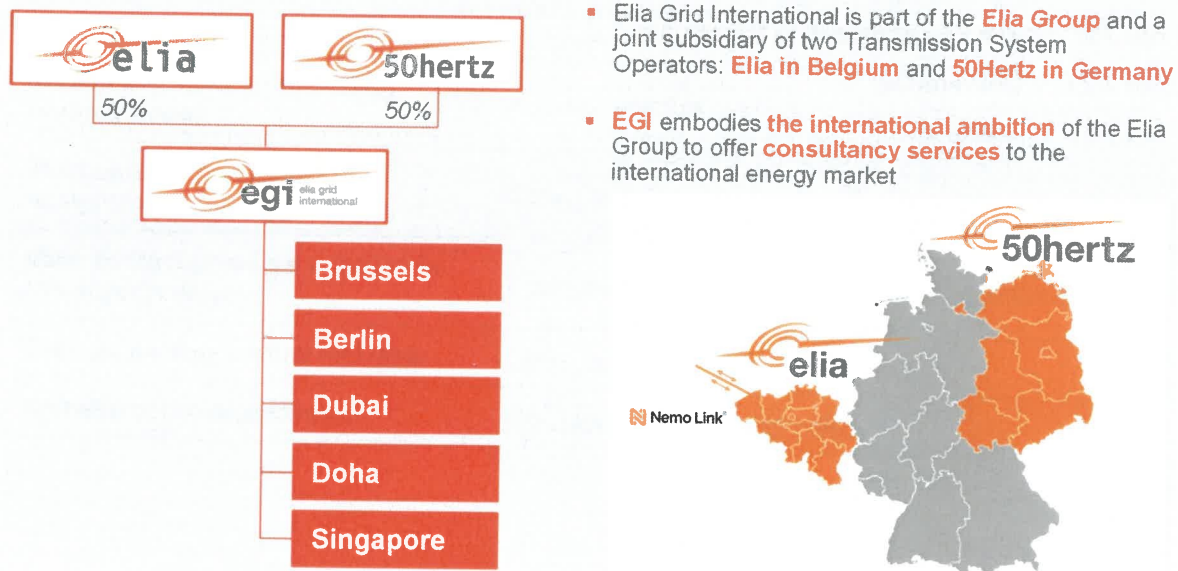


FIGURE 1: EGI AS PART OF THE ELIA GROUP (SOURCE: EGI)

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 Artificial Intelligence Adoption & Organisational Design" (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/(the "Consultant") and the contracting party (hereinafter the "Customer" /"Client"). The Seller is Elia Grid International SA (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.
- 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 Payment – Interest and Costs – Protest

- 5.1 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.
- 5.2 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.
- 5.3 All invoices shall be delivered only electronically on the following email address "efaktury@sepsas.sk" and shall be accompanied with the Acceptance protocol as an Annex. Only invoices delivered from this email address "noreply_invoice_ar@elia.be" shall be accepted.

6 Performance Deadlines

- 6.1 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.
- 6.2 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 Intellectual Property Rights

- 7.1 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.

- 7.2 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.

8 Performance of the Contract

- 8.1 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.
- 8.2 The Seller undertakes to execute and/or provide the Works and/or Services in accordance with the rules of practice and standards in force.

9 Price for the consultancy services

- 9.1 Honorary for the knowledge transfer on the Role of Artificial Intelligence & Organisation Design is **€50.000**, - (fifty thousand Euros)
- 9.2 Payment schedule - 100% of the total amount **€50.000**, - (fifty thousand Euros) due at the submission of the findings report and signing of the Acceptance protocol, that form an integral part of the invoice.

All payments are due 30 calendar days after they have been received. An invoice is considered received three (3) business days after its sending date. 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.

10 Offer validity

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

11 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.

12 Signatures for acceptance

Brussels, 11th November 2022
For Elia Grid International:

For Slovenská elektrizačná prenosová
sústava, a.s

Carlo Degli Esposti
Business Partner – Member of the
Management Board

Mr. Peter Dovhun
Chairman of the Board of Directors

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

Mr. Marián Šíranec
Vice-Chairman of the Board of Directors

ANNEX – Capacity building: SEPS Artificial Intelligence Adoption & Organisational Design

Annex A1. Our proposal: scope of work

Taking into consideration our knowledge experience in working with SEPS teams, an extensive knowledge transfer about artificial intelligence applications within Elia Group and organisational design will take place in this step. The aim of this delivery is to draw a strategic focus on scaling and adopting Artificial Intelligence throughout the organization. We will draw light on our experience in scaling AI by setting up an AI Centre of Excellence, supported by an organization wide governance and management of AI applications. We will also support this delivery by describing key business use cases spanning various business functions, and how AI brought value to the organization. This phase will aim to increase the awareness of SEPS on our AI experience through the execution of a 2-days workshop. . We will perform knowledge sharing peer-to-peer discussions between Elia Group and SEPS experts, aiming to

- a) understanding applications of artificial intelligence in utility operations
- b) people, processes (operations) & technology (tools) requirements and identifying gaps in organisation readiness
- c) identify the key mid-term actions and roadmap needed to fill the possible gaps in laying the foundation of AI centre of excellence.

Annex A2. The EGI approach to the solution

Our general approach will focus on strategic questions in the domain of:

- a. Artificial Intelligence applications and use cases, spanning several business functions of TSO
- b. Organization design, discussing a general framework, and Elia Group experience in scaling an AI Centre of Excellence across the organization

Our scope will concentrate on the knowledge transfer for capacity building of SEPS teams.

