



European Network of
Transmission System Operators
for Electricity

COMPLIANCE AUDIT REPORT HEP-OPERATOR PRIJENOSNOG SUSTAVA D.O.O.

16. – 17.11.2010

COMPLIANCE AUDIT CONDUCTED IN ZABREG BY THE
ENTSO-E RG CE SG COMPLIANCE MONITORING &
ENFORCEMENT
AT THE CONTROL CENTRE OF THE ENTSO-E MEMBER
TSO HEP-OPS

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1 EXECUTIVE SUMMARY

1.1 COMPLIANCE MONITORING IN ENTSO-E RGCE

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

- the yearly processes of self-assessment, which is applied to all TSOs, as well as
- the yearly 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 by random.

SG Compliance Monitoring & Enforcement (SG CME) is in charge of performing these processes.

The year 2010 is the first year of conducting mandatory Compliance Audits. Before this, in 2008 and 2009 Voluntary Compliance Audits have been performed at altogether 4 volunteering TSOs. Through this, the SG CME gained first experiences with this kind of process.

1.2 AUDITED TSO

The RGCE member TSO HEP-OPS was chosen for a Compliance Audit in 2010. SG CME conducted the audit on 16- 17th of November in 2010 at the control centre of HEP-OPS in Zagreb.

1.3 AUDITED OH STANDARDS

The Compliance Audit encompassed all 14 standards of Operation Handbook Policy 8 which is related to operational training of dispatchers. In 2009 HEP-OPS made 14 compliance declarations in the self-assessment process.

HEP-OPS declared full compliance with the following standards:

- P8-A-R1, P8-A-R4, P8-A-S2, P8-B-R1, P8-C-S1, P8-C-S3, P8-C-S4, P8-C-S5

HEP-OPS declared sufficient compliance with the following standards:

- P8-A-S1, P8-B-S1, P8-C-S2

HEP-OPS declared non compliance with the following standards:

- P8-A-R2, P8-A-R3, P8-C-S6,

1.4 HEP-OPS APPROACH TO THE AUDIT

The representatives of HEP-OPS were well prepared for the audit. All the necessary documentation was available and very well organised. The representatives of HEP-OPS clearly demonstrated that they are familiarized with the content of every single document. The Audit Team particularly wishes to stress the easiness and quickness with which all required evidences were presented and explained.

In the beginning of the audit the representatives of HEP-OPS presented the organisation of HEP-OPS, how the grid looks like and where it is interconnected, and the general policies of HEP-OPS related to the implementation of the OH standards, especially Policy 8, and to internal organizational aspects which are of importance for achieving and/or maintaining compliance.

The readiness of the HEP-OPS representatives to explain and discuss openly all subjects covering Policy 8 and beyond contributed to convince the Audit Team members that the compliance declarations of HEP-OPS are correct and based on sound reasoning.

1.5 RESULTS

The Audit Team found that the evidence presented by HEP-OPS during the audit is adequate and that HEP-OPS is fully compliant in case of 10 out of 14 investigated OH requirements and standards. In 3 cases HEP-OPS is sufficiently compliant.

For the standards P8-A-R2, P8-A-R3, P8-C-S6 the audit team proposed to increase the compliance levels declared by HEP-OPS in 2009 from non compliant to sufficiently compliant. For the standards P8-A-S1, P8-B-S1 the audit team proposed to increase the compliance levels declared by HEP-OPS in 2009 from sufficiently compliant to fully compliant.

HEP-OPS accepted this view and committed itself to realize the following improvement plans:

- P8-A-R2: "See mitigation plan which is now improvement plan "EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE". Deadline: end of 2013.
- P8-A-R3: "See mitigation plan which is now improvement plan "EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE". Deadline: end of 2013.
- P8-C-S2: HEP-OPS will create a formal document describing P8-C-S2 actions which is in accordance with all elements mentioned above. Deadline: end of 2011.
- P8-C-S6: HEP-OPS will elaborate individual training programs for each trainer. Deadline: end of 2011.

The Audit Team recommends (i.e. these measures are not decisive for determining the compliance levels):

- to better organise the documentation related to Policy 8
- HEP-OPS to host an Inter-TSO dispatcher workshop

2 AUDIT REPRESENTATIVES

2.1 CME AUDIT TEAM STRUCTURE

The Audit Team has the task to prepare and perform the Compliance Audit as well as to write the corresponding Audit Report. The Audit Team consists of the following members:

- Audit Team Leader – a member of the SG CME not belonging to the audited TSO and its neighbouring TSOs
- Up to two Control Area Managers (CAMs) or members of the SG Coordinated System Operation (CSO) excluding the CAM and representatives of the audited TSO as well as those of the neighbouring TSOs
- Two members of the SG CME not belonging to the audited TSO and its neighbouring TSOs
- One observer/supporter from the ENTSO-E Secretariat.

In this particular case the Compliance Audit was conducted without participation of a Control Area Manager or a member of the WG CSO.

2.2 CME AUDIT TEAM FOR HEP-OPS

Audit Team Role	Name	Role in the Compliance Audit Process	Company (TSO) or ENTSO-E
AT Leader	Alexander Mondovic	Member of the SG CME	Swissgrid
AT Member	Olivier Beck	Member of the SG CME	RTE
AT Member	Silvia Moroni	Member of the SG CME	Terna
AT Member	Lasse Kontinen	Compliance Monitoring Advisor	ENTSO-E Secretariat

A TSO subject to an audit may object any member of the Audit Team on grounds 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 prior to the team's arrival on-site. HEP-OPS didn't make any such objection.

2.3 HEP-OPS AUDIT STAFF

Name	Function at HEP-OPS
Tomislav Plavsic	Director of System Control Department (CAM)
Luka Spoljar	Head of Dispatcher Training and Licensing Department
Marinko Rogic	Deputy Director of System Control Department
Mario Seso	Head of System Operation and Training Service
Marin Plecko	Dispatcher and trainer
Danko Blazevic	Dispatcher and trainer

An initial letter and an audit schedule were sent to HEP-OPS on 30th June 2010. This letter included an audit questionnaire. HEP-OPS submitted the completed audit questionnaire on 4th of November in 2010. They did not require any explanations related to the audit questionnaire and other material received from the Audit Team.

A reminder and the first draft of the Compliance Audit Report containing the general layout of the report text and the methodology of the Compliance Audit were sent to HEP-OPS on 12th of November in 2010.

3 AUDIT PLAN

3.1 OBJECTIVES

In 2010 the objective of Compliance Audits is to check all 14 RGCE OH standards of Policy 8. These standards were also monitored in the 2009 regular process via the self-assessments.

Furthermore, at performing the Compliance Audit the Audit Team makes recommendations to the audited TSO so as to enhance the evidence or documentation on compliance with the audited OH standards.

3.2 SCOPE

The scope of a compliance audit encompasses:

- issues which are directly related to the compliance of the audited TSO with the audited RGCE OH standards
- 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 are the following:

- 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
- 2009 self-assessment questionnaires stored at the ENTSO-E Secretariat related to HEP-OPS concerning the audited OH standards
- Information and explanations which the Audit Team receives on site
- Implementation of the knowledge of the audited OH standards in the training of dispatchers and operators

General background

The Compliance Audit also encompasses issues of general nature listed below:

- Reference system of rules existing at the audited TSO: general policies of HEP-OPS, related set of rules and procedures for the control centre(s) of HEP-OPS
- Procedures to control the application of the audited OH standards and their follow-up
- Procedures to improve the compliance with the audited OH standards
- Existence of any TSO's internal report related to the implementation of the audited OH standards
- Existence of TSO's internal audits and/or documentation concerning implementation of OH standards
- Existence of TSO's internal bodies (forums, panels) for the implementation of the OH standards

3.3 METHODOLOGY

The SG CME prepared an audit schedule defining the chronological order of the compliance audit, which HEP-OPS accepted without comment.

