

## OPERATIONAL AGREEMENT OF LFC BLOCK SHB

This agreement (hereinafter referred to as “Agreement”) is made by and between:

**ELES, d.o.o.**, a company incorporated under Slovenian Law, registered in Court Register under the number 5427223000, having its registered office at Hajdrihova 2 - 1000 Ljubljana – Slovenia, represented by M. Sc. Aleksander Mervar, duly authorized to act on the company’s behalf for the present Agreement.

(Hereinafter referred to as “**ELES**”)

and

**Hrvatski operator prijenosnog sustava d.o.o.**, a company incorporated under Law of Croatia, registered in Court Register under the number 080517105, having its registered office at Kupska 4 - 10000 Zagreb – Croatia, represented by Tomislav Plavšić, Ph. D. duly authorized to act on the company’s behalf for the present Agreement.

(Hereinafter referred to as “**HOPS**”)

and

**NOSBiH - Nezavisni operator sistema u BiH**, a company incorporated under the Law of Bosnia and Herzegovina, registered in Register of the Ministry of justice Bosnia and Herzegovina under the number 08-50.3-7-3/05, having its registered office at Hifzi Bjelevca 17 - 71 000 Sarajevo – Bosnia and Herzegovina, represented by Ph. D. Milodrag Košarac, duly authorized to act on the company’s behalf for the present Agreement.

(Hereinafter referred to as **NOSBiH**).

Hereinafter individually referred to as the “Party” and collectively as the “Parties”.

---

## Article 1

### Aim

The aim of cooperation within the load-frequency control block SHB (Hereinafter referred to as “LFC block SHB”) is to establish an adequate mechanism that would enable efficient operation of electricity systems of Slovenia, Croatia and Bosnia and Herzegovina and consequently of LFC block SHB. This mechanism shall act in a preventive way and shall ensure that the operation of LFC block SHB is in line with provisions of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (Hereinafter referred to as “SO GL”).

## Article 2

### Data exchange for LFC performance monitoring

According to SO GL Article 134 and Article 119 the Parties are obligated to provide the following data between each other:

- the instantaneous frequency data (frequency accuracy 1 mHz or better, measurement cycle is equal or shorter than 4 s),
- the instantaneous frequency restoration control error (Hereinafter referred to as “FRCE”) data (frequency accuracy 1 mHz or better, active power accuracy 1,5 % of highest rated value, measurement cycle is equal or shorter than 4 s),
- the instantaneous tie-line measurements (both sides measurements, active power, 1,5 % of highest rated value, measurement cycle is equal or shorter than 4 s),
- k factor (triggered on change).

## Article 3

### Requirements for technical infrastructure

Parties must provide such technical infrastructure that ensures availability, reliability and redundancy of LFC process.

## Article 4

### The monitor of LFC block SHB

According to Article 134 of SO GL the Parties nominate ELES as LFC block SHB monitor. Responsibilities and tasks of LFC block monitor are described in SO GL Article 134.

Other parties shall provide the LFC block monitor with the LFC area measurements necessary for collecting frequency quality evaluation data for the LFC block.

The LFC block monitor shall deliver to other Parties the frequency quality evaluation data of the LFC block SHB and its LFC areas once every 3 months.

## Article 5

### Organization of automatic frequency restoration process in LFC block SHB

Every transmission system operator (Hereinafter referred to as “TSO”) in LFC block SHB shall implement automatic frequency restoration process (Hereinafter referred to as “aFRP”). aFRP of each Party shall be designed in a way that it reduces the FRCE of the respective TSO only.

In extraordinary situation (i.e. LFC failure) a Party may request other Parties, to do aFRP on behalf of the affected Party in order to reduce the FRCE of the LFC block SHB. Affected Party must declare appropriate system state in EAS prior to the request. Requested Party shall endeavour to reduce FRCE of the LFC block SHB.

Organization of aFRP will be periodically evaluated. If needed, further steps in organization of aFRP will be taken (i.e. implementation of the prenetting process between Parties of the LFC block SHB).