Methodology for the Peer review

1. The peer review will be conducted by a 2-days workshop in the general approach. This workshop is designed as working sessions enabling a peer-to-peer exchange focusing on the key challenges SEPS need to tackle.
2. The two main topics of the workshops will touch AI adoption, applications and the establishment of Artificial Intelligence organisation design.
3. Kick-off steps:
 - a. Before the kick-off, EGI will review the key documentation on the progress made by SEPS in relation to AI, in order to get acquainted with the current maturity in the organisation.
 - 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 the workshop will be based on the reviewing the technology, organised in working sessions, in the light of the organisation challenges and drivers for development. The workshops will aim to map the key challenges in adoption of technology and attaining maturity and to discuss possible 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 session 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 AI technology adoption 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 of the ongoing process. Our experts will tackle these issues trying to assess possible gaps and discuss with the SEPS experts' possible improvement points, considering the existing framework

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 (finding report).

5. The workshop and finding report will be followed up by a Q&A session of what has been discussed, to round up the outcomes of this knowledge transfer.
6. 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.

Annex A2.I. 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.

TABLE 1: EGI EXPERT TEAM

Role in the Project	Name of Expert
Project Director	Carlo Degli Esposti
Project Manager	Nicolas May
Expert (Data Scientist)	Rachel Berryman
Expert (Organization Design)	Lavjit Singh

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.

Nicolas May – Project manager - EGI

Nicolas started his career as a Project Engineer for Fabricom (Engie group) before joining the Elia Group as an internal consultant. Nicolas worked for two years in the Enterprise Portfolio Management department, before moving to the Asset Management department as Critical Asset Manager where he was mainly focused on implementation of PAS-55 (replaced by ISO 5500x) Asset Management standard and monitoring and benchmarking performances and metrics of the asset management activities of Elia. In 2014, Nicolas has joined Elia Grid International as senior Asset Management and delivery consultant. He is now in charge of the Asset Management advisory team of EGI.

Nicolas is working on several projects around the world on implementation of asset management practices and improving efficiency of asset life cycle management practices. Nicolas was involved in the transformation project within National Grid Saudi Arabia where an asset management entity was developed and implemented by Elia Grid International, as well as the operational assessment of the Vietnamese System Operator and the assessment of the largest Saudi Oil & Gas company's Power Systems business line. More recently, Nicolas has been involved in a 380kV corridor project in Belgium as extra high voltage project portfolio manager and as implementation manager of capacity remuneration mechanism auction related processes and IT platform for Elia Transmission.

Nicolas has obtained a Master in Mechanical Engineering from Polytechnic Faculty of Mons (Belgium) with a specialization in maintenance, production, reliability, dynamics and vibrations and a Master in technological and industrial management from Solvay Brussels School of Economics and management (Belgium) with a specialization certificate in finance and strategy.

Rachel Berryman - Head Data Scientist AI Centre of Excellence - Elia

Rachel Berryman is Deputy Head of the Artificial Intelligence (AI) Center of Excellence for Elia Group. In this role, she works across both TSOs of Elia Group to equip everyone in the business to harness the power of AI and machine learning. This includes helping them discover use cases, developing training on AI and machine learning and managing AI projects. Prior to this, Rachel worked for 4 years as an energy data scientist, both in Elia Group and at a start-up where she developed a price prediction algorithm that was used to drive behind-the-meter flexibility of commercial cooling assets. Her passion is organizational change and helping to drive a shift to a data-centric culture by translating between the technical and business sides of the equation. Her academic background is in Computer Science and Environmental Economics, and she also teaches at a Data Science Bootcamp in Berlin in her spare time.

Lavjit Singh – Senior Expert Market Transformation - EGI

Lavjit Singh has more than 11 years of professional experience in power sector on markets and utility business transformation topics. He started his career with the largest power trading utility group in India where he gained proficiency in power markets and trading mechanisms. His initial experience was as a business and market analyst for retail unit of the group incubated to serve industrial consumers. He helped build a portfolio of key B2B accounts including refinery operations and ancillaries, steel plants, railways, airports, etc. He also took responsibility for business transformation of retail business, helping design SOTA trading desk, market data portal for industry, web client interface for efficient trading, etc. After more than four years in trading operations, he took a new responsibility to incubate a consulting business for the trading group. He contributed by managing and lead strategic projects pan-India for oil & gas sector, supporting them in their EHV grid infrastructure development and integration, open access and energy portfolio management, facilitating RE investments and devising EMS solutions. He was also instrumental in establishing closed distribution systems and activities related to power system design, operational plan, capability and resources, licenses, etc. for various Special Economic Zones. He continued his experience by participating in Europe's largest funding program for research and innovation – Horizon 2020 (now Horizon Europe). The ~80 Bn EUR grant focused on enabling innovations for smart, sustainable and inclusive growth in EU. He followed the energy transition track and became part of several innovation projects including FLEXITRANSTORE, FLEXIGRID and INTERRFACE, wherein he was responsible for delivery of key work packages linked to enhanced market design, new technologies and business models, local markets and energy management. On achieving significant TRLs across these innovation projects, Lavjit Singh joined Elia Grid International, to support Elia Group's customer centricity ambitions, bringing his innovation and retail expertise to the TSO group. His grasp and understanding of digital transformation, utility business and market operations, rightly places him to lead strategic discussions with peer utilities.