The Audit Team reviewed the existing material on HEP-OPS and its neighbouring TSOs already collected through the self-assessment process in the 2009 self-assessment questionnaires. It also inspected the answers in the 2010 audit questionnaire filled in by HEP-OPS.

The methodology includes audit criteria and expectations based on best practices. The criteria are objective, measurable (if possible), complete and relevant to the objectives. At defining the audit

methodology the auditors identify the potential sources of audit evidence and estimate the amount and type of evidence needed.

The Audit Team used an Audit Worksheet (AW) (see chapter 4) for reviewing the audited OH standards. The purpose of the AW is to help to ensure consistency and fairness. By using the AW the Audit Team documented the material reviewed and the observations made.

In fact, 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 (or not) the self-assessed claims of the audited TSO. The audit team determine whether the evidence presented by the TSO is sufficient. They do this by assessing the relevance, validity and reliability of the information and documentation presented.

It is the responsibility of the audited TSO to provide evidence of compliance with all audited OH standards.

In most cases the evidence is in written form like documents, plans, programs or records. In some cases the evidence is a review of computerized records or additional supporting material provided at interviews with the staff of the audited TSO.

3.4 EVALUATION PRINCIPLES

The evaluation principles of the audit at HEP-OPS were the following:

Preparatory phase:

- Inspecting the exact wording of each audited OH standard and of additional questions formulated by the SG CME
- Identification of documents and other material the TSO has to present to the auditors in order to demonstrate its full compliance with each OH standard
- Identification of remaining discrepancies (inconsistencies) with neighbouring TSOs (by considering the answers of the latter in the 2009 self-assessment questionnaires concerning their relationship to HEP-OPS)
- Analysing the explanations/comments HEP-OPS made in the 2009 self-assessment and 2010 audit questionnaires by using a marking system (see below) in order to evaluate the quality of explanations/comments in general
- Determining to which needed documents and other material an explanation/comment is actually given (this equals to the identification of the missing explanations)
- Inventorying of the evidences i.e. of the reference documents HEP-OPS stated in the 2009 self-assessment and 2010 audit questionnaires by using a marking system (see below) in order to evaluate the quality of statements (not of evidences themselves, because the Audit Team will see them only during the audit)
- Analysing the quality of mitigation plans and improvement plans HEP-OPS stated in Addenda (if existing), and in 2009 self-assessment and 2010 audit questionnaire in case of non compliance and sufficient compliance

Audit phase:

- Demanding from HEP-OPS to give additional explanations, especially related to documents and other material which were not or not fully addressed by documents and other material mentioned in the 2009 self-assessment and 2010 audit questionnaire
 - the goal is to heighten the quality of explanations to the highest mark of the marking system (if possible i.e. if HEP-OPS is able to give adequate explanations)
- Demanding from HEP-OPS to present that evidence and, if necessary, additional evidence, in printed or electronic form
 - the goal is again to heighten the quality of evidence to the highest mark of the marking system (if possible i.e. if HEP-OPS is able to present relevant documents or other material)

- o this can be achieved by determining whether the presented material is relevant to the audited OH standard at all,
- o by remarking the titles of all presented documents, their relevant chapters and even relevant passages extracted from them as well as
- o by writing down explanations related to the presented material

The results of the preparatory and audit phase are given in chapter 4. In the following a description of the marking system is given:

Quality of explanation (it is always applied to the entirety of stipulations of an OH standard and to additional questions formulated by the SG CME):

Missing = TSO **doesn't give any explanation.**

e = TSO gives only a **short explanation** which is mostly **only (slightly) related to the stipulations of the OH standard**, but not also to the additional questions in the 2009 self-assessment questionnaire and 2010 audit questionnaire.

d = TSO gives a **broader explanation**, but which is mostly only **related to the stipulations of the OH standard**, but not also to the additional questions in the 2009 self-assessment questionnaire and 2010 audit questionnaire.

c = TSO gives a broader explanation which is enlarged to **some explicit details asked in the additional questions.**

b = TSO gives a broader explanation which is **enlarged to the most of the explicit details asked in the additional questions.**

a = TSO gives a broader explanation which is **enlarged to all explicit details asked in the additional questions.**

Quality of list of references (it is always applied to the entirety of stipulations of an OH standard and to additional questions formulated by the SG CME):

Missing = TSO **doesn't give any list of references or gives an elusive answer.**

e = TSO lists documents which are **only indirectly** related to the question.

d = TSO lists some documents for which **one can reasonably assume** that they are related to the question, **but an explanation is needed.**

c = TSO lists some documents which are **obviously** related to the question, **but the exact document titles are missing.**

b = TSO lists some documents which are **obviously** related to the question and **the document titles seem to be complete.**

a = TSO lists some documents which are **obviously** related to the question, **the document titles seem to be complete and an additional explanation is given.**

Compliance level, mitigation/improvement plan - the compliance level the TSO declared and the quality of corresponding mitigation plan or improvement plan to remove non-compliance or sufficient compliance, respectively, are also considered within the scope of the Compliance Audit:

Compliance level the audited TSO declared:

FC = fully compliant (this implies that neither a mitigation nor an improvement plan is needed)

SC = sufficiently compliant (this implies an improvement to reach full compliance plan is obligatory)

NC = non-compliant (a mitigation plan to remove non-compliance and reach full compliance is obligatory)

N/A = not applicable

Quality of mitigation/improvement plan:

Missing = TSO **doesn't specify a mitigation/improvement plan.**

b = TSO specifies a **mitigation/improvement plan.**

a = TSO specifies a **in depth mitigation/improvement plan.**

Deadline missing (additionally to marks "a" and "b", if applicable) = TSO specifies an **(in depth) mitigation/improvement plan, but without a deadline.**

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 confidentiality agreement in the future should HEP-OPS assert such a claim.

4 AUDIT RESULTS

4.1 P8-A-R1: TRAINING PROGRAM

PREPARATORY PHASE

OH standard	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.	
N°1: P8-A-R1	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation / improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°1: P8-A-R1	<p>Compliance Level: FC Explanation of the declared compliance level: Dispatchers of HEP-OPS are provided by a structured training program that includes initial and continuous parts, which are regularly checked and updated. The initial part is the main part of that program. Dispatchers are regularly informed about operational evolutions.</p> <p>Additional Questions Do you have a training program including both initial and continuous part? yes Do you adapt permanently the training program? yes Do you have criteria to check whether the training program is in accordance with the current operational challenges? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°1: P8-A-R1	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p> <p>List of Evidences of Mitigation Plan. Comments:</p> <p>.....</p> <p>1.1 DO YOU HAVE A TRAINING PROGRAM INCLUDING BOTH INITIAL AND CONTINUOUS PART?</p>

Yes No **List of Evidences. Comments:**

There are two separate documents: initial and continuous training program:

“Program početne obuke voditelja sustava” (Initial dispatchers training program)

“Program stalne obuke voditelja sustava” (Continuous dispatchers training program)

1.2 HOW OFTEN DO YOU CARRY OUT THE CONTINUOUS TRAINING PROGRAM?

Instances per year: 8-10 (included: common dispatcher meetings & inter TSO training)

List of Evidences. Comments:

Common dispatcher meetings (workshops) and Inter TSO training make the main part of the continuous training program.

“Program stalne obuke voditelja sustava” (Continuous training program)

“Plan obuke voditelja sustava za 2010. godinu” (Training plan)

Invitations / agendas of various courses & education

Invitations / agendas / minutes of common dispatcher meetings (workshops)

1.3 DO YOU ADAPT THE TRAINING PROGRAM ON A REGULAR BASIS AND IF YES HOW OFTEN?Yes No **List of Evidences. Comments:**

The training program is improved continuously and adapted after events with possible impact to processes as well as changes in processes and tools. New versions are created if necessary.

“Program stalne obuke voditelja sustava” (Continuous training program)

Agendas of common dispatcher meetings

Different updated materials in the control room

1.4 DO YOU HAVE CRITERIA TO CHECK WHETHER THE TRAINING PROGRAM IS IN ACCORDANCE WITH THE CURRENT OPERATIONAL CHALLENGES?Yes No **List of Evidences. Comments:**

Training programs are adapted if there is an important event in operations, or if there is a change in procedures or processes.

Agendas of common dispatcher meetings

Different updated materials in the control room

1.5 DO YOU DIVERSIFY THE TRAINING CONTENTS ON THE BASE OF THE DISPATCHER ASSIGNMENT (OFF-DEMAND BALANCE, NETWORK SECURITY, ETC.)?Yes No **List of Evidences. Comments:**

Some minor changes in training content are possible but it is practically the same for all dispatchers.

AUDIT PHASE

Question	Response
<p>1. P8-A-R1: Training program</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS training program is divided into initial “Program početne obuke voditelja sustava” and continuous “Program stalne obuke voditelja sustava” programs. These documents refer to various other documents which were presented to the audit team in electronic and printed form. “Program početne obuke voditelja sustava” was signed by Tomislav Plavsic in Zagreb on 1.12.2009. “Program stalne obuke voditelja sustava” was signed by Tomislav Plavsic in Zagreb on 1.12.2009. HEP-OPS also presented their previous training program from 1.10.2009 signed by Tomislav Plavsic and the initial training program for their newest dispatcher Tomislav Tendera signed by Luka Spoljar in Zagreb on 31.10.2008.</p> <p>Initial training of dispatcher candidate in HEP-OPS takes 12 months of which six months are theoretical training and six months are on the job training. Each dispatcher candidate has a mentor which is also head of the Dispatcher Evaluation Committee which includes also 2-3 members in addition to the mentor. Dispatcher candidates will visit all critical power plants and substations in HEP-OPS grid as part of their initial program. They also spend substantial amount of time in regional control centres.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p> <p>Remark:</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.2 P8-A-R2: INITIAL PROGRAM

PREPARATORY PHASE

OH standard	Initial program. The initial program consists of a theoretical part and on-the-job part complemented by simulator sessions.	
N°2: P8-A-R2	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	A
	Quality of the list of references:	A
	Compliance level, mitigation/ improvement plan:	NC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°2: P8-A-R2	<p>Compliance Level: NC</p> <p>Actions taken to reach compliance: Appointing a person responsible for training organization including training for the operation on DTS, which will be implemented as an important part of the new ICT project.</p> <p>Deadline: 12\2011</p> <p>Temporary measures to preserve the security of interconnected system Applying appropriate EMS functions to complement on-the-job part of initial program.</p> <p>Existing addendum for this Policy reference yes</p> <p>Explanation of the declared compliance level: The initial program consists of a theoretical part and on-the-job part, but it is not complemented by simulator sessions, since DTS is not installed yet.</p> <p>Additional Questions Does your initial program consist of both theoretical and on-the-job part? yes Does your initial program include simulator sessions as well? no How long does the initial program on-the-job part (education) last before the new candidate is certified to take the respective dispatcher position? (How many months) (3 / 6 months - as defined in A-G1) months: 6</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°2: P8-A-R2	<p>Do you have an Addendum to the rule: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>In case of Yes:</p> <p>List of Evidences of Mitigation Plan. Comments:</p> <p>DAM (an EMS based application for power flows calculation) is currently used.</p> <p>DTS will be implemented as an important part of the new ICT project (named "Funkcije vođenja EES-a") and it is expected in June of year 2011.</p> <p>"Izjava o radovima" (DTS part) – an important part of the project "Funkcije vođenja EES-a"</p> <hr/> <p>2.1 DOES YOUR INITIAL PROGRAM CONSIST OF BOTH THEORETICAL AND ON-THE-JOB PART? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

	<p>List of Evidences. Comments:</p> <p style="background-color: #e0e0e0; padding: 2px;">"Program početne obuke voditelja sustava" (Initial training program)</p> <p>2.2 DOES YOUR INITIAL PROGRAM INCLUDE SIMULATOR SESSIONS?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p style="background-color: #e0e0e0; padding: 2px;">Adendum exists</p> <p>2.3 HOW LONG DOES THE INITIAL PROGRAM ON-THE-JOB PART (EDUCATION) LAST BEFORE THE NEW CANDIDATE IS CERTIFIED TO TAKE THE RESPECTIVE DISPATCHER POSITION? (HOW MANY MONTHS?) (3 / 6 MONTHS - AS DEFINED IN A-G1)</p> <p>Time: 6 months</p> <p>List of Evidences. Comments:</p> <p style="background-color: #e0e0e0; padding: 2px;">"Program početne obuke voditelja sustava" (Initial training program)</p>
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AUDIT PHASE

Question	Response
<p>2. P8-A-R2: Initial program</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS presented "Program početne obuke voditelja sustava" (Initial Training Program) which was signed by Tomislav Plavsic in Zagreb on 1.12.2009." It contains theoretical and on the job parts, but not simulator sessions due to lack of DTS in HEP-OPS. They cannot simulate dynamics with their Energy Management System, but normal steady state analyses are performed.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: SC</p> <p>Remark:</p> <p>Improvement plan with deadline: Implementation of DTS as planned. See mitigation plan which is now improvement plan "EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE". Deadline: end of 2011</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.3 P8-A-R3: CONTINUOUS PROGRAM

PREPARATORY PHASE

OH standard	<p>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:</p> <ul style="list-style-type: none"> - advanced theoretical parts; - learning of new rules and procedures; - additional simulator sessions. 	
N°3: P8-A-R3	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	NC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°3: P8-A-R3	<p>Compliance Level: NC</p> <p>Actions taken to reach compliance: Appointing a person responsible for training organization including training for the operation on DTS, which will be implemented as an important part of the new ICT project.</p> <p>Deadline: 12\2011</p> <p>Temporary measures to preserve the security of interconnected system Applying appropriate EMS functions to complement the continuous program.</p> <p>Existing addendum for this Policy reference yes</p> <p>Explanation of the declared compliance level: The continuous program complements the initial program only with learning of new rules and procedures. Our continuous program is not complemented with advanced theoretical parts and additional simulator sessions, since DTS is not installed yet.</p> <p>Additional Questions Do you provide advanced theoretical parts? yes Do you provide teaching of new rules and procedures? yes How often do you provide simulator sessions? months: 0 Do you train dispatchers to work under new conditions affecting network operations (new network elements or power units)? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°3: P8-A-R3	<p>Do you have an Addendum to the rule: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>In case of Yes:</p> <p style="text-align: center;">List of Evidences of Mitigation Plan. Comments:</p> <div style="background-color: #f0f0f0; padding: 10px;"> <p>DAM (an EMS based application for power flows calculation) is currently used.</p> <p>DTS will be implemented as an important part of the new ICT project (named "Funkcije vođenja EES-a") and it is expected in June of year 2011.</p> <p>"Izjava o radovima" (DTS part) – an important part of the project "Funkcije vođenja EES-a"</p> </div>

3.1 DO YOU PROVIDE ADVANCED THEORETICAL PARTS? IN CASE YOU DO, PLEASE DESCRIBE SHORTLY ITS CONTENT.

Yes No

List of Evidences. Comments:

Theoretical based workshops.

“Program stalne obuke voditelja sustava” (Continuous training program)

3.2 DO YOU PROVIDE TEACHING OF NEW RULES AND PROCEDURES?

Yes No

List of Evidences. Comments:

“Program stalne obuke voditelja sustava” (Continuous training program)

3.3 HOW OFTEN DO YOU PROVIDE SIMULATOR SESSIONS?

Annually to each dispatcher: 0

List of Evidences. Comments:

Adendum exists.

3.4 DO YOU TRAIN THE RESTORATION AFTER A BLACKOUT?

Yes No

List of Evidences. Comments:

They are trained through some materials about the restoration after blackout (theoretic instructions, existing cases of blackouts and restorations, etc.)

+ Attendance of HEP-OPS participants (at least one of dispatchers) in the annual system restoration coordination meeting with APG, ELES, CEPS, SEPS, MAVIR, TERNA and HEP-OPS representatives.

“Defence and restoration plan of HEP-OPS”

“Pravila rada službe za vođenje sustava i obuku”

3.5 DO YOU CARRY OUT EXCEPTIONAL TRAINING SESSIONS WITHIN THE SCOPE OF THE CONTINUOUS TRAINING IN CASE OF NEW/CHANGED PROCEDURES?

Yes No

List of Evidences. Comments:

According to our continuous training program, exceptional training sessions should be held in case of new rules/procedures as well as in case of changes in rules/procedures.

3.6 DO YOU TRAIN YOUR DISPATCHERS ONE BY ONE OR AS A COMPLETE SHIFTING TEAM?

Single training Shifting team training

List of Evidences. Comments:

Normally the dispatchers are trained single, only the visits to substations, power plants, cross-visits and workshops are organized for a group of dispatchers at the same time.

During on-the-job part of the training dispatchers are trained one by one (i.e. only one dispatcher candidate can be in shift with experienced dispatchers).

3.7 DO YOU TRAIN DISPATCHERS TO WORK UNDER NEW CONDITIONS AFFECTING NETWORK OPERATIONS (NEW NETWORK ELEMENTS OR POWER UNITS)?

	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p>Dispatchers are informed in details about every new network element and about its impact on the network operation.</p> <p>Materials about new network elements, various analyses of the influence to the system, etc. (in the control room)</p>
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AUDIT PHASE

Question	Response
<p>3. P8-A-R3: Continuous program</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: "Program stalne obuke voditelja sustava" (Continuous Training Program) was signed by Tomislav Plavsic in Zagreb on 1.12.2009. It includes advanced theoretical parts, learning of new rules and procedures and additional simulator sessions. HEP-OPS has not yet conducted any additional simulator sessions due to lack of DTS. One dispatcher and head of dispatching have had DTS training with RTE DTS in Lyon in 2006 focusing on ad hoc network similar to that of Croatian, and HEP-OPS will have functional DTS by the end of 2011.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: SC</p> <p>Remark:</p> <p>Improvement plan with deadline: Implementation of DTS as planned. See mitigation plan which is now improvement plan "EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE". Deadline: end of 2011</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.4 P8-A-R4: ENGLISH TRAINING

PREPARATORY PHASE

OH standard	English training. Dispatchers in contact with neighbouring 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.	
N°4: P8-A-R4	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°4: P8-A-R4	<p>Compliance Level: FC Explanation of the declared compliance level: All dispatchers of HEP-OPS have sufficient knowledge of English and operational terms to carry out their tasks. They are able to exchange information in an international environment safely and smoothly. In HEP-OPS National Control Center the required minimum of English knowledge is the fourth basic level which is even more than sufficient for described tasks. Additional Questions Do you verify English speaking skills of your dispatchers? yes Does the learning of English technical terms relevant to system operation make a part of the dispatcher training? yes Does each shift team have at least one dispatcher who speaks English? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°4: P8-A-R4	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p> <p style="padding-left: 40px;">List of Evidences of Mitigation Plan. Comments:</p> <div style="background-color: #cccccc; height: 20px; width: 60%; margin-left: 40px;"></div> <p>-----</p> <p>4.1 DO YOU VERIFY ENGLISH SPEAKING SKILLS OF YOUR DISPATCHERS? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <div style="background-color: #cccccc; padding: 5px;"> <p>All dispatchers of HEP-OPS have sufficient knowledge of English and operational terms to carry out their tasks. They are capable to exchange information in an international environment safely and smoothly.</p> <p>English course certificates</p> <p>Lists of participants of English courses</p> </div>

4.2 DOES THE LEARNING OF ENGLISH TECHNICAL TERMS RELEVANT TO SYSTEM OPERATION MAKE A PART OF THE DISPATCHER TRAINING?
 Yes No
List of Evidences. Comments:
 Dictionary of relevant technical terms is a part of the training program. Every dispatcher has to be familiar with all listed terms.

4.3 DO YOU ALSO TRAIN DISPATCHERS TO ON PHONE CONVERSATION IN ENGLISH?
 Yes No
List of Evidences. Comments:
 Conversation in English, including the phone conversation, is a necessary part of English course.

4.4 DOES EACH SHIFT TEAM HAVE AT LEAST ONE DISPATCHER WHO SPEAKS ENGLISH?
 Yes No
List of Evidences. Comments:
 All dispatchers of HEP-OPS have sufficient knowledge of English and operational terms to carry out their tasks.

4.5 DO YOU MAINTAIN THE EXISTING SKILLS OF DISPATCHERS TO SPEAK LANGUAGES OF NEIGHBOURING COUNTRIES IN ADDITION TO ENGLISH? IN CASE YOU DO WHICH LANGUAGES ARE CONCERNED?
 Yes No
List of Evidences. Comments:
 Dispatchers of HEP-OPS usually communicate in English only with dispatchers of MAVIR (Hungary), because languages of other neighbouring countries are very similar to Croatian, since all those countries were part of former Yugoslavia, so dispatchers can communicate in their own language and understand each other very well.

AUDIT PHASE

Question	Response
<p>4. P8-A-R4: English training</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS provided a list of participation in dispatcher English training sessions and individual training levels of each dispatcher signed by Bernarda Pejic in Zagreb on 4.11.2010. "Program stalne obuke voditelja sustava" (Continuous Training Program) signed by Tomislav Plavsic in Zagreb on 1.12.2009 requires good knowledge of English from all dispatchers. Also business conversational English certificates for dispatchers were shown to the audit team.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Needs Improvement</p>

Question	Response
Remark: Improvement plan with deadline:	

P8-A-S1: TRAINING PROGRAMS

PREPARATORY PHASE

OH standard	<p>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.</p> <p>S1.1: Initial program: The initial program has to include at least the knowledge of components of the power system, the operation of the power system, the tools for operation and respective on-the-job-practice.</p> <p>S1.2: Continuous program. The continuous program has to focus on theoretical and practical aspects of operation as well as on respective boundary conditions. The inter-TSO training as defined in chapter B is part of the continuous training.</p>	
N°5: P8-A-S1	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	SC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°5: P8-A-S1	<p>Compliance Level: SC</p> <p>Actions taken to reach compliance: Specific requirements and its duration for the continuous program are still in the defining proces. Various theoretical and practical aspects of operation as well as on respective boundary conditions are being studied at the moment. Possible ways of inter-TSO training (cross visits) and its implementation with EMS and ISO-BiH are being discussed at the moment.</p> <p>Deadline: 1\2010</p> <p>Explanation of the declared compliance level: The initial and continuous program considers relevant parts of the UCTE Operation Handbook and mutual agreements between TSOs. Specific requirements and its duration are defined only for the initial program. Specific requirements and its duration for the continuous program are still in the defining proces. The initial program includes the knowledge of power system components, the operation of the power system, the tools for operation and respective on-the-job-practice applied in last six months of the training. The continuous program consists some theoretical and practical aspects of operation as well as on respective boundary conditions. The inter-TSO training as defined in chapter B is being applied only partially (only with ELES - Cross visits; and in a way with MAVIR - International dispatcher meeting in Hungary). There are various contacts and discussions with EMS and ISO-BiH about this issue, but this still doesn't take a place in agreements between HEP-OPS and those TSOs.</p> <p>Additional Questions Is the inter-TSO training part of your continuous training program? yes Does your training program cover agreements between TSOs? yes Does your training program consider the relevant parts of the UCTE OH? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°5: P8-A-S1	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p>

	<p style="text-align: center;">List of Evidences of Mitigation Plan. Comments:</p> <div style="background-color: #f0f0f0; height: 20px; width: 100%; margin-bottom: 10px;"></div> <hr style="border-top: 1px dashed #000;"/> <p>5.1 DOES YOUR TRAINING PROGRAM CONSIDER THE RELEVANT PARTS OF THE RG CE OH?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <div style="background-color: #f0f0f0; padding: 5px; margin-bottom: 10px;"> <p>Initial training program and Continuous training program in general take into consideration the requirements of the ENTSO-E RG CE OH.</p> <p style="margin-left: 40px;">“Program početne obuke voditelja sustava” (Initial training program)</p> <p style="margin-left: 40px;">“Program stalne obuke voditelja sustava” (Continuous training program)</p> </div> <p>5.2 DO YOUR DISPATCHERS HAVE TO ACCESS TO RG CE OH?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <div style="background-color: #f0f0f0; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">All dispatchers have the electronic version of RG CE OH and they have access to the ENTSO-E website (actual versions of all policies of RG CE OH can be easily downloaded).</p> </div> <p>5.3 IS THE INTER-TSO TRAINING PART OF YOUR CONTINUOUS TRAINING PROGRAM?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <div style="background-color: #f0f0f0; padding: 5px; margin-bottom: 10px;"> <p>The inter-TSO training as defined in chapter B is being applied with all neighbouring TSOs:</p> <ul style="list-style-type: none"> - cross visits with ELES and ISO-BiH - common training workshops with MAVIR, EMS and ELES <p>Invitations, agendas and lists of participants of cross visits and common training workshops (i.e. international dispatcher meetings).</p> </div> <p>5.4 DOES YOUR TRAINING PROGRAM COVER AGREEMENTS BETWEEN TSOs?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p>These agreements are included in regular dispatcher training (initial and continuous training) and they are also provided in the control room (printed and electronic versions).</p> <p style="margin-left: 40px;">“Program početne obuke voditelja sustava” (Initial training program)</p> <p style="margin-left: 40px;">“Program stalne obuke voditelja sustava” (Continuous training program)</p> <p style="margin-left: 20px;">Agreements between TSOs from the control room</p> </div>
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AUDIT PHASE

Question	Response
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Question	Response
<p>5. P8-A-S1: Training programs</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS training program is divided into initial “Program početne obuke voditelja sustava” and continuous “Program stalne obuke voditelja sustava” programs. These documents refer to many separate documents which were presented to the audit team in electronic and printed form. “Program početne obuke voditelja sustava” was signed by Tomislav Plavsic in Zagreb on 1.12.2009. “Program stalne obuke voditelja sustava” was signed by Tomislav Plavsic in Zagreb on 1.12.2009.</p> <p>Two above mentioned documents and their annexes plus some additional documents contain all actions required by P8-A-S1.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p> <p>Remark:</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.5 P8-A-S2: TSO REFERENCE LIST OF ENGLISH TECHNICAL TERMS

PREPARATORY PHASE

OH standard	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).	
N°6: P8-A-S2	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°6: P8-A-S2	<p>Compliance Level: FC Explanation of the declared compliance level: In HEP-OPS there is available a list of technical terms in English with a translation to Croatian for operation and for training that is based on the existing UCTE reference list (Appendix 8). Additional Questions Do you have and make available to dispatchers a list of English technical terms relevant to system operation, with translation into their native language? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°6: P8-A-S2	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes: List of Evidences of Mitigation Plan. Comments: <div style="background-color: #cccccc; height: 20px; width: 100%;"></div> -----</p> <p>6.1 DO YOU HAVE AND MAKE AVAILABLE TO DISPATCHERS A LIST OF ENGLISH TECHNICAL TERMS RELEVANT TO SYSTEM OPERATION, WITH TRANSLATION INTO THEIR NATIVE LANGUAGE?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <div style="background-color: #cccccc; padding: 5px;"> <p>In the control room there is available a list of technical terms in English with translation to Croatian (for operation and for training) which is based on the existing ENTSO-E RG CE OH reference list (Appendix 8) in an electronic and printed format. There is also available another list of technical terms in four languages (including English).</p> <p style="text-align: center;">The list of technical terms in English with translation to Croatian.</p> <p style="text-align: center;">Another list of technical terms in four languages (including English)</p> </div>

AUDIT PHASE

Question	Response
<p>6. P8-A-S2: TSO reference list of English technical terms</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS has a printed and an electronic version of “TSO reference list of English technical terms” based on Policy 8 Appendix in control centre for dispatchers. They have also supplemental document which has translation from Croatian into Hungarian, English and German.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p> <p>Remark:</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.6 P8-B-R1: EXPERIENCE EXCHANGE

PREPARATORY PHASE

OH standard	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.	
N°7: P8-B-R1	Mismatches with neighbouring TSOs:	None
	Quality of explanation:	a
	Quality of the list of references:	missing
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°7: P8-B-R1	<p>Compliance Level: FC</p> <p>Explanation of the declared compliance level: HEP-OPS exchanges the operational experience with all their neighbours in order to cope with normal and abnormal situations in a coordinated way, and dispatchers (occasionally) take a part in that exchange, if needed.</p> <p>Additional Questions Do you organize the exchange of the operational experience with your neighbors?</p> <p>ISO BiH yes</p> <p>ELES yes</p> <p>JP EMS yes</p> <p>MAVIR ZRt yes</p> <p>Do your dispatchers take part in that exchange? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°7: P8-B-R1	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p> <p>List of Evidences of Mitigation Plan. Comments:</p> <p>-----</p> <p>7.1 DO YOU ORGANIZE THE EXCHANGE OF THE OPERATIONAL EXPERIENCE WITH YOUR NEIGHBOURS? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p>HEP-OPS exchanges the operational experience with all their neighbours in order to cope with normal and other situations in a coordinated way. There are cross visits between dispatchers with ELES and ISO-BiH, international dispatcher meetings with MAVIR and EMS. Beside that, there is an annual system restoration coordination meeting with APG, ELES, CEPS, SEPS, MAVIR, TERNA and HEP-OPS representatives. There is also weekly teleconference with APG, ELES, CEPS, SEPS, MAVIR and others which is prepared by the planning service. Furthermore, HEP-OPS intends to participate in the TSO Security Cooperation (TSC).</p>

	<p>7.2 Do YOUR DISPATCHERS TAKE PART IN THAT EXCHANGE?</p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p>Besides their implied attendance in the cross visits and international dispatcher meetings, at least one of dispatcher takes a part in the annual system restoration coordination meeting.</p> <p>In general, dispatchers occasionally take a part in other operational meetings, if needed.</p>
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AUDIT PHASE

Question	Response
<p>7. P8-B-R1: Experience exchange</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS provided agendas, invitations, list of participants and presentations on experience exchange with their neighbouring TSOs.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: b</p> <p>Compliance level: FC</p> <p>Remark: Not all lists of participants were available from Inter-TSO workshops. Information received confirmed HEP-OPS explanations. HEP-OPS should keep more detailed record on experience exchange. Audit team recommends HEP-OPS to host an Inter-TSO dispatcher workshop.</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.7 P8-B-S1: COMMON TRAINING

PREPARATORY PHASE

OH standard	<p>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.</p> <p>G3. Inter-TSO common training.</p> <ul style="list-style-type: none"> - G3.1. Cross visits between neighbouring TSOs dispatchers - G3.2. Common training workshops - G3.3. On-shift cross period - G3.4. Common DTS training sessions 	
N°8: P8-B-S1	Mismatches with neighbouring TSOs:	None
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	SC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°8: P8-B-S1	<p>Compliance Level: SC</p> <p>Actions taken to reach compliance: Cross visits between neighbouring dispatchers and its implementation are being discussed with EMS and ISO-BiH at the moment. Implementation of common training procedures to improve communication and coordinated measures between neighbouring TSOs dispatchers.</p> <p>Deadline: 1\2010</p> <p>Explanation of the declared compliance level: The actions (inter-TSO common training) defined in P8-B-G3 are not applied with ISO-BiH and EMS at the moment, but there are various contacts and discussions with EMS and ISO-BiH about that issue. Cross visits of dispatchers are fully applied with ELES. HEP-OPS dispatchers participate in the regular annual International dispatcher meeting in MAVIR, which can be defined as the action P8-B-G3.2 (Common training workshop), although it is not fully in accordance with the definition in P8-B-G3.2. HEP-OPS and EMS also implement the action defined in P8-B-G3.2 (Common training workshops), since dispatchers of HEP-OPS and EMS are in position to exchange their operational experience in the regular International dispatcher meetings in Hungary and also in the International dispatcher meeting organized by Transelectrica in Romania (last year). In general, not all dispatchers of HEP-OPS have taken part in the exchange of experience and/or Inter TSO training, but slightly more than one half of them has. Border by border: ELES : one half of all our dispatchers have participated in the cross visits in ELES (so far). MAVIR: the long tradition of the regular annual International dispatcher meetings in Hungary. About 75 percent of our dispatchers have already taken part in those meetings. EMS: our dispatchers are in position to exchange operational experience with dispatchers of EMS in the regular International</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°8: P8-B-S1	

Do you have an Addendum to the rule: Yes No

In case of Yes:

List of Evidences of Mitigation Plan. Comments:

8.1 WHICH ACTIONS DEFINED IN GUIDELINES P8-B-G3 DO YOU IMPLEMENT? (PLEASE ANSWER THIS QUESTION BORDER BY BORDER)

Neighbour	P8-B-G3.1.	P8-B-G3.2.	P8-B-G3.3.	P8-B-G3.4.
ELES	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
ISO-BiH	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
MAVIR	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
EMS	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

List of Evidences. Comments:

The common training is being applied with all neighbouring TSOs:

- cross visits (P8-B-G3.1.) with ELES and ISO-BiH
- common training workshops (P8-B-G3.2.) with MAVIR and EMS (international dispatcher meetings)
- P8-B-G3.2 is also applied with ELES since dispatchers of HEP-OPS and ELES are in position to exchange their operational experience in the regular International dispatcher meetings in Hungary and also in Romania (organized by Transelectrica)

Invitations, agendas and lists of participants of cross visits and common training workshops (i.e. international dispatcher meetings)

8.2 DO YOU CARRY OUT COMMON TRAINING ONLY SPORADICALLY OR ON A REGULAR BASIS? How OFTEN IF REGULAR?

Yes No

List of Evidences. Comments:

The common training is carried out with each neighbour at least once a year:

- common training workshops (once a year in respective neighbouring TSOs - on a regular basis)
- cross visits (but in average more than once a year with respective neighbouring TSOs - sporadically)

AUDIT PHASE

Question	Response
<p>8. P8-B-S1: Common training</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS provided agendas, invitations, list of participants and presentations on experience exchange with their neighbouring TSOs. Cross-visit with ISO-BiH is scheduled for December 2010 and January 2011.</p> <p>New mark for quality of explanation: a</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

Question	Response
<p>New mark for list of references: b</p> <p>Compliance level: FC</p> <p>Remark: Not all lists of participants were available from Inter-TSO workshops. Information received confirmed HEP-OPS explanations. HEP-OPS should keep more detailed record on experience exchange. Audit team recommends HEP-OPS to host an Inter-TSO dispatcher workshop.</p> <p>Improvement plan with deadline:</p>	

4.8 P8-C-S1: COORDINATION OF THE TRAINING

PREPARATORY PHASE

OH standard	Coordination of the training. TSO appoints a training coordination manager responsible for training organization: designing, following-up and updating the full training process.	
N°9: P8-C-S1	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°9: P8-C-S1	<p>Compliance Level: FC Explanation of the declared compliance level: HEP-OPS has appointed a person considered as a training coordination manager (his working position/function in HEP-OPS is: the head of the dispatcher training division), since he is responsible for training organization: designing, following-up and updating the full training process.</p> <p>Additional Questions Have you appointed a training coordination manager? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°9: P8-C-S1	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes: List of Evidences of Mitigation Plan. Comments: [Redacted]</p> <hr/> <p>9.1 HAVE YOU APPOINTED A TRAINING COORDINATION MANAGER? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments: HEP-OPS has appointed a training coordination manager (his organization position in HEP-OPS is: head of Dispatcher training and licensing department) and he is responsible for training organization: designing, following-up, updating and carrying out the whole training process. Job specifications</p> <p>9.2 DO YOU HAVE A PERMANENT BODY TO FOLLOW-UP THE TRAINING PROCESS? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments: Dispatcher training and licensing department is responsible for following up the training process. O Training programs are checked and updated if needed (in case of significant changes in operational or</p>

	regulative aspect).
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AUDIT PHASE

Question	Response
<p>9. P8-C-S1: Coordination of the training</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: Luka Spoljar works as Training Coordination Manager due to his position as Head of Dispatcher Training and Licensing department in HEP-OPS. His nomination to the position "Suglasnost za premjestaj radnika" was signed by Sladana Gugo in Zagreb on 21.7.2008.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p> <p>Remark: Creation of a formal document appointing Head of Dispatcher Training and Licensing department as Trainer Coordination Manager.</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.9 P8-C-S2: ORGANIZATION

PREPARATORY PHASE

OH standard	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.	
N°10: P8-C-S2	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	SC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°10: P8-C-S2	<p>Compliance Level: SC</p> <p>Actions taken to reach compliance: Permanent education of the person considered as the training coordination manager and his previous knowledge and experience. Soon it will be created a new training organization which will include the training program defined for trainers.</p> <p>Deadline: 1\2010</p> <p>Explanation of the declared compliance level: The training coordination manager determines appropriate procedures for the training organization. In our case these procedures have covered currently: a description of the dispatchers required qualifications (knowledge and skills) and the processes for the initial and continuous programs; of the theoretical sessions, time-schedules, supervision, tools, support for trainees, evaluation/validation and continuous improvement of the programs. In HEP-TSO the process of dispatchers accreditation is also being applied. However, trainers selection and training program defined for trainers are not applied yet.</p> <p>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 no 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 trainers selection and training of trainers no</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°10: P8-C-S1	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p>

List of Evidences of Mitigation Plan. Comments:

10.1 Do YOUR PROCEDURES FOR TRAINING INCLUDE A DESCRIPTION OF THE DISPATCHERS REQUIRED QUALIFICATIONS?

Yes No

List of Evidences. Comments:

This is not included in the training program.

This is partly included in dispatcher job specification ("samostalni inženjer 5")

10.2 Do YOUR PROCEDURES FOR TRAINING INCLUDE A REFERENCE LIST OF TOPICS FOR TRAINING PROGRAMS LINKED TO THE DISPATCHERS REQUIRED QUALIFICATION?

Yes No

List of Evidences. Comments:

There is no reference list of topics for training programs linked to the dispatchers required qualification so far, but the training program includes list of topics which have be included in training.

10.3 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 ON TRAINEES, EVALUATION/VALIDATION AND CONTINUOUS IMPROVEMENT OF THE PROGRAMS?

Yes No

List of Evidences. Comments:

"Program početne obuke voditelja sustava" (Initial training program)

"Program stalne obuke voditelja sustava" (Continuous training program)

10.4 Do YOUR PROCEDURES FOR TRAINING INCLUDE THE PROCESS OF DISPATCHERS' ACCREDITATION?

Yes No

List of Evidences. Comments:

After a candidate for dispatcher passes the final exam (evaluation) in which his knowledge and capabilities to perform a dispatcher job are tested, he signs the declaration of passing the final exam and that he is capable and ready to perform the dispatcher job. Since this declaration authorizes him to perform his job in the control room, it is considered as the "First accreditation" in P8-C-S4. This declaration is also signed by his mentor (the main trainer, usually the training coordination manager) and by other members of his training committee (usually experienced dispatchers).

"Program početne obuke voditelja sustava" (Initial training program)

10.5 Do YOUR PROCEDURES FOR TRAINING INCLUDE TRAINERS' SELECTION AND TRAINING OF TRAINERS?

Yes No

List of Evidences. Comments:

Trainers are usually selected between the experienced dispatchers. The head of Dispatcher Training and Licensing Department (Training coordination manager) is usually the main trainer of a dispatcher candidate, and the head of System Operation and Training Service can also be a trainer.

	<p>Trainers are trained internally (in the company - by the experts for the specific areas that are significant for a dispatcher job) or externally (by the external bodies: Faculty of Electrical Engineering and Computing in Zagreb and energy institutes)</p> <p>“Program stalne obuke voditelja sustava” (Continuous training program)</p>
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AUDIT PHASE

Question	Response
<p>10. P8-C-S2: Organization</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS does not have “description of the dispatchers required qualifications”. They consider their initial program as description of the required qualifications. HEP-OPS has also training diaries for each dispatcher candidate where all requirements are fulfilled.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: b</p> <p>Compliance level: SC</p> <p>Remark:</p> <p>Improvement plan with deadline: HEP-OPS will create a formal document describing P8-C-S2 actions which is in accordance with all elements mentioned above. Deadline: end of 2011.</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.10 P8-C-S3: EVALUATION

PREPARATORY PHASE

OH standard	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.	
N°11: P8-C-S3	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°11: P8-C-S3	<p>Compliance Level: FC Explanation of the declared compliance level: In HEP-OPS for a dispatcher candidate in the end of his training (on-job-practice) there is the final (internal) exam (final evaluation), in which his knowledge and capabilities to perform a dispatcher job are tested, performed by his mentor (manager) and three experienced dispatchers (his training team). Additional Questions Do you complete the initial program with a test of the knowledge of dispatches candidates? yes Does the trainer issue a document containing the results of the evaluation to the manager of the candidate? Yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°11: P8-C-S3	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes: List of Evidences of Mitigation Plan. Comments: [Redacted]</p> <hr/> <p>11.1 Do YOU COMPLETE THE INITIAL PROGRAM WITH A TEST OF THE KNOWLEDGE OF DISPATCHER CANDIDATES? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments: During the training of the dispatcher candidate, his mentor (the main trainer) and the other members of his training committee meet each other to inform about the status of the education of the dispatcher candidate. The last meeting is approximately two weeks before the final exam of the dispatcher candidate. In this meeting also the date for the final exam is fixed. After a candidate for dispatcher passes the final exam (evaluation) in which his knowledge and capabilities to perform a dispatcher job are tested, and if he successfully pass the exam, he signs the declaration of passing the final exam and that he is capable and ready to perform the dispatcher job. The exam is oral and it is performed by his mentor (the main trainer, usually training coordination manager) and by other members of his training committee (experienced dispatchers usually).</p>

“Program početne obuke voditelja sustava” (Initial training program)

11.2 DOES THE TRAINER ISSUE A DOCUMENT CONTAINING THE RESULTS OF THE EVALUATION TO THE MANAGER OF THE CANDIDATE?

Yes No

List of Evidences. Comments:

The manager of the dispatcher candidate is his mentor/manager (main trainer) and it is in most cases our training coordination manager so he is member of the training committee of a dispatcher candidate so he participates also in the final exam. Due to a fact that the final exam is performed by the his mentor (main trainer, usually the training coordination manager himself) and by other members of his training committee (experienced dispatchers mostly), and also the mentor/manager (main trainer) of a dispatcher candidate participates in all steps of the evaluation, a special document for him containing the results of the evaluation is unnecessary.

11.3 DO YOU HAVE OTHER TRAINERS THAN THE TRAINING COORDINATION MANAGER?

Yes No

List of Evidences. Comments:

The training coordination manager is in most cases the main trainer (mentor) of the dispatcher candidate. There are also other trainers, selected between the experienced dispatchers.

“Odluka o imenovanju osoba zaduženih za obuku voditelja sustava” (Act of appointing persons responsible for dispatcher training)

11.4 IS TRAINING OF THE DISPATCHERS A FULL TIME JOB FOR TRAINER?

Yes No

List of Evidences. Comments:

Only the training coordination manager (the main trainer) job description shows that his main duty is organization of the dispatcher training and licensing process. Other trainers are experienced dispatchers so the training is not their full time job.

“Odluka o imenovanju osoba zaduženih za obuku voditelja sustava” (Act of appointing persons responsible for dispatcher training)

11.5 DO THE TRAINER CARRY OUT THE EVALUATION OF THE DISPATCHERS?

Yes No

List of Evidences. Comments:

During the training of the dispatcher candidate, his mentor (the main trainer) and the other members of his training committee meet each other to inform about the status of the education of the dispatcher candidate. At least once they perform an inter exam to check the status of the education of the dispatcher candidate. In the last meeting of the training committee of the candidate (approximately three weeks before the final exam of the dispatcher candidate) the date for the final exam is fixed.

“Program početne obuke voditelja sustava” (Initial training program)

11.6 IS THERE ANY EXTERNAL BODY THAT DOES THE EVALUATION OF THE DISPATCHERS?

Yes No

List of Evidences. Comments:

	<p>This final exam is internal (inside the company) so there is no external body that does the evaluation.</p> <p>In the future dispatchers will also have to be examined from the external body - Ministry of economy (energetic department) - according to "Pravilnik o stručnom osposobljavanju i provjeri znanja za upravljanje i rukovanje energetske postrojenjima" (State training program for managing power objects - for operational staff) – its implementation will start in the year of 2011</p>
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AUDIT PHASE

Question	Response
<p>11. P8-C-S3: Evaluation</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: "Program početne obuke voditelja sustava" (Initial Training Program) signed by Tomislav Plavsic in Zagreb on 1.12.2009" covers all required actions by P8-C-S3. HEP-OPS also provided accreditation documents of new dispatchers from 2006, 2007 and 2009.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p> <p>Remark:</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.11 P8-C-S4: FIRST ACCREDITATION

PREPARATORY PHASE

OH standard	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.	
N°12: P8-C-S4	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	A
	Quality of the list of references:	A
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°12: P8-C-S4	<p>Compliance Level: FC</p> <p>Explanation of the declared compliance level: After a candidate for dispatcher passes final internal exam (evaluation) in which his knowledge and capabilities to perform a dispatcher job are tested, he signs the declaration of passing the final exam and that he is capable and ready to perform the dispatcher job. Since this declaration authorizes him to perform his job in the control room, it is considered as the "First accreditation" in P8-C-S4. This declaration is also signed by his mentor (manager) and by his training team (those three experienced dispatchers).</p> <p>Additional Questions Do you deliver a first accreditation to your dispatcher? yes Do you have criteria for accreditation of dispatcher candidate? yes</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°12: P8-C-S4	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p> <p style="text-align: center;">List of Evidences of Mitigation Plan. Comments:</p> <p style="text-align: center;">[REDACTED]</p> <hr style="border-top: 1px dashed black;"/> <p>12.1 DO YOU DELIVER A FIRST ACCREDITATION TO YOUR DISPATCHER? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p style="text-align: center;">After the dispatcher candidate passes the final exam (evaluation) in which his knowledge and capabilities to perform a dispatcher job are tested, he signs the declaration of passing the final exam and that he is capable and ready to perform the dispatcher job. Since this declaration authorizes him to perform his job in the control room, it is considered as the "First accreditation" in P8-C-S4. This declaration is also signed by his mentor (main trainer, usually the training coordination manager) and by other members of his training committee (experienced dispatchers mostly).</p> <p style="text-align: center;">"Zapisnik o završnoj provjeri znanja i sposobnosti kandidata za samostalno obavljanje poslova voditelja</p>

sustava" (Minutes of the final examination of the knowledge of a dispatchers candidate and his capability of managing the system autonomously)

12.2 DO YOU HAVE CRITERIA FOR ACCREDITATION OF DISPATCHER CANDIDATE?
 Yes No

List of Evidences. Comments:

Accreditation of dispatcher candidate is the evidence that the dispatcher candidate is familiar with the operational processes, procedures and rules and that he is totally capable of handling of the control system and relevant tools.

Basis for the final exam are questions from all topics related to the dispatcher's tasks and responsibilities. In the exam the dispatcher candidate has to answer the questions and has to give extensive explanations, statements and comments to the questions.

A positive and unanimous verdict of all members of the training committee is crucial for the accreditation of the dispatcher candidate.

"Zapisnik o završnoj provjeri znanja i sposobnosti kandidata za samostalno obavljanje poslova voditelja sustava" (Minutes of the final examination of the knowledge of a dispatchers candidate and his capability of managing the system autonomously)

12.3 HOW LONG DOES THE ACCREDITATION LAST?
 Time: **no limit**

List of Evidences. Comments:

Due to the employment contracts normally the accreditation is unlimited. But in case of culpable negligence there is a possibility to recall the accreditation temporary or permanent.

"Zapisnik o završnoj provjeri znanja i sposobnosti kandidata za samostalno obavljanje poslova voditelja sustava" (Minutes of the final examination of the knowledge of a dispatchers candidate and his capability of managing the system autonomously)

12.4 DO YOU HAVE DIFFERENT LEVELS OF ACCREDITATION?
 Yes No

List of Evidences. Comments:

AUDIT PHASE

Question	Response
<p>12. P8-C-S4: First accreditation</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: HEP-OPS provided accreditation documents of new dispatchers from 2006, 2007 and 2009.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

Question	Response
Remark: Improvement plan with deadline:	

4.12 P8-C-S5: TRAINERS' SELECTION

PREPARATORY PHASE

OH standard	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.	
N°13: P8-C-S5	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	FC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°13: P8-C-S5	<p>Compliance Level: FC</p> <p>Explanation of the declared compliance level: Required profile of trainers has been determined, but trainers are not selected internally yet. They will be selected between experienced dispatchers. Currently in HEP-OPS the person responsible for education process of a candidate (i.e. his mentor) performs the function of his trainer. Faculty of Electrical Engineering and Computing in Zagreb is one of the possible external bodies for carrying out the training programs.</p> <p>Additional Questions Do you have determined profile of trainers? yes Do you appoint external bodies for carrying out the training programs? partially</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°13: P8-C-S5	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes: List of Evidences of Mitigation Plan. Comments: [Redacted]</p> <hr/> <p>11.7 HAVE YOU DETERMINED THE PROFILE TRAINERS SHOULD HAVE? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> List of Evidences. Comments: The trainers are selected between experienced dispatchers. The trainer should have a lot of operational experiences and has to participate in the continuous training. "Odluka o imenovanju osoba zaduženih za obuku voditelja sustava" (Act of appointing persons responsible for dispatcher training)</p> <p>11.8 DO YOU APPOINT EXTERNAL BODIES FOR CARRYING OUT THE TRAINING PROGRAMS? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> List of Evidences. Comments:</p>

	<p>English training is carried out by the external body.</p> <p>Faculty of Electrical Engineering and Computing in Zagreb and energy institutes are external bodies for carrying out some parts of the training programs (some special courses for dispatchers).</p> <p>“Program stalne obuke voditelja sustava” (Continuous training program)</p> <p>“Plan obuke voditelja sustava za 2010. godinu” (Training plan)</p> <p>Agendas & invitations to special courses for dispatchers</p>
	<p>11.9 DO YOU SELECT TRAINERS WITH DISPATCHING EXPERIENCE?</p> <p>Time: at least five years dispatching experience</p> <p>List of Evidences. Comments:</p> <p>“Odluka o imenovanju osoba zaduženih za obuku voditelja sustava” (Act of appointing persons responsible for dispatcher training)</p>

AUDIT PHASE

Question	Response
<p>13. P8-C-S5: Trainers' selection</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding:” Odluka o imenovanju osoba zaduženih za obuku voditelja sustava” signed by Tomislav Plavsic in Zagreb on 1.12.2009 appoints all dispatcher trainers and describes their profiles in HEP-OPS.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: a</p> <p>Compliance level: FC</p> <p>Remark:</p> <p>Improvement plan with deadline:</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

4.13 P8-C-S6: TRAINING OF TRAINERS

PREPARATORY PHASE

OH standard	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.	
N°14: P8-C-S6	Mismatches with neighbouring TSOs:	N/A
	Quality of explanation:	a
	Quality of the list of references:	a
	Compliance level, mitigation/ improvement plan:	NC

OH standard	EXPLANATION GIVEN IN THE 2009 SELF-ASSESSMENT QUESTIONNAIRE
N°14: P8-C-S6	<p>Compliance Level: NC</p> <p>Actions taken to reach compliance: HEP-OPS complies with the requisite to analyse its needs for training of trainers, but it is not evidenced by a formal document (so far). A new training organization of HEP-OPS will include the training program defined for trainers (including such formal document). Deadline: 1\2010</p> <p>Temporary measures to preserve the security of interconnected system Permanent education of the person considered as the training coordination manager and his previous knowledge and experience.</p> <p>Existing addendum for this Policy reference no</p> <p>Explanation of the declared compliance level: Training program defined for trainers is not applied yet. HEP-OPS complies with the requisite to analyse its needs for training of trainers, but it is not evidenced by a formal document (so far). A new training organization of HEP-OPS will include the training program defined for trainers (including such formal document).</p> <p>Additional Questions Do you have individual training program for trainers? no Do you have pedagogical program for trainers? no</p>

OH standard	EXPLANATION GIVEN IN THE 2010 AUDIT QUESTIONNAIRE
N°14: P8-C-S6	<p>Do you have an Addendum to the rule: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>In case of Yes:</p> <p>List of Evidences of Mitigation Plan. Comments:</p> <p>-----</p> <p>11.10 Do you have individual training program for trainers? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p>In system Control department special attention is paid to the training of trainers.</p>

	<p>Trainers are trained:</p> <ul style="list-style-type: none"> internally (in the company) – during the continuous training sessions and also by the experts in specific areas that are significant for a dispatcher job externally – by the external bodies (by the university: Faculty of Electrical Engineering and Computing in Zagreb and by energy institutes) <p>“Program stalne obuke voditelja sustava” (Continuous training program)</p> <p>11.11 Do YOU HAVE PEDAGOGICAL PROGRAM FOR TRAINERS? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>List of Evidences. Comments:</p> <p>Possible, but not used so far.</p>
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AUDIT PHASE

Question	Response
<p>14. P8-C-S6: Training of trainers</p> <p>Does the TSO have evidences to confirm self-assessment?</p> <p>Finding: “Program stalne obuke voditelja sustava” (Continuous Training Program) was signed by Tomislav Plavsic in Zagreb on 1.12.2009 describes training of the trainers on general level.</p> <p>New mark for quality of explanation: a</p> <p>New mark for list of references: b</p> <p>Compliance level: SC</p> <p>Remark:</p> <p>Improvement plan with deadline: HEP-OPS will elaborate individual training programs for each trainer. Deadline: end of 2011.</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Needs Improvement</p>

5 CONCLUSIONS

The Compliance Audit conducted at HEP-OPS clearly demonstrated that the on-site checking of the TSO's compliance with the OH standards is one of the best methods for receiving clