

European Network of Transmission System Operators for Electricity

# COMPLIANCE AUDIT REPORT ELES, d.o.o.

13 - 14 OCTOBER 2015

COMPLIANCE AUDIT CONDUCTED IN THE NATIONAL CONTROL CENTRE IN LJUBLJANA BY ENTSO-E RGCE SG CME



#### DISCLAIMER

The present Compliance Audit Report is based on the information as provided by the audited company. This report is in no way a guarantee that security and reliability on the system of the audited company and/or on the whole synchronously interconnected system of the Regional Group Continental Europe (RGCE) is ensured. This report cannot be considered as a certification of whatever form. Finally, this report does not as such have any impact on the compliance, by the audited company and/or by any other member of ENTSO-E, with the RGCE Operation Handbook and/or any other relevant applicable standard.



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# **1 EXECUTIVE SUMMARY**

# 1.1 COMPLIANCE MONITORING IN ENTSO-E RGCE

The mission of the ENTSO-E System Operation Committee Regional Group Continental Europe (RGCE) is to improve the reliability and security of the interconnected power system in the Continental Europe through developing and enforcing RGCE Operation Handbook (OH) standards, monitoring the interconnected power system and assessing its future adequacy. The RGCE member TSOs are subject to compliance with all approved OH standards. The Compliance Monitoring Program (CMP) is the RGCE program that monitors and assesses compliance with these standards via:

- The annual process of self-assessment, which is applied to all TSOs, as well as
- The annual process of mandatory on-site compliance audits, which is applied to a certain number of TSOs chosen on a rotating base either directly (in case of doubts that a certain TSO complies with OH Standards) or randomly.

Sub-Group Compliance Monitoring & Enforcement (SG CME) is in charge of performing abovementioned two processes. The 2015 is the 6th year of conducting mandatory compliance audits. SG CME performed 4 voluntary compliance audits in 2008-2009 and 36 mandatory audits in 2010-2015.

# 1.2 AUDITED TSO

The RGCE member TSO ELES, was chosen for a Compliance Audit in 2015. CME conducted the audit on 13 and 14 October 2015 at ELES premises: the National Control Centre (NCC) located in Ljubljana

The onsite-audit focused on the training provided to 30 dispatchers located in both National Control Centre and three Regional Control Centres.

# **1.3 AUDITED OH STANDARDS**

The Compliance Audit encompassed 14 requirements/standards of Operation Handbook Policy 8 Operational Training. In 2014, ELES made compliance declarations in the self-assessment process for all standards of OH Policy 8 and revised them during the pre-audit phase updating when appropriate. Assessments have been checked against their evidence during the audit.



The Audit Team audited 14 requirements/standards of Policy 8 and concluded that ELES is fully compliant (FCo) with each one.

During the onsite audit, the Audit Team had the opportunity of visiting the national control room and training room, what helped the Audit Team to better understand the organisation and processes within the organisation of ELES. Presentation of installed DTS was an important part of this visit.

ELES was well prepared for the audit. The documents considered as evidence were available during the audit. All these documents were a good basis for proving the compliance level of ELES with the audited standards. Requests for additional material were promptly met by ELES.

The general impression of the Audit Team is that ELES has an excellent and well-documented procedure for dispatchers training which is efficiently used in practice. Therefore, the audit team has no further recommendation to ELES regarding the OH P8.

In the case of this Compliance Audit, all preconditions for a successful audit were fulfilled and the Audit Team wishes to express its gratitude to the ELES staff involved in the Audit and the company management.

Table 1 describes ELES compliance declaration in self-assessment questionnaires 2009 and 2014 and compliance audit questionnaire 2015 with compliance level suggestion by the Audit Team after reviewing the evidence for the audited standards.

OH Standard	Self- assessment questionnaire 2009	Self- assessment questionnaire 2014	Compliance audit questionnaire 2015	On site compliance audit 2015
P8-A-R1 TRAINING PROGRAM	FCo	FCo	FCo	FCo
P8-A-R2 INITIAL PROGRAM	FCo	FCo	FCo	FCo
P8-A-R3 CONTINUOUS PROGRAM	FCo	FCo	FCo	FCo
P8-A-R4 ENGLISH TRAINING	FCo	FCo	FCo	FCo
P8-A-S1 TRAINING PROGRAMS	FCo	FCo	FCo	FCo
P8-A-S2 TSO REFERENCE LIST OF ENGLISH TECHNICAL TERMS	FCo	FCo	FCo	FCo
P8-B-R1 EXPERIENCE EXCHANGE	SCo	FCo	FCo	FCo
P8-B-S1 COMMON TRAINING	SCo	FCo	FCo	FCo
P8-C-S1 COORDINATION OF THE TRAINING	FCo	FCo	FCo	FCo
P8-C-S2 ORGANIZATION	FCo	FCo	FCo	FCo
P8-C-S3 EVALUATION	FCo	FCo	FCo	FCo
P8-C-S4 FIRST ACCREDITATION	FCo	FCo	FCo	FCo
P8-C-S5 TRAINERS' SELECTION	FCo	FCo	FCo	FCo
P8-C-S6 TRAINING OF TRAINERS	FCo	FCo	FCo	FCo

#### TABLE 1: COMPLIANCE LEVEL CHANGES FOR THE AUDITED OH STANDARDS



# **2 AUDIT REPRESENTATIVES**

The Audit Team has the task to prepare and perform the Compliance Audit as well as to develop the corresponding audit report. The Audit Team composition is given in Table 2. The TSO subject to a compliance audit may object any member of the Audit Team on the basis of a conflict of interests or the existence of other circumstances that could interfere with the impartial performance of his or her duties. The audited TSO is obligated to express its concerns with the proposed team member four weeks prior to the team's arrival on-site. No objection was expressed by ELES. ELES personnel involved in the audit are given in Table 3.

Audit Team role	Company or association	Name	Email address
Audit team leader	PSE	Rafal Kuczynski	rafal.kuczynski@pse.pl
Audit team member	RTE	Alexandre Dutoit	alexandre.dutoit@rte-france.com
Audit team member	Amprion	Heinz-Dieter Ziesemann	heinz-dieter.ziesemann@amprion.net
Compliance Monitoring Advisor	ENTSO-E Secretariat	Carlos Castel	<u>carlos.castelconesa@entsoe.eu</u>

#### TABLE 2. SG CME AUDIT TEAM

#### TABLE 3. ELES AUDIT STAFF

Function in the company	Name
Assistant Division Director	Zoran Marčenko
Deputy Head of System Operation Service	Andrej Semprimožnik
NCC Operator	Henrik Pižorn
Expert for Regulatory Relations	Gorazd Sitar
Head of System Operation Service	Frank Kropec
Transmission System Analyst	Jaka Žvab



# **3 AUDIT PLAN**

## **3.1 GENERAL PROCEDURES**

The audit covered a chosen set of Operation Handbook (OH) standards, which had already been monitored within the Compliance Monitoring Program 2009 and 2014 self-assessment process.

The completed Audit Worksheet was sent by email to the ENTSO-E Secretariat and carbon copies to all Audit Team members four weeks before the first audit day. The complete schedule of the audit process for ELES is given in Table 4.

In preparation for the audit, ELES organised its supporting compliance documentation that is the evidence of the compliance with audited standards. The ENTSO-E RGCE SG CME's audit team acknowledges an excellent preparation for the audit.

All documentation (evidence) required for the onsite audit of each standard was available in hard or electronic format during the audit. The Control Area Manager and/or other responsible expert personnel were available during the audit to provide guidance to the Audit Team on where to look in the documentation for compliance to the OH standard and, if requested, to give further explanation on criteria and procedures implemented.