## Article 6

### FRCE target parameters

According to Article 128 of SO GL all TSOs in LFC block SHB shall endeavour to comply with the following FRCE target parameters for LFC block SHB:

- the number of time intervals per year outside the Level 1 FRCE range within a time interval equal to the time to restore frequency shall be less than 30 % of the time intervals of the year,
- the number of time intervals per year outside the Level 2 FRCE range within a time interval equal to the time to restore frequency shall be less than 5 % of the time intervals of the year.

Values for Level 1 FRCE and Level 2 FRCE are calculated yearly in synchronous area Continental Europe (SA CE).

The LFC block monitor calculates the target parameters of LFC Areas in LFC block SHB in the same way as in SA CE as stated in the formula bellow:

$$\frac{Level1_{TSO A}}{Level1_{SHB}} = \sqrt{\frac{FCRi_{TSO A}}{FCRi_{SHB}}} \text{ and } \frac{Level2_{TSO A}}{Level2_{SHB}} = \sqrt{\frac{FCRi_{TSO A}}{FCRi_{SHB}}} \text{ where is}$$

Level1<sub>TSO A</sub> target parameter Level 1 of TSO A

---

Level1 <sub>SHB</sub>	target parameter Level 1 of LFC block SHB
Level2 <sub>TSO A</sub>	target parameter Level 2 of TSO A
Level2 <sub>SHB</sub>	target parameter Level 2 of LFC block SHB
FCR <sub>iTSO A</sub>	initial frequency containment reserve (FCR) obligation of TSO A
FCR <sub>iSHB</sub>	initial FCR obligation of LFC block SHB (as a sum of initial obligations of all LFC block SHB members)

The values are calculated yearly by LFC SHB block monitor who delivers calculated target parameters of LFC block SHB and LFC areas to Parties.

### **Article 7**

#### **Allocation of responsibilities in order to fulfil the FRCE target parameters**

Every TSO in LFC block SHB is responsible to perform load-frequency control in order to fulfil FRCE target parameters according to Article 6.

The LFC block monitor shall be responsible for reporting to LFC block SHB members every three month and identifying any violation of the FRCE target parameters.

Every TSO in LFC block SHB is responsible to comply with the frequency restoration reserves (Hereinafter referred to as “FRR”) dimensioning rules in accordance with Article 10.

### **Article 8**

#### **Actions aiming to reduce FRCE in real-time operation**

The LFC block SHB monitor is responsible for identifying any violation of the limits:

- a) If the 1-minute average of the FRCE of a LFC block is above the Level 2 FRCE range at least during 15 minutes,
- b) Where the FRCE of a LFC block exceeds 25 % of the reference incident of the synchronous area for more than 30 consecutive minutes.

Immediately after identifying any violation of the limits, the LFC block SHB monitor shall inform the other Parties and together with the other Parties implement coordinated actions to reduce the FRCE.

Each Party is responsible to activate all measures it has at the disposal aiming to reduce the FRCE of its control area – it means activating FRR, RR if applicable, Mutual Emergency Assistance Service if applicable, Assistance for active power procedure etc.

If any Party is still unable to reduce FRCE, other Parties shall be informed. Affected Party can ask any other Party for activation of additional measures (if available) in order to help

eliminate FRCE of Party in violation. Additional measures for reduction of FRCE for LFC block SHB are activated according to Article 16.

Costs of activated additional measures are covered by Reserve receiving TSO.

### **Article 9**

#### **Further measures aiming to reduce FRCE**

If actions aiming to reduce FRCE violation as stated in Article 8 are not sufficient and additional required amount of reserves as stated in Article 12 is not available to purchase, every Party is responsible to activate further measures in order to reduce FRCE violation by requiring changes in the active power production or consumption of power generating modules and demand units in its LFC area.

### **Article 10**

#### **General principles for reserve dimensioning**

Required amount of FRR in LFC block SHB is determined based on consecutive historical records comprising at least the historical LFC block imbalance values. In principle for this purpose 15-minute average data in time period between 1 July of the preceding year and 30 June of the current year are used, but if all Parties agree different time period could be used. The LFC block monitor is obliged to collect those data.

All Parties determine the reserve capacity on FRR of the LFC block SHB based on a probabilistic methodology. In addition to probabilistic methodology required reserve capacity of FRR cannot be less than reference incident for respective direction.

The positive dimensioning incident for FRR dimensioning of LFC Block SHB is equal to tripping of a largest single power generating module in the LFC Block SHB.

The negative dimensioning incident for FRR dimensioning of LFC Block SHB is equal to tripping of largest single demand facility in the LFC Block SHB.

The positive dimensioning incident for FRR dimensioning of each TSO is equal to tripping of a largest single power generating module in TSO's control area.

The negative dimensioning incident for FRR dimensioning of each TSO is equal to tripping of largest single demand facility in TSO's control area.

All TSOs of a LFC block SHB shall ensure that the positive reserve capacity on FRR is sufficient to cover the positive LFC block SHB imbalances for at least 99 % of the time, based on the historical records referred to in first paragraph.

All TSOs of a LFC block SHB shall ensure that the negative reserve capacity on FRR is sufficient to cover the negative LFC block SHB imbalances for at least 99 % of the time, based on the historical records referred to in first paragraph.

The shares of the reserve capacity on FRR in positive direction required for each TSO  $P_i$  as FRR obligation for a considered calendar year  $t$  shall be based on the following expression for all TSOs in LFC Block SHB:

$$P_{i,t+} = FRR_{+dimensioning} \cdot \left( \frac{\max(+FRR_{idet\_need}, +FRR_{i,prob\_need})}{\sum(\max(+FRR_{idet\_need}, +FRR_{i,prob\_need})} \right)$$

with:

$P_{i,t+}$  being the initial FRR obligation for TSO  $i$  for the calendar year  $t$  ;

$FRR_{+dimensioning}$  being the FRR dimensioning value in positive direction calculated for LFC Block SHB;

$+FRR_{idet\_need}$  being the reserve capacity in the control area  $i$  during the period referred to in paragraph 1 calculated according deterministic methodology, i.e. equal to positive dimensioning incident for that TSO;

$+FRR_{i,prob\_need}$  being reserve capacity in the control area during the period referred to in paragraph 1 calculated according probabilistic methodology, i.e. the positive reserve capacity on FRR is sufficient to cover the positive TSO imbalances for at least 99 % of the time  $t$ ;

The shares of the reserve capacity on FRR in negative direction required for each TSO  $P_i$  as FRR obligation for a considered calendar year  $t$  shall be based on the following expression for all TSOs in LFC Block SHB:

$$P_{i,t-} = FRR_{-dimensioning} \cdot \left( \frac{\max(-FRR_{idet\_need}, -FRR_{i,prob\_need})}{\sum(\max(-FRR_{idet\_need}, -FRR_{i,prob\_need})} \right)$$

with:

$P_{i,t-}$  being the initial FRR obligation for TSO  $i$  for the calendar year  $t$  ;

$FRR_{-dimensioning}$  being the FRR dimensioning value in negative direction calculated for LFC Block SHB;

$-FRR_{idet\_need}$  being the reserve capacity in the control area  $i$  during the period referred to in paragraph 1 calculated according deterministic methodology, i.e. equal to negative dimensioning incident for that TSO;

$-FRR_{i,prob\_need}$  being reserve capacity in the control area during the period referred to in paragraph 1 calculated according probabilistic methodology, i.e. the negative reserve capacity on FRR is sufficient to cover the negative TSO imbalances for at least 99 % of the time  $t$ ;

Every year but not later than July 15<sup>th</sup>, TSOs of the LFC Block SHB shall provide to each other the data needed for abovementioned calculation.

Each TSO of a LFC block SHB determines independently the ratio of automatic FRR, manual FRR, the automatic FRR full activation time and manual FRR full activation time in order to comply with the FRCE target parameters.

---

## Article 11

### Determination of FRR amounts

Every year but not later than July 15th, TSOs of the LFC Block SHB shall provide to each other the data needed for FRR calculation in the unified form determined by LFC block SHB monitor. Amounts of FRR in LFC block SHB shall be calculated by all Parties in line with Article 10 of this Agreement and shall be exchanged no later than August 1<sup>st</sup> and confirmed by all Parties every year but no later than August 15<sup>th</sup>.