All documentation will be considered as confidential audit records and treated as such. The Audit Team prepares this report regarding the audit findings that will be published upon decision of the RGCE Plenary.



#### TABLE 4. SCHEDULE FOR THE COMPLIANCE AUDIT

Submittal of the audit material on behalf of the Audit Team	8 weeks prior to audit 18.8.2015
Objection or concern about audit team personnel	5 weeks prior to audit 8.9.2015
Submittal of the completed Audit Worksheet to the Audit Team by ELES	4 weeks prior to audit 15.9.2015
Initial feedback based on the submitted Audit Worksheet sent to ELES by the Audit Team	2 working days prior to audit 9.10.2015
<ul> <li>Opening meeting of the Audit Team and CAM of ELES <ul> <li>(1) Introduction of the Audit Team members,</li> <li>(2) Description of how the on-site audit will be conducted,</li> <li>(3) Discussion on how confidential information will be handled,</li> <li>(4) Discussion on data access required by the Audit Team,</li> <li>(5) Announcement that ELES will be asked to provide feedback on the audit process and results,</li> <li>(6) Presentation of the TSO and TSO's organization.</li> </ul></li></ul>	First audit day, 13.10.2015 09:00 – 09:30
Start of the OH standards' review*	First audit day, 13.10.2015 09:30 – 17:30
Continuation of the OH standards' review	Second audit day, 14.10.2015 09:00 - 12:30
Internal Audit Team meeting	Second audit day, 14.10.2015 12:30 - 14:00
<ul> <li>Closing meeting with CAM of ELES <ul> <li>(1) Presentation of preliminary audit findings and recommendations to be included on the draft audit report, with a strong emphasis on the evidence for each compliance level or non-compliance identified by the Audit Team,</li> <li>(2) Discussion and feedback by ELES with a possibility to object the findings,</li> <li>(3) In case of any non-compliance or lack of evidence of compliance, first draft proposal of the TSO on an adequate mitigation plan, including deadline. Should such an immediate proposal not be possible, the TSO must submit it afterwards in written copy within seven days.</li> </ul> </li> </ul>	Second audit day, 14.10.2015 14:00 – 15:30
Delivery of the draft audit report to ELES for review	2 weeks after the audit 28.10.2015
Remarks by ELES	4 weeks after the audit 11.11.2015
Delivery of the final audit report to ELES	6 weeks after the audit 25.11.2015
Acknowledgement of the final Audit Report by ENTSO-E RGCE Plenary and decision on its possible internal or external publishing.	RGCE Plenary in 2016

(\*) A visit in the control room and training centre has been performed by the Audit Team during the standards' review.



# 3.2 SCOPE

The objective of Compliance Audits in 2015 is to check all the requirements/standards from OH Policy 8. These standards were also monitored in the 2009 and 2014 regular compliance processes via the self-assessment questionnaire.

The scope of a compliance audit encompasses issues which are directly related to the compliance of the audited TSO with the investigated RGCE OH standards and issues which make a general background for the implementation of the OH at the audited TSO.

#### **Directly related issues**

Issues directly related to the audited RGCE OH standards:

- Existence of TSO's addenda and/or non-compliance declarations/non-compliance self-reports
- Follow-up of the TSO's mitigation plans to remove the declared non-compliances •
- Self-assessment questionnaires of 2009 and 2014 stored at the ENTSO-E Secretariat related • to audited TSO concerning the audited OH standards
- Audit Worksheet (AW) 2015 •
- Information and explanations which the Audit Team receives on site •

#### General background

The compliance audit also encompasses issues of general nature listed below:

- General policies of the audited TSO rules and procedures for the control centre(s) related to • the audited standards
- Procedures to control the application of the audited OH standards and their follow-up •
- Procedures to improve the compliance with the audited OH standards ٠
- TSO's internal report related to the implementation of the audited OH standards •
- TSO's internal audits and/or documentation concerning implementation of OH standards •
- TSO's internal bodies (forums, panels) for the implementation of the OH standards •
- Follow-up to the Compliance Audit in 2012 •

## 3.3 METHODOLOGY

The CME group prepared an audit schedule defining the chronological order of the compliance audit, which the audited TSO accepted without comment. The Audit Team reviewed the existing material on the audited TSO and its neighbouring TSOs already collected through the self-assessment process in the 2009 and 2014 self-assessment questionnaires. It also processed (assessed) the answers in the 2015 Audit Worksheet filled in by the audited TSO.

The applied methodology includes audit criteria and expectations based on best practices. The adopted criteria are objective, measurable (if possible), complete and relevant to the objectives. At defining the audit methodology, the auditors identified the potential sources of audit evidence and estimated the amount and type of evidence needed.

The Audit Team used an Audit Worksheet (see chapter 4) for reviewing the audited OH standards. The purpose of the AW is to ensure consistency and fairness. By using the AW the Audit Team documented the material reviewed and the observations made. One of the main reasons for an on-site visit is to review the existing documentation and to interview the staff. Thus, the auditors obtain "objective evidence" which support the self-assessed declarations of the audited TSO. The Audit Team determined whether the evidence presented by the TSO is sufficient. They did this by assessing the relevance, validity and reliability of the information and documentation presented.



It was the responsibility of the audited TSO to provide evidence of compliance with all audited OH standards. In most cases the evidence was in written form like documents, plans, programs or records. In some cases the evidence consisted of a review of computerized records or additional supporting material provided at interviews by the staff of the audited TSO.

## **3.4 EVALUATION PRINCIPLES**

#### Preparatory phase – activities in charge of Audited TSO

- Inspection of the exact wording of each audited OH standard and of additional questions formulated by the CME
- Fill in the audit questionnaire and submit to the Audit Team before the audit
- Identification of documents and other material to present to the auditors in order to demonstrate its compliance level with each OH standard

#### Preparatory phase – activities in charge of CME Audit team

- Identification of compliance level declaration inconsistency with neighbouring TSOs (Selfassessment questionnaire 2014 cross-border check regarding compliance level declarations)
- Analysis of the explanations and comments which the audited TSO made in the self-assessment 2014 and audit questionnaires 2015 in written form in order to evaluate the quality of explanations and comments
- Identification of the missing explanations in the self-assessment 2014 and audit questionnaire 2015
- Analysis of the improvements achieved during the implementation of mitigation and improvement plans declared in the MLA Addendum/Addenda, in the self-assessment questionnaire 2014, in the Audit Worksheet 2015 and in Compliance Audit in 2012 in case of non-compliance and sufficient compliance or recommendations

#### Audit phase

- Request to the audited TSO to give additional explanations, especially related to standards which were not or not fully addressed by documents and other material mentioned in the self-assessment questionnaire 2014 and audit questionnaire 2015.
  - The goal was to improve the quality of the explanations.
- Request to the audited TSO to present that evidence and, if necessary, additional evidence, in printed or electronic form
  - The goal was to improve the quality of the presented evidence.
  - The goal was to present material relevant to the audited OH standard at all.
- Request to the audited TSO to remark the titles of all presented documents, their relevant chapters and even relevant passages.
- Request to the audited TSO to provide further written explanations related to the presented material.

## 3.5 CONFIDENTIALITY

By signing this report the Audit Team members assure that they will maintain the confidentiality of information obtained during the compliance audit and drafting of the audit report. Moreover, they express their readiness to sign a supplementary confidentiality agreement, if the audited TSO assert such a claim.



# 4 AUDIT WORKSHEET FOR 2015 ONSITE AUDIT

#### 4.1 **OH REQUIREMENT P8-A-R1. TRAINING PROGRAM**

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-A-R1

**Training program.** Each TSO provides its dispatchers with a structured training program that is designed to develop and improve their skills. This program includes initial and continuous parts. The training has to be permanently adapted to the operational evolutions. All the issues of the training have to be regularly checked and updated.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Every year ELES makes training program "Program usposabljanja operativnega osebja za leto (year)". The training program includes initial and continuous part. The training program is permanently adapted to follow the development of TSO-procedures and applications, the development of power system and the operational conditions. Furthermore, special operational events are simulated on Operator Training Simulator in order to prepare operators for similar events in the future. Training is organized and performed according to internal regulation "Usposabljanje operativnega osebja, OP K 7.5.3".

#### **Additional Questions**

Do you have a training program including both initial and continuous part?	yes
Do you adapt the training program according to the operational evolutions?	yes
Do you have criteria to check whether the training program is in accordance with the current operational challenges?	yes



#### **AUDIT QUESTIONNAIRE 2015**

#### P8-A-R1

**Training program.** Each TSO provides its dispatchers with a structured training program that is designed to develop and improve their skills. This program includes initial and continuous parts. The training has to be permanently adapted to the operational evolutions. All the issues of the training have to be regularly checked and updated.

Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Every year ELES makes training program called "Program usposabljanja operativnega osebja za leto (year)" (Training program for operating staff). The training program includes initial and continuous part. The training program is permanently (yearly) adapted to follow the development of TSO-procedures and applications, the development of power system and the operational conditions. The document is available to operators through ELES business information system.

The training is regularly checked and yearly updated. What is more, in the program is prescribed also the "ad hoc training" (namensko usposabljanje) in order to react on fast changes in operation of the power system.

The whole training process including creating programs, executing and evaluation of trainings is organized and performed according to internal ELES regulation "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff).

Do you h	have a mitigation plan to the requirement?	Yes 🗌	No 🖂	
	ase of an existing Addendum or a Non Compl comments:	ance Declaration	n; list of evidence for a	mitigation

#### Additional Questions

Do you have a training program including both initial and continuous part?	Yes 🛛	No 🗌
Do you adapt the training program according to the operational evolutions?	Yes 🛛	No 🗌
Do you have criteria to check whether the training program is in accordance with the current operational challenges?		
	Yes 🖂	No 🗌

List of evidence, comments:



To check whether the training program is in accordance to current operational challenges we use two tools:

- Head of operation participate in training program development and •
- We perform a survey among operators in order to get a feedback. •

Evidence:

- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for • operating staff for 2015-2016). Chapter 5, Page 15 (initial and continuous part)
- "OP K 6.2.1 P6 Usposablianje operativnega osebja" (Training of operating staff) internal ELES rule Chapter 2 Page 5 (training updating criteria)
- Operators survey result

#### **AUDIT PHASE**

#### **COMPLIANCE AUDIT 2015**

Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

Training Programs "Program usposabljanja operativnega osebja za leto..." from 2010 till 2016 were shown and explained to the audit team. ELES provided a detailed description of the content of the initial and continuous programs. The training program is updated every year, in line with operational evaluation (e.g. CTDS training). Structure of training process was shown in internal ELES rules document (OP K 6.2.1 P6.). Those documents were a good basis for proving the compliance level of ELES with this standard.

#### 4.2 **OH REQUIREMENT P8-A-R2.** INITIAL PROGRAM

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-A-R2.

**Initial program.** The initial program consists of a theoretical part and on-the-job part complemented by simulator sessions.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

#### Additional Questions

Does your initial program consist of theoretical part?

yes

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Does your initial program consist of on-the-job part?	yes
Does your initial program include simulator sessions?	yes

#### **AUDIT QUESTIONNAIRE 2015**

#### P8-A-R2.

Initial program. The initial program consists of a theoretical part and on-the-job part complemented by simulator sessions.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

The theoretical part is performed by external body (Ministry for infrastructure) which is obligatory by Slovenian legislation (Energy law, Rules of training and exam for energy facility management). On the job training is basic part of initial training and it's duration depends on position of operator (six months for regional operator and one year for national operator). Part of initial training is also simulator sessions.

Do you have a mitigation plan to the requirement? Y	es 🗌	No 🖂
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In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

Additional Questions		
Does your initial program consist of theoretical part?	Yes 🖂	Νο
Does your initial program consist of on-the-job part?	Yes 🖂	No 🗌
Does your initial program include simulator sessions?	Yes 🖂	No 🗌

List of evidence, comments:



- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Chapter 5.1 at Page 15 (initial training content)
- "Energetski zakon" Ur. List št. 17/2014 z dne 7. 3. 2014, 31. člen (Energy law)
- "Pravilnik o strokovnem usposabljanju in preizkusu znanja za upravljanje energetskih naprav" (Rules of training and exam for energy facility management) theoretical part of initial and continuous part
- Material of external theoretical part
- "Potrdilo za opravljanje del dispečer v elektroenergetskem sistemu" (Certificate for dispatcher in power system issued by Ministry of infrastructure).
- "Zapisnik o komisijskem preverjanju usposobljenosti" (Minutes of an evaluation)
- "Poročilo o izobraževanju simulator" (Report of simulator session training)

#### AUDIT PHASE

#### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

ELES showed and explained the details of the initial training program in the following evidence:

- "Program usposabljanja operativnega osebja za leto 2015-2016", internal ELES document
- "Energetski zakon" Ur. List št. 17/2014 z dne 7. 3. 2014, (Energy law)
- "Pravilnik o strokovnem usposabljanju in preizkusu znanja za upravljanje energetskih naprav" (Rules of training and exam for energy facility management) Issued by the Slovenian Ministry of Infrastructure, the document describes among others the theoretical part of the initial training program.
- Material of external theoretical part

In addition ELES Human Resources department presented both documents from one dispatcher: "Potrdilo za opravljanje del dispečer v elektroenergetskem sistemu" (Certificate for dispatcher in power system issued by Ministry of Infrastructure) and "Zapisnik o komisijskem preverjanju usposobljenosti" (report of an evaluation)

A DTS training report (18 March 2014) was shown to the audit team as example. Those documents were a good basis for proving the compliance level of ELES with this standard.



# 4.3 OH REQUIREMENT P8-A-R3. CONTINUOUS PROGRAM

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-A-R3.

Continuous program. The continuous program is applied to all dispatchers as soon as they are certified and nominated to a dispatcher position. The main aim of the continuous program is to keep and extend the dispatchers' knowledge and competences. The continuous program is established to complement the initial program with: advanced theoretical parts; learning of new rules and procedures; additional simulator sessions.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

The advanced theoretical part is provided for example in case of installation of new equipment (such us pumped storage power plant, wind power plant, new type of protection relay, special topology scenarios) in the Slovenian and adjacent TSO's electrical power systems. Operators are informed about new rules and procedures and also about any changes in the existing ones. Additional simulator session is performed at least 1 day in a year for each operator. Training is organized and performed according to internal regulation "Usposabljanje operativnega osebja, OP K 7.5.3" and according to internal document "Program usposabljanja operativnega osebja za leto (year)".

#### **Additional Questions**

Are your dispatchers taught on advanced theoretical parts in the continuous training program?	yes
Are your dispatchers taught on new rules and procedures in the continuous training program?	yes
Do your dispatchers perform additional simulator sessions in the continuous training program?	yes

#### **AUDIT QUESTIONNAIRE 2015**

#### P8-A-R3.

**Continuous program.** The continuous program is applied to all dispatchers as soon as they are certified and nominated to a dispatcher position. The main aim of the continuous program is to keep and extend the dispatchers' knowledge and competences. The continuous program is established to complement the initial program with: advanced theoretical parts; learning of new rules and procedures; additional simulator sessions.

Compliance Level: FCo



Concise explanation and list of evidence for declared compliance level:

Continuous training is obligatory for all certified operators working in control centres in order to maintain operator's skills.

At least once a year an operator participates in simulator session. Part of that session is also an advanced theoretical part (related to the scenario). To maintain the level of education an external training followed by exam is obligatory every five years, as described in P8-A-R2. Additionally, ELES is organising workshops of operators which main part is extending the theoretical knowledge as well as exchange of experience among operators.

In case of implementation of new tools, procedures, equipment (such as SCADA/EMS, pump storage power plant, wind power plant, new type of protection relay, special topology scenarios) we perform an "ad hoc" training. Operators are informed about new rules and procedures and also about any changes in the existing ones.

Do you have a mitigation plan to the requirement? Yes 🗌	No 🖂	
In case of an existing Addendum or a Non Compliance Declaration comments:	n; list of evidend	ce for a mitigation pl
Additional Questions		
Are your dispatchers taught on advanced theoretical parts in the continuous training program?	Yes 🖂	No 🗌
Are your dispatchers taught on new rules and procedures in the continuous training program?	Yes 🖂	No 🗌
Do your dispatchers perform additional simulator sessions in the continuous training program?	Yes 🖂	No 🗌
List of evidence, comments:		
<ul> <li>Evidence:</li> <li>"OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Trainin ELES rule, Chapter 9 at Page 7(obligation) Chapter 2 at Page "Pravilnik o strokovnem usposabljanju in preizkusu znan naprav" (Rules of training and exam for energy facility manage (continuous theoretical education every 5 years)</li> <li>Material of theoretical training (fascikel iz RCV)</li> <li>"Program usposabljanja operativnega osebja za leto 2015 operating staff for 2015-2016). Chapter 5.3. Page 16 (continuous)</li> </ul>	je 5 (aim) ja za upravlja gement) - articl 5-2016" (Traini	nje energetskih le 50 at Page 15 ing program for

- "Zapisnik strokovnega srečanja operaterjev ELES-a" (Minutes of ELES operators workshop)
- "Prenos znanja iz mednarodnih treningov" (Transfer of knowledge from inter TSO trainings) •
- "Poročilo o izobraževanju Usposabljanje za uporabo ABB NM" (Report of ad hoc training - new ABB NM SCADA)



• "Poročilo o izobraževanju – simulator" (Report of simulator session training)

#### **COMPLIANCE AUDIT 2015**

Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The rules for the continuous training program are described in: OP K 6.2.1 P6, "Pravilnik o strokovnem usposabljanju in preizkusu znanja za upravljanje energetskih naprav" and "Program usposabljanja operativnega osebja za leto 2015-2016". ELES has shown and explained all these documents. ELES has also provided as example the minutes of ELES internal operators workshop 2011. Such workshops with the participants of the national and regional control centres are organized in general after significant changes in the ELES network or guidelines. In addition ELES presented the record for the inter TSO CEE training in DUtrain (March 2015). Those documents were a good basis for proving the compliance level of ELES with this standard.

# 4.4 OH REQUIREMENT P8-A-R4. ENGLISH TRAINING

#### SELF-ASSESSMENT QUESTIONNAIRE 2014

#### P8-A-R4.

**English training.** Dispatchers in contact with neighboring control areas shall have sufficient knowledge of English and operational terms to carry out their tasks, ensuring the safe and smooth flow of information in an international environment using clear expressions in order to ease an immediate understanding.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

In the job describtion is required knowledge of English. Operators are also attending the external English courses in order to improve their English skills, to maintain the level of knowledge. English technical terms relevant to system operation are learned during the initial training on-the-job part, during normal job activities and during common TSO trainings.

#### **Additional Questions**

Do you verify English speaking skills of your dispatchers who are in contact with neighbouring control areas? Yes
Does the learning of English technical terms relevant to system
operation make a part of the dispatcher training for those dispatchers Yes

who are in contact with neighboring control areas?



### **AUDIT QUESTIONNAIRE 2015**

#### P8-A-R4.

English training. Dispatchers in contact with neighboring control areas shall have sufficient knowledge of English and operational terms to carry out their tasks, ensuring the safe and smooth flow of information in an international environment using clear expressions in order to ease an immediate understanding.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

In the job description of an operator is required knowledge of English. English knowledge evaluation is performed at job application by human resources department. Training of English is performed also during on the job training as well as during Inter-TSO simulator sessions and TSC daily operational teleconferences. Operators are also encouraged to participate in the external English courses in order to improve their English skills and to maintain the level of knowledge. English technical terms relevant to system operation are learned during the initial training during on-thejob part, during normal job activities and during common TSO trainings. A list of English technical terms is also available in the control room. Do you have a mitigation plan to the requirement? Yes 🗌 No 🖂 In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments: **Additional Questions** Do you verify English speaking skills of your dispatchers who are in contact Yes 🖂 No 🗌 with neighbouring control areas? Does the learning of English technical terms relevant to system operation make a part of the dispatcher training for those dispatchers who are in contact Yes 🖂 No 🗌 with neighboring control areas? List of evidence, comments: English knowledge evaluation is performed at job application by human resources department. Learning of English technical terms is performed during simulator sessions, on the job training, Inter-TSO workshops and trainings, TSC daily operational teleconference.

#### Evidence

- "Akt o sistemizaciji vrste del in delovnih mest družbe ELES d. o,.o." (Job describtion document of • ELES), Page 89 (Job description of NCC operator),
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Appendix 4 at Page 24 (English training)
- "Scenarij za usposabljanje operaterjev: Razpad Štajerske in Prekmurja" (Scenario description) • Page 1 as an scenario description example
- **English Certificates of operators**
- "Izjava o seznanjenosti s Slovensko angleškim slovarjem strokovnih izrazov" (Statement of acquaintance with Slovenian - English technical terms)



#### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The audit team checked that ELES includes English training in the continuous and initial training program since 2010, moreover specific external English courses are available for dispatchers. In addition the audit team had the opportunity to see the English certificate of some dispatchers. Those evidence were a good basis for proving the compliance level of ELES with this standard.

#### 4.5 **OH STANDARD P8-A-S1 TRAINING PROGRAMS**

#### SELF-ASSESSMENT QUESTIONNAIRE 2014

#### P8-A-S1.

Training programs. The initial and continuous program has to consider the relevant parts of the UCTE Operation Handbook and mutual agreements between TSOs. Each TSO defines its specific requirements for the initial program and the continuous program and their duration.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Training is organized and performed according to internal regulation "Usposabljanje operativnega osebja, OP K 7.5.3" and "Program usposabljanja operativnega osebja za leto (year)". The training program covers agreements between TSOs and also the relevant parts of the UCTE OH.

#### **Additional Questions**

Does your initial training program cover agreements between TSOs?	Yes
Does your initial training program consider the relevant parts of the UCTE OH?	Yes
Does your continuous training program cover agreements between TSOs?	Yes
Does your continuous training program consider the relevant parts of the UCTE OH?	Yes
Do you define specific requirements and duration of the initial program and the continuous program?	Yes

#### **AUDIT QUESTIONNAIRE 2015**

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No 🖂



#### P8-A-S1.

**Training programs.** The initial and continuous program has to consider the relevant parts of the UCTE Operation Handbook and mutual agreements between TSOs. Each TSO defines its specific requirements for the initial program and the continuous program and their duration.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Training is organized and performed according to internal regulation and training program. In those documents is defined the content of training. It covers the relevant part of UCTE Operation Handbook (Policy 1, Policy 3 and Policy 5 and parts of other relevant policies). The training program covers also agreements between TSOs. Training programs are updated with relevant parts of legislation and trained also during simulator sessions.

Duration and specific requirements for initial and continuous training are prescribed in training program.

#### Do you have a mitigation plan to the standard? Yes 🗌

In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

#### **Additional Questions**

Does your initial training program cover agreements between TSOs?	Yes 🖂	No 🗌
Does your initial training program consider the relevant parts of the UCTE OH (ENTSO-E RGCE OH)?	Yes 🖂	No 🗌
Does your continuous training program cover agreements between TSOs?	Yes 🖂	No 🗌
Does your continuous training program consider the relevant parts of the UCTE OH (ENTSO-E RGCE OH)?	Yes 🖂	No 🗌
Do you define specific requirements and duration of the initial program and the continuous program?	Yes 🖂	No 🗌

#### List of evidence, comments:

Evidence

- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Appendix 2 at Page 19 (legislation education)
- Inter-TSO CEE training program (performed by DUtrain)
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Chapter 5 at Page 15 and 16 (duration of training)
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Chapter 4.2.3 at Page 13 (load of operators)



#### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The audit team checked that the relevant parts of the Operation Handbook and Multilateral Agreements with neighbouring TSOs are part of the initial and continuous training programs, this information is included in the internal ELES documentation: "Program usposabljanja operativnega osebja za leto 2015-2016". In addition this document contains the duration of the different modules of the training programs. The available evidence were a good basis for proving the compliance level of ELES with this standard.

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#### **OH STANDARD P8-A-S2 TSO REFERENCE LIST OF ENGLISH** 4.6 **TECHNICAL TERMS**

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-A-S2.

TSO reference list of English technical terms. Each TSO makes available a reference list of technical terms in English with translation to the mother language of dispatchers for operation and for training based on the existing UCTE reference list (see Appendix 8).

Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Reference list of all English technical terms (Appendix 8 - Terminology) with translation to the Slovenian language is available to operators in National control center.

#### No Additional Questions

#### **AUDIT QUESTIONNAIRE 2015**

#### P8-A-S2.

TSO reference list of English technical terms. Each TSO makes available a reference list of technical terms in English with translation to the mother language of dispatchers for operation and for training based on the existing UCTE reference list (see Appendix 8).

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Reference list of all English technical terms (Appendix 8 - Terminology) with translation to the Slovenian language is available to operators in National control centre and training room as well as in ELES business information system as Excel sheet. Every operator confirms with statement his acquaintance with the list.

#### Do you have a mitigation plan to the standard?

Yes 🗌

No 🖂

In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

List of evidence, comments:

Evidence:

- Appendix 8 terminology (English technical terms)
- "Izjava o seznanjenosti s Slovensko angleškim slovarjem strokovnih izrazov" (Statement of acquaintance with Slovenian - English technical terms)

Yes



### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

ELES presented the translation of the appendix of Policy 8 (English Technical terms) and the dispatchers confirmation of the acknowledgment of the document (March 2013). The audit team checked the availability of the list both in the control room and in the training room. This list is also available in the ELES business information system.

#### **OH REQUIREMENTS P8-B-R1. EXPERIENCE EXCHANGE.** 4.7

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-B-R1.

Experience exchange. TSOs have to exchange the operational experience with their neighbours in order to cope with normal and abnormal situations in a coordinated way.

Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

We are performing exchange of operators experience as follows: with APG we perform common inter-TSO simulator training, common workshops (organised by MAVIR and CEE region). With HOPS we perform common workshops (organised by MAVIR, EMS and CEE region) and crossvisits. With TERNA we perform cross-visits. From 2008, ELES's operators participate yearly on common training workshops of operators in the CEE region.

#### Additional Questions

Do your dispatchers participate in the exchange of the operational experience with neighbouring TSOs?

#### **AUDIT QUESTIONNAIRE 2015**

#### P8-B-R1.

Experience exchange. TSOs have to exchange the operational experience with their neighbours in order to cope with normal and abnormal situations in a coordinated way.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

We are performing exchange of operators experience as a part of common training with neighbouring TSOs. Trainings are performed in a way as we describe bellow:

With APG we perform common inter-TSO simulator training, common workshops (organised • by MAVIR and CEE region).



•	<ul> <li>With HOPS we perform common workshops (organised by MAVI and cross-visits.</li> <li>With TERNA we perform cross-visits.</li> </ul>	IR, EMS and C	EE region)
Do you l	u have a mitigation plan to the requirement? Yes 🗌 No	0	
	case of an existing Addendum or a Non Compliance Declaration; list an, comments:	t of evidence f	or a mitigation
Addit	ditional Questions		
-	your dispatchers participate in the exchange of the Y erational experience with neighbouring TSOs?	′es ⊠	No 🗌
List of evi	evidence, comments:		
Evident • • •	Cross-visit of HOPS NCC (reports, presentation) Report of TERNA-ELES cross-visits DUtrain report of commons training (participating ELES and APG of Mavir operators workshops (list of participants, presentations) Common CEE operators workshop (invitation, presentation, report	. ,	e)

## **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The audit team confirmed with the available evidence that ELES is regularly exchanging operational experience with all neighbours in order to cope with normal and abnormal situations in a coordinated way. The experience exchange is done in general by cross visits, workshops and simulators sessions. As example, the following documents were shown:

- Cross-visit of HOPS NCC (report 2013, presentation 2009)
- Report of TERNA-ELES cross-visits 2006-2011-2015. •
- DUtrain report of common CEE simulation session. This training takes place twice a year since • 2011.
- List of participants and presentations of the dispatcher workshop organized by Mavir on yearly • basis.
- For the future ELES is preparing on shift cross periods with TERNA.

In addition ELES showed a table with the dispatcher attendance to the different experience exchanges. The available evidence were a good basis for proving the compliance level of ELES with this standard.



#### **OH STANDARD P8-B-S1 COMMON TRAINING** 4.8

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-B-S1.

Common training. Each TSO implements at least one of the four actions defined in guidelines P8-B-G3 to improve communication and coordinated measures between neighbouring TSO dispatchers. The actions taken have to be chosen depending on the mutual level of risks for secure system operation with the first (or further) neighbouring TSO.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

We are performing the exchange of the operators experience with all neighbouring TSOs.

#### **Additional Questions**

Which actions defined in guidelines P8-B-G3 do you implement? [Guidelines P8-B-G3. Inter-TSO common training. The common training can be implemented in the following ways: G3.1. Cross visits between neighbouring TSOs dispatchers.; G3.2. Common training workshops.; G3.3. On-shift cross periods.G3.4. Common DTS training sessions.]

APG	HOPS	TERNA
G3.2 G3.4	G3.1 G3.2	G3.1 G3.2



## **AUDIT QUESTIONNAIRE 2015**

#### P8-B-S1.

Common training. Each TSO implements at least one of the four actions defined in guidelines P8-B-G3 to improve communication and coordinated measures between neighbouring TSO dispatchers. The actions taken have to be chosen depending on the mutual level of risks for secure system operation with the first (or further) neighbouring TSO.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

We perform common trainings with all neighbouring operators in a way described below:

- With APG we performing cross visits, common workshops (organised by MAVIR and CEE region) and common inter-TSO simulator training in CEE performed by DUtrain,
- With HOPS we perform cross-visits and common workshops (organised by MAVIR, EMS and CEE region).
- With TERNA we perform cross-visits and common workshop.

Do you have a mitigation plan to the standard?

Yes 🗌

No 🖂

In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

#### **Additional Questions**

Which actions defined in guidelines P8-B-G3 do you implement?

[Guidelines P8-B-G3. Inter-TSO common training. The common training can be implemented in the following ways: G3.1. Cross visits between neighbouring TSOs dispatchers.; G3.2. Common training workshops.; G3.3. On-shift cross periods.G3.4. Common DTS training sessions.]

Neighbour	G3.1	G3.2	G3.3	G3.4
APG	$\square$	$\square$		$\boxtimes$
HOPS	$\square$	$\square$		
TERNA	$\square$	$\square$		

List of evidence, comments:

Evidence:

- Report of cross-visit at APG •
- Common CEE operators workshop (invitation, presentation, report on attendance •
- DUtrain report of commons training (participating ELES and APG operators) •
- Cross-visit of HOPS NCC (reports, presentation) •
- Report of TERNA-ELES cross-visits
- Mavir operators workshops (list of participants, presentations) •
- Reports of EMS operators workshops •
- EAS workshop report



• Table of operators attendance in common trainings

#### **COMPLIANCE AUDIT 2015**

Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The audit team confirmed with the available evidence that ELES implements regularly at least one of the four actions defined in guidelines P8-B-G3 with each neighbour. As example, ELES provided the following evidence from common trainings:

- Cross-visit of HOPS NCC (reports 2013, presentation 2009)
- Report of TERNA-ELES cross-visits 2006-2011-2015.
- DUtrain report of common CEE simulation session. This training takes place twice a year since 2011.
- List of participants and presentations of the dispatcher workshop organized by Mavir on yearly basis.

For the future ELES is preparing on shift cross periods with TERNA.

In addition ELES showed a table with the dispatcher attendance to the different common trainings. The available evidence were a good basis for proving the compliance level of ELES with this standard.



#### **OH STANDARD P8-C-S1 COORDINATION OF THE TRAINING** 4.9

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-C-S1

Coordination of the training. TSO appoints a training coordination manager responsible for training organization: designing, following-up and updating the full training process.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

The training coordination manager is nominated with internal document "Imenovanje delovne skupine za izvajanje usposabljanja operaterjev 20.4.2010"

#### **No Additional Questions**



#### **AUDIT QUESTIONNAIRE 2015**

#### P8-C-S1

**Coordination of the training.** TSO appoints a training coordination manager responsible for training organization: designing, following-up and updating the full training process.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

The training coordination manager is nominated with internal document by ELES CEO. The coordinator is responsible for training program creation and execution. He also coordinates all relevant training activities including recording of executed activities.

Do you have a mitigation plan to the standard?

Yes 🗌

No 🖂

In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

#### **Additional Questions**

Who has the role of Training Coordination Manager in your TSO? (please provide first and second name)

Mr Andrej Semprimožnik

List of evidence, comments:

Evidence:

- "Odločba o imenovanju delovne skupine za pripravo in izvajanje programa usposabljanja operativnega osebja". (Noinationt of operator training working group for preparation and execution of training program).
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for • operating staff for 2015-2016). Chapter 4.2 at Page 11 (training coordination manager nomination)
- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal • ELES rule, Chapter 1 on Page 5 (training coordination manager)
- "Akt o sistemizaciji vrste del in delovnih mest družbe ELES d. o,.o." (Job describtion • document of ELES) Page 61 (Job description of specialist of operators training)



#### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

ELES showed the nomination of the training coordination manager and the operator training working group which is responsible for the design, follow up, update and execution of the training program. This nomination is regularly updated (2009, 2010, 2015).

Information for the nomination of the training coordination manager and the members of the training team, their tasks and responsibilities were presented through the following documents and explained to the audit team:

- "Odločba o imenovanju delovne skupine za pripravo in izvajanje programa usposabljanja operativnega osebja". (Nomination of operator training working group for preparation and execution of training program).
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016).
- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff)
- "Akt o sistemizaciji vrste del in delovnih mest družbe ELES d. o, o." (Job description document of ELES)

The available evidence were a good basis for proving the compliance level of ELES with this standard.



# 4.10 OH STANDARD P8-C-S2 ORGANIZATION

#### SELF-ASSESSMENT QUESTIONNAIRE 2014

#### P8-C-S2

**Organization.** The training coordination manager determines appropriate procedures for the training organization. These procedures shall cover: - a description of the dispatchers required qualifications (knowledge and skills); - a reference list of topics for training programs linked to the dispatchers required qualification; - the processes for the initial and continuous programs including scripts/documents; of the theoretical sessions, time-schedules, supervision, tools, support for trainees, evaluation/validation and continuous improvement of the programs; - the process of dispatchers accreditation; - trainers selection and training of trainers.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Procedures, training organisation, list of topics, training staff is defined in our internal document "Program usposablianja operativnega osebja za leto (year)" Scripts, document time schedules tools etc are available in ELES electronic system. Qualification needed for an operator are stated also in job description. Internal regulation "Usposabljanje operativnega osebja, OP K 7.5.3" includes amongst others initial and continuous training program, needed human and equipment resources, evaluation and validation of the programs and also continuous improvements. The general timeschedule is prepared yearly and finalized before beginning of training sessions. The organization, performing of education and profile of trainers is described in our internal document "Program usposabljanja predavateljev-trenerjev za leto (year)" Selected experts in specific fields perform training sessions for operators. ELES uses outsourcing for education performed by "Izobraževalni center energetskega sistema - ICES". Experts from different areas that are being trained within work are nominated into the working group for preparation and performing of training program for operators. The experts for specific application attend individual outsourced courses and workshops on mutual communications, relations with employees and motivation.

#### **Additional Questions**

Do your procedures for training include a description of the dispatchers required qualifications?	Yes
Do your procedures for training include a reference list of topics for training programs linked to the dispatchers required qualification?	Yes
Do your procedures for training include the processes for the initial and continuous programs including scripts/documents; of the theoretical sessions, time-schedules, supervision, tools, support for trainees, evaluation/validation and continuous improvement of the programs?	Yes
Do your procedures for training include the process of dispatchers accreditation?	Yes
Do your procedures for training include trainer selection and training of trainers?	Yes



#### AUDIT QUESTIONNAIRE 2015

#### P8-C-S2

**Organization.** The training coordination manager determines appropriate procedures for the training organization. These procedures shall cover: - a description of the dispatchers required qualifications (knowledge and skills); - a reference list of topics for training programs linked to the dispatchers required qualification; - the processes for the initial and continuous programs including scripts/documents; of the theoretical sessions, time-schedules, supervision, tools, support for trainees, evaluation/validation and continuous improvement of the programs; - the process of dispatchers accreditation; - trainers selection and training of trainers.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Procedure for training is determined in internal ELES rule by training coordination manager.

Procedures, training organisation, list of topics and training staff are defined in our internal documents. Scripts, document and training time schedules are available in ELES business information system as well in paper form. Qualifications needed for an operator are stated in job description. Internal regulation describe amongst others: initial and continuous training program, needed human and equipment resources, evaluation and validation of the programs and also continuous improvements. The general time-schedule is prepared yearly and is finalized before beginning of training sessions.

The organization, performing of education and profile of trainers is described in our internal document - training of trainers program. Selected experts in specific fields perform training sessions for operators. Experts from different areas that are being trained on their work position by regular work are nominated into the working group for preparation and performing the training program for operators. The experts for specific application attend individual outsourced courses and workshops on mutual communications, relations with employees and motivation. ELES uses also outsourcing for education performance such as by "Izobraževalni center energetskega sistema – ICES, Dutrain, English learning schools.

Do you have a mitigation plan to the standard? Yes 🗌	No 🖂	
In case of an existing Addendum or a Non Compliance Declaration plan, comments:	; list of evidence for a mit	tigation
Additional Questions		
Do your procedures for training include a description of the dispatchers required qualifications?	Yes 🛛 No	<b>b</b> 🗌
Do your procedures for training include a reference list of topics for training programs linked to the dispatchers required qualification?	Yes 🛛 No	<b>o</b> 🗌
Do your procedures for training include the processes for the initial and continuous programs including scripts/documents; of the theoretical sessions, time-schedules, supervision, tools, support for	Yes 🖂 🛛 No	<b>o</b> 🗌

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trainees, evaluation/validation and continuous improvement of the programs?		
Do your procedures for training include the process of dispatchers accreditation?	Yes 🖂	No 🗌
Do your procedures for training include trainer selection and training of trainers?	Yes 🖂	No 🗌

List of evidence, comments:

Evidence:

- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal ELES rule, Chapter E on Page 8 (general procedures)
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Specific procedures on Page 1 (tutorship of program creating)
- "Odločba o imenovanju delovne skupine za pripravo in izvajanje programa usposabljanja operativnega osebja". (Nomination of operator training working group for preparation and execution of training program).

Operators required qualifications are described in job description and in training program

Evidence:

- "Akt o sistemizaciji vrste del in delovnih mest družbe ELES d.o.o." (Job descriptions for ELES) Pages 89 and 90.
- "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Chapter 2 on page 4 (required qualifications)

Training topics are linked to required qualifications as stated in training program.

#### Evidence:

 "Program usposabljanja operativnega osebja za leto 2015-2016" (Training program for operating staff for 2015-2016). Appendix 1 on page 17 (link to required qualifications)

Training program includes initial and continuous programs. Training material (scripts and documents), time schedules are available on ELES business information system. Supervision of the training is done by head of system operation by participation on trainings and interviewing the staff. Tools and support for trainees are available in DTS room. Evaluation is done by operator's questionnaire and improvement by training coordinator. Both are evaluated and confirmed by head of operation.

Evidence:

- "Gradivo za operaterje" (Summary of relevant documents for operators)
- DTS training schedule
- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal ELES rule, Chapter 2 on Page 6 (questionnaire)
- Questionnaire 2014 result and one questionnaire form

At the end of training operator is obliged to participate in internal exam. Minutes of an evaluation which proves adequate knowledge to perform operator's job in combination with external training certificate issued by Ministry of infrastructure is recognised as the operator's accreditation.

Evidence:

 "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) – internal ELES rule, Chapter 7 on Page 6 (accreditation granting)



• Zapisnik o komisijskem preverjanju usposobljenosti (Minutes of an evaluation)

Process of trainer selection and training is defined in internal ELES rules.

 "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) – internal ELES rule, Chapter 1 on Page 5 (trainer selection) and Chapters 12 and 13 on page 7 (trainers training)

#### COMPLIANCE AUDIT 2015

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The description of the dispatcher required qualifications is available in the job description ("Akt o sistemizaciji vrste del in delovnih mest družbe ELES d.o.o.") and "Program usposabljanja operativnega osebja za leto 2015-2016".

The reference list of topics for training programs is also documented in "Program usposabljanja operativnega osebja za leto 2015-2016".

The processes for the initial and continuous programs are available in :

- "Gradivo za operaterje" (Summary of relevant documents for operators, available on the ELES business information system)
- DTS training schedule for the period 2011-2015
- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) –, Chapter 2 on Page 6 (questionnaire)
- Summary of the evaluation of the trainings for 2014.

The process of dispatcher accreditation is documented in the minutes of the evaluation process and in OP K 6.2.1 P6 Usposabljanje operativnega osebja.

Trainer's selection and training of trainers are also described in OP K 6.2.1 P6 Usposabljanje operativnega osebja.

The above evidence were explained to the audit team. They were a good basis for proving the compliance level of ELES with this standard.



# 4.11 OH STANDARD P8-C-S3 EVALUATION

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-C-S3

Evaluation. The initial program has to be completed by an evaluation in which the knowledge and capabilities of a candidate to perform a dispatcher job are tested. This evaluation is performed by the trainers; a relevant document is forwarded to the manager of the candidate.

Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

At the end of the initial program is performed an exam in front of committee, established for performing the test. A relevant document is issued and forwarded to the manager of the candidate.

#### **Additional Questions**

Do you complete the initial program with a test of the knowledge of dispatches candidates?	Yes
Do the trainers issue a document containing the results of the evaluation to the manager of the candidate?	Yes



#### P8-C-S3

**Evaluation.** The initial program has to be completed by an evaluation in which the knowledge and capabilities of a candidate to perform a dispatcher job are tested. This evaluation is performed by the trainers; a relevant document is forwarded to the manager of the candidate.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

At the end of the initial program an evaluation of candidates qualification is performed by a committee, established to perform the test. Members of the committee are:

- head of system operation (manager of the candidate),
- mentor of the candidate during on-the-job training
- trainer,
- employee from personnel department

To get a positive evaluation candidate has to present sufficient knowledge in on site exam and all members of a committee should report positively of his past behaviour. Minutes of the candidate evaluation session is issued and forwarded to the candidate, to the personnel department and to the manager of the candidate.

# Do you have a mitigation plan to the standard? Yes $\Box$ No igtrianglequence

In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

# Additional Questions Do you complete the initial program with a test of the knowledge of dispatches candidates? Yes

Do the trainers issue a document containing the results of the evaluation to the manager of the candidate? Yes  $\boxtimes$ 

List of evidence, comments:

Evidence:

- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal ELES rule, Chapter 3 on Page 6 (exam)
- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal ELES rule, Chapter 4 on Page 6 (committee nomination)
- "Zapisnik o komisijskem preverjanju usposobljenosti" (Minutes of an evaluation)

How do you

No 🗌

No 🗌



### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The evaluation process is documented in "OP K 6.2.1 P6 Usposabljanje operativnega osebja" Chapter 3 on Page 6 (exam) and Chapter 4 page 6 (committee nomination).

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# 4.12 OH STANDARD P8-C-S4 FIRST ACCREDITATION

#### SELF-ASSESSMENT QUESTIONNAIRE 2014

#### P8-C-S4

First accreditation. The TSO has to deliver a first accreditation to the dispatcher candidate that authorizes him to perform his job in the control room. The first accreditation is attributed according to defined criteria for a duration decided by the TSO as in below-mentioned guidelines.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

After passing the internal test operator receive written document which is valid as a first accreditation. The first accreditation is delivered after successfully finished initial training program (1 year for experienced person in electrical engineering area, 2 years for probationer). After completed external education performed by "Izobraževalni center energetskega sistema - ICES" the candidate for dispatcher takes an external exam in front of external commission "Zveza društev energetikov Slovenije - ZDES", nominated by the Slovenian Ministry of economy. This external exam is also necessary for operator to get the accreditation.

#### **Additional Questions**

Do you deliver a first accreditation to your dispatcher?	Yes
Do you have criteria for accreditation of dispatcher candidate?	Yes

#### **AUDIT QUESTIONNAIRE 2015**

#### P8-C-S4

First accreditation. The TSO has to deliver a first accreditation to the dispatcher candidate that authorizes him to perform his job in the control room. The first accreditation is attributed according to defined criteria for a duration decided by the TSO as in below-mentioned guidelines.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Minutes of the candidate's positive evaluation in combination with external training certificate are regarded as an operator's accreditation. Criteria for duration:

According to the "Rules of training and exam for energy facility management" the external training certificate issued by Ministry of infrastructure must be renewed every 5 years. According to internal ELES rules duration of internal ELES accreditation for operators is not limited in duration. However in case of operator's insufficient quality of performance on duty, head of operation can request renewal of internal ELES accreditations.

#### Do you have a mitigation plan to the standard? Yes 🗌 No 🖂 In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

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#### **Additional Questions**

Do you deliver a first accreditation to your dispatcher?	Yes 🖂	No 🗌
Do you have criteria for accreditation of dispatcher candidate?	Yes 🖂	No 🗌

#### List of evidence, comments:

#### Evidence

- "Pravilnik o strokovnem usposabljanju in preizkusu znanja za upravljanje energetskih naprav" (Rules of training and exam for energy facility management)
- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal ELES rule, Chapter 5 on Page 6 (first accreditation) and Chapter 7 on Page 6 (first accreditation criteria)
- "Zapisnik o komisijskem preverjanju usposobljenosti" (Minute of an evaluation)
- "Potrdilo za opravljanje del dispečer v elektroenergetskem sistemu" (Certificate for dispatcher in power system issued by Ministry of infrastructure).

#### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The accreditation process is described in "Pravilnik o strokovnem usposabljanju in preizkusu znanja za upravljanje energetskih naprav" (Rules of training and exam for energy facility management, issued by the Slovenian Ministry of Infrastructure) Art. 4 "upravljavci energetskih naprav" (operators of energy installations), 10 "dispečer v elektroenergestskem sistemu" (dispatcher in electro power system), 35-44 "preskusi znanja" (tests of knowledge). and "OP K 6.2.1 P6 Usposabljanje operativnega osebja"

ELES showed to the audit team the internal first accreditation of one dispatcher.

In addition the audit team checked the first accreditation (2009) and the renewed certificate (2014) issued by the Ministry of Infrastructure of one dispatcher.

Both documents (Internal and Government ones) are necessary for the full dispatcher accreditation.



# 4.13 OH STANDARD P8-C-S5 TRAINERS' SELECTION

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-C-S5

Trainers' selection. TSOs have to determine the profile of trainers with regards to their respective tasks and responsibilities in the training programs. Trainers are selected internally (experienced dispatchers) or from external bodies.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Trainers selection is determined in internal rule "OP 7.5.3 Usposabljanje operativnega osebja". Selected experts in specific fields perform training sessions for operators. Trainers are officially nominated by the management.

#### **Additional Questions**

Have you determined the profile of trainers?

Yes

### **AUDIT QUESTIONNAIRE 2015**

#### **P8-C-S5**

Trainers' selection. TSOs have to determine the profile of trainers with regards to their respective tasks and responsibilities in the training programs. Trainers are selected internally (experienced dispatchers) or from external bodies.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Trainer's selection process and profile is determined in internal rules. Selected staff should have experience in system operation (ex-operators), be experts in specific fields of work, tools experts. Trainers are officially nominated by the ELES management. Pedagogical-Andragogical skills to train operators are also desired.

ELES use also external trainers for topics such as Inter-TSO Training, English, preparation to external exam, introduction to new tools (new system SCADA/EMS).

Do you have a mitigation plan to the standard?

Yes

In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation plan, comments:

#### **Additional Questions**

Have you determined the profile of trainers?

Yes⊠

No 🖂

No 🗌



#### List of evidence, comments:

#### Evidence:

- "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff) internal • ELES rule, Chapter 1 on Page 5 (trainer profile)
- "Odločba o imenovanju delovne skupine za pripravo in izvajanje programa usposabljanja • operativnega osebja". (Nomination of operator training working group for preparation and execution of training program)

#### **COMPLIANCE AUDIT 2015**

Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

The profile of trainers is described in "OP K 6.2.1 P6 Usposabljanje operativnega osebja" (Training of operating staff). In addition ELES showed to the audit team the nomination of trainers from 2009, 2010 and 2015.

The above evidence were explained to the audit team. They were a good basis for proving the compliance level of ELES with this standard.

## 4.14 OH STANDARD P8-C-S6 TRAINING OF TRAINERS

#### **SELF-ASSESSMENT QUESTIONNAIRE 2014**

#### P8-C-S6

Training of trainers. Depending on education and previous experience, an individual training program is defined for each trainer; it can be provided by internal sessions or by outsourced training sessions.

#### Compliance Level: FCo

Concise explanation and list of evidence for declared compliance level:

Trainers are experts in specific fields and continuously improve their skills through their regular activities. The experts for specific application attended individual outsourced courses. Occasionally they attend workshops on mutual communications and relations with employees and motivation. Detail training program for trainers is defined in "Program usposabljanja predavateljev-trenerjev za leto (year)".

#### No Additional Questions

#### AUDIT QUESTIONNAIRE 2015

#### P8-C-S6

Training of trainers. Depending on education and previous experience, an individual training program is defined for each trainer; it can be provided by internal sessions or by outsourced training sessions.

Compliance Level: FCo

No 🖂



Concise explanation and list of evidence for declared compliance level:

Trainers are experts in specific fields and continuously improve their skills through their regular activities. The experts for specific application attended relevant (if existing) outsourced courses for their expertise and attending relevant workshops of soft skills. Detailed training program for trainers is defined in document "Training of trainers program".

Do you have a mitigation plan to the standard?	Yes 🗌	
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In case of an existing Addendum or a Non Compliance Declaration; list of evidence for a mitigation

List of evidence, comments:

plan, comments:

Evidence:

- "Program usposabljanja predavateljev-trenerjev za leti 2015 in 2016" (Training of trainers • program for 2015 and 2016)
- "Potrdili o opravljenem pedagoško-andragoškem usposabljanju mentorjev" (certificateS of pedagogical-andargogical training)
- Lista trenerjev odločba o imenovanju trenerjev •

#### **COMPLIANCE AUDIT 2015**

#### Compliance Level suggestion by the audit team: FCo

#### Explanation for the suggested compliance level:

ELES presented the training of trainers program ("Program usposabljanja predavateljev-trenerjev za leti 2015 in 2016", approved on 12.12.2014) and certificates from previous trainings e.g. "Potrdilo o opravljenem pedagoško-andragoškem usposabljanju mentorjev" for the training coordination manager.

The above evidence were explained to the audit team. They were a good basis for proving the compliance level of ELES with this standard.



# **5** CONCLUSIONS

The Audit Team audited 14 requirements/standards. The Audit Team found out that ELES is fully compliant with all audited standards.

During the onsite audit, the Audit Team had the opportunity of visiting the national control room and the training room, what helped the Audit Team to better understand the organisation and processes within the organisation of ELES. Presentation of installed DTS was an important part of this visit.

ELES estimates that their staff needed **150 human hours** for the preparation of the compliance audit.

ELES was well prepared for the audit. The documents considered as evidence were available during the audit. All these documents were a good basis for proving the compliance level of ELES with the audited standards. Requests for additional material were promptly met by ELES.

The general impression of the Audit Team is that ELES has an excellent and well-documented procedure and well-structured business information system for dispatchers training. Therefore, the audit team has no recommendation to ELES regarding the OH P8.

In the case of this Compliance Audit, all preconditions for a successful audit were fulfilled and the Audit Team wishes to express its gratitude to the ELES staff involved in the Audit and the company management.



# **6** SIGNATURE PAGE

## **ENTSO-E** Audit Team Members:

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/

Carlos Castel Conesa (Compliance monitoring Advisor)

Date and Place: 25.11.2015, Brussels, Belgium