## Article 12

### Operational procedures in case of exhausted FRR in LFC block SHB

Each Party is obligated to provide agreed amount of FRR according to Article 10 and Article 11. In case of exhausted FRR in LFC area, respective Party shall purchase required amount of reserves. If no reserves are available respective Party shall proceed with further measures as stated in Article 9.

## Article 13

### Escalation procedure for cases of severe risk of insufficient reserve capacity on FRR in the LFC block

The Party with lack of FRR shall inform other Parties. The LFC block monitor shall check if the FRR of the LFC block SHB is still sufficient. If the LFC block SHB monitor estimates that the FRR in LFC block SHB is not sufficient, the Party with the lack of FRR shall announce warning in EAS.

## Article 14

### Procurement of common FRR in LFC block SHB

Each Party is responsible to procure/guaranty the amount of common reserves defined in Article 11.

Each Party is responsible to specify FRR availability requirements and requirements on the control quality of FRR providing units and FRR providing groups in FRR prequalification process.

Each party can procure an amount of required FRR using exchange with other LFC Blocks. The procured amount may not exceed the maximum amount allowed by SO GL rules of exchange with other LFC Block and must be in proportion with the amount that Parties are obliged to ensure according to this Agreement.

No common procurement of reserves is foreseen by concluding this Agreement, and consequently also no reserve-procurement-costs sharing principles shall be developed and implemented under this Agreement. Each Party bears its own reserve-procurement costs.

#### **Article 15**

##### **Activation of common FRR**

A TSO-TSO model shall be used for the activation of the common FRR, i.e. each Party is responsible for the activation of the procured common reserves in its own LFC area. If reserve from other LFC area is needed to cover the loss of generation or consumption unit, the request shall be addressed by reserve Receiving TSO to reserve Connecting TSO. The reserve Receiving TSO is responsible for informing the reserve Transiting TSO if applicable.

Parties agree that in case of loss of generation or consumption unit, affected Party activates its own procured reserves first and if needed shared reserve afterwards. Each request for cross-border activation shall be confirmed in written form by the reserve Connecting TSO and reserve Transiting TSO if applicable.

The parties hereby declare that they will act in the most efficient way to assist the reserve Receiving TSO. This can be done according to procedure described in Appendix 1 to this Agreement.

Detailed activation procedure is defined in the Appendix 1.

#### **Article 16**

##### **Activation of additional measures**

A TSO-TSO model shall be used for the activation of the additional measures. It is outside of scope of this agreement how reserve Connecting TSO procures additional measures. Additional measures can be activated outside of LFC block SHB. In such case the Party which activated additional measures is considered reserve Connecting TSO. The reserve Receiving TSO is responsible for informing the reserve Transiting TSO if applicable.

Each request for cross-border activation shall be confirmed in written form by the reserve Connecting TSO and reserve Transiting TSO if applicable.

The Parties hereby declare that they will act in the most efficient way to assist the reserve Receiving TSO. This can be done according to procedure described in Appendix 1 to this Agreement.

Detailed activation procedure is defined in the Appendix 1.



---

### Article 17

#### Technical characteristics of common FRR

The common FRR with following parameters shall be made available among the Parties:

- activation time: 15 minutes;
- minimum delivery period: 1 hour (also in the case of possibility of change), in case of a need the parties can agree on shorter minimum delivery period;
- start of delivery: anytime;
- end of delivery: round hour until VTL (meaning: correction value via Virtual Tie-Line) implementation; after VTL implementation: round quarter hour as long as the minimum delivery period is respected;
- possibility of change of activation: time period of requested assistance can be changed; change can be initiated by reserve Connecting TSO in case of network security issues or outage of production unit or by reserve Transiting TSO in case of network security issues;
- new activation: possible 15 minutes after the end of previous activation.
- Prolongation of delivery is possible 15 minutes before the end of previous activation.

### Article 18

#### Technical characteristics of additional measures

Technical characteristics of additional measures are out of scope of this Agreement. Reserve Connecting TSO will inform reserve Receiving TSO about technical characteristics of energy from additional measures on request before activation.

### Article 19

#### Transmission capacities and security issues

The exchange of energy from the cross-border activated reserves is performed via the usage of transfer capacities, respecting security standards of a safe and reliable network operation. For this purpose, only available intraday cross border capacity can be used. The exchange of energy shall comply with the requirements and limits for the exchange of FRR set out in SO GL Table of Annex VII.

---

## Article 20

### Data to be exchanged between the Parties for activation of common FRR

Maximal prices and available quantity of energy from the common FRR shall be exchanged between the Parties for each interval at least one hour before the start of delivery interval. The described data shall be exchanged in line with ENTSO-E ERPP standard.

Reserve Connecting TSO will inform reserve Receiving TSO about actual price of energy potentially used as additional measure on request.

## Article 21

### Settlement of energy from the activated reserves

Parties mutually agree that energy from the cross-border activated reserves shall be settled among themselves in a transparent way. In order to guaranty this, the Parties shall use the data exchanged between the Parties as defined in Article 20 of this Agreement, data from the confirmed and approved request forms for the activation of reserves (Appendix 1) and data from Preliminary settlement report (Appendix 7).

The settlement process is performed in a following manner:

- Settlement is based on the data from the Preliminary settlement report (Appendix 7) which is based on confirmed and approved requests for the activation presented in Appendix 1 (Request of activation). The confirmed and approved request shall be signed by Parties. The Preliminary settlement report shall be send by Reserve Connecting TSO to Reserve Receiving TSO on the first working day (in a country of Reserve Connecting TSO) following the energy delivery.
- Preliminary settlement report shall contain at least following information detailing each request:
  - The volume of energy activated in MWh for each time stamp rounded to full MWh until VTL implementation; after VTL implementation: rounded to three decimals, as agreed in Request of activation,
  - The Maximal price of energy in €/MWh for each time stamp rounded to two decimals as provided within data exchange in article 20,
  - The Settlement price of energy in €/MWh for each time stamp rounded to two decimals. Settlement price shall be equal or lower to the Maximal price. Calculation of settlement price is subject of internal calculation of Reserve Connecting TSO and shall be calculated as weighted average of all activated energy for each time stamp.
  - The total amount (=Settlement price × volume) for each time stamp and whole reporting period rounded to two decimals.

- On the basis of confirmed and approved request for the activation and Preliminary settlement report, involved TSOs shall prepare monthly report (Appendix 2). The initial reports sent for confirmation shall be prepared by:).
  - HOPS: for transactions NOSBiH-HOPS,
  - NOSBiH: for transactions NOSBiH-ELES,
  - ELES: for transactions HOPS-ELES.
- Monthly report signed by concerned parties shall be delivered no later than on the 3<sup>rd</sup> working day of the month M, for the month M-1.
- In the event that the 03<sup>rd</sup> day of the month is not a working day in Slovenia or/and in Croatia or/and in Bosnia and Herzegovina, final monthly report shall be delivered on the first following working day.
- This report will be used as a background for invoices
- Invoices for activated energy shall be issued monthly for the preceding month on the basis of activated energy and corresponding prices set forward in previous bullet.
- Invoices shall be issued no later than on the 5<sup>th</sup> working day in the current month for previous month.
- Invoices shall be paid no later than on the last working day of the month in which they are issued.
- Each party shall pay applicable bank fees (SHA).
- In the event that the 5<sup>th</sup> day of the month is not a working day in Slovenia or/and in Croatia or/and in Bosnia and Herzegovina, the issuing of the invoice will occur on the first following working day.
- Should the respective TSO hereto fail to settle its liabilities as they fall due, such Party shall be obliged to pay statutory default interest at legal rate according to the national legislation of the Party issuing the invoice.

## **Article 22**

### **Managing grid time deviation and distribution of set-point frequency**

The LFC block SHB monitor will be responsible for receiving set-point frequency from synchronous area monitor (Swissgrid) for correction of CE synchronous time and its redistribution to Parties. Parties are responsible for implementing the latest received set-point frequency in their system.

---

### Article 23

#### **The roles and the responsibilities of TSOs for the exchange and sharing of FRR with TSOs of other LFC blocks**

Parties agree that the roles and the responsibilities of the reserve Connecting TSO, the reserve Receiving TSO and of the affected TSO for the exchange and sharing of FRR with TSOs of other LFC blocks will be in line with “All CE TSOs’ agreement on the roles and responsibilities of the TSOs implementing an imbalance netting process, a cross-border FRR activation process or a cross-border RR activation process in accordance with Article 149(2) of SO GL”.

The list for exchange and sharing of FRR with TSOs of other LFC blocks are written in Appendix 3 for ELES, Appendix 4 for HOPS and Appendix 5 for NOSBiH of this Agreement. If needed any Party shall update appropriate Appendix of this Agreement.

### Article 24

#### **Exchange of FCR with other LFC blocks**

In line with SO GL Article 163 Parties shall ensure that at least 30 % of their total combined initial FCR obligations, is physically provided inside LFC block SHB. The exact amount of initial FCR obligation which can be physically provided outside of LFC Block SHB by each Party is determined in proportion to initial FCR obligation of each Party taking part in inter-LFC block market of FCR capacity.

Parties agree that the amount of reserve capacity of FCR, physically located in an LFC block SHB as a result of the exchange of FCR with other LFC blocks, shall be limited to the maximum of 100 MW of reserve capacity on FCR. Parties taking part in inter-LFC block market of FCR capacity shall ensure that this obligation is fulfilled and distribution of abovementioned amount of reserves is based on market principles.

Parties agree that there shall be no internal limits other than set in SO GL for the exchange of FCR between the LFC areas within LFC block SHB.

### Article 25

#### **Costs**

Each Party shall bear its own costs and expenses related to negotiation, signature and execution of the Agreement.

---

**Article 26**  
**Applicable Law**

For any disputes between the Parties arising out of or in connection with the Agreement the Parties shall use their reasonable best efforts to reach an amicable settlement. In case the Parties fail to settle a dispute by mutual agreement, the dispute shall be resolved by the competent court of defending Party. National law of deciding court shall be applied.

**Article 27**  
**Severability**

If any part or provision of this Agreement is or becomes invalid, illegal, void or unenforceable, the remaining part(s) shall continue to be valid and enforceable and shall not be affected thereby. Parties hereby agree that all invalid, illegal, void and/or unenforceable part(s) or provision(s) shall be replaced by valid, legal and/or enforceable part(s) or provision(s) in order to achieve the intended economic and legal effect as far as possible.

**Article 28**  
**Confidentiality**

Information considered as confidential includes all commercially sensitive information, information clearly marked as “confidential” and information which by its nature must be considered or qualified as confidential.

No recipient of confidential information shall use or otherwise process the confidential information obtained by it pursuant to this Agreement for any purpose except as strictly required for the performance of the obligations hereunder, or disclose any such information to any third party other than those of its directors, employees, professional advisors and representatives, regulatory authorities, governmental bodies, constitutionary and judicial authorities, which have a strict need to know such information for the proper performance of this Agreement.

Parties are obliged to organize their data handling in such a way as to minimize the risk of misuse or unauthorized access or the enclosure of confidential information.

**Article 29**  
**Force Majeure**

No Party shall be liable for delay or failure to fulfil its obligations under this Agreement if the delay or failure results from “Force Majeure” (meaning any unforeseeable event or

situation beyond the reasonable control of the Party, and not due to a fault of such Party) which cannot reasonably be avoided or overcome, and which makes it impossible for such Party to fulfil temporarily or definitively, its obligations under this Agreement.

### **Article 30**

#### **Amendments**

This Agreement may only be changed and amended in writing. Any amendment or change of the Agreement is subject to unanimous agreement between the Parties and will become effective after the signature of Parties.

Whenever the Agreement is amended by the Parties, the Agreement shall be sent to the regulatory authorities. Articles which contain methodologies and conditions referenced in SO GL Article 6(3)(e) are subject to approval by the NRAs of the EU members of the LFC block SHB and public consultation from Article 11. Any modification or addition of these Articles requires public consultation in accordance with SOGL Article 11 and approval by the NRAs of the EU members of the LFC block SHB.

### **Article 31**

#### **Use of Languages**

Parties acknowledge that they have required the present Agreement and all notices and legal proceedings provided hereunder to be written in English language, to the extent permitted by rules of public policy relating directly or indirectly to these proceedings.

### **Article 32**

#### **Liability**

Each Party shall perform its obligations in compliance with terms and conditions set in the Agreement and in provisions of SO GL regarding LFC block functionality.

The Parties undertake to carry out their duties and comply with their obligations under this Agreement with the diligence of a specialised professional and as a responsible control area manager, in compliance with the applicable laws and regulations in the electricity sector.

Under the same standard of diligence, each Party shall notify the other Parties of all risks and dangers inherent to the performance of this Agreement. The Parties undertake to cooperate with each other to adequately identify in advance such risks and dangers and mitigate those where possible.

In case that any Party is breaching any of its obligations arising from the Agreement, the other Party shall be entitled to claim compensation from the defaulting Party for any direct damage resulting from the breaching of the Agreement.

Any claims or damages going beyond that, including claims for business interruption, for loss of business profits, or for indirect incidental, special or consequential damages are expressly excluded.

### **Article 33**

#### **Validity**

The Agreement shall enter into force on the date of its signature by Parties.

The Agreement replaces in full the Operational Agreement of LFC block SHB signed by Parties on July 7<sup>th</sup> 2019.

Parties can agree on amendment or a new agreement taking into account the analysis of technical and financial effects of this Agreement prepared by experts of the Parties.

The Agreement remains valid at least until 31. 12. 2021. at 24:00 h. It is automatically prolonged year per year after this date unless an amendment or a new agreement is concluded between the Parties or unless a Party withdraws from the Agreement. The party proposing an amendment or a new agreement should send a notice to the other parties 2 months' prior the expiration date of the Agreement.

If any of the Parties decides to withdraw from the Agreement, it may do so by sending prior written notice to Parties at least 6 months before the Party's withdrawing day.

The withdrawing Party is obliged to settle all the liabilities in relation to the Party's participation in the LFC block SHB before it withdraws.

### **Article 34**

#### **Methodology for reservation of cross-border capacity**

The Parties agree to develop a methodology for reservation of cross-border capacity for the purpose of cross-border exchange of activated reserves that would be in line with requirements of Commission Regulation 2017/2195 establishing a guideline on electricity balancing. Parties agree to establish common working group to deal with this issue.

### **Article 35**

#### **Implementation of cross-border exchange of activated reserves by using virtual tie-lines**

Following the provisions of the Article 15 (Activation of common FRR) Parties agree that they will implement cross-border exchange of activated reserves by using virtual tie-lines within 6 months from the signature of this Agreement. Procedure for activating FRR using virtual tie-lines is defined in additional document Activation procedure of FRR within LFC Block SHB via VTL.

Energy exchanged over the virtual tie line is exclusively determined from signed Request of activation and exchanged by e-mail/telefax message and it is subject of the regular accounting process, as for any other tie-line.

In the transition period, until the cross-border exchange of activated reserves by using virtual tie-lines is implemented, Parties will use procedure defined in Appendix 1. For scheduling purposes Business Type A97 shall be used. Scheduling process should be finished before the start of delivery. The energy provided for one hour is deemed to be the average power related to that hour (example: if a service of 100 MW is requested at 22:00, the service starts at 22:15, the deemed energy is deemed to be  $\frac{3}{4}$  of 100 MW (75 MWh) between 22:00 and 23:00).

### **Article 36**

#### **Appendixes**

Appendixes to this Agreement shall be considered an integral part of this Agreement.

Adaptation procedure should be initiated by Party whose side the reason for adaptation had occurred.

All the correspondence amongst Parties should be in writing via e-mail.

In case mutual agreement on change/adaptation of Appendix is reached by Parties, the formal signing procedure should be initiated by the Party who started the adaptation process.

In case of mutual agreement between Parties is reached, additional Appendixes can be added to the Agreement later on as an integral part, followed by formal signing procedure.

### **Article 37**

#### **Signature**

The present Agreement shall be signed in three (3) originals. Each Party receives one (1) original.

Place and date: .....

ELES, d.o.o.

CEO

M. Sc. Aleksander Mervar,

Place and date: .....

NOSBiH - Nezavisni operator sistema u BiH

CEO

Ph.D. Milodrag Košarac,

Place and date: .....

Hrvatski operator prijenosnog sustava d.o.o.

CEO

Tomislav Plavšić, Ph.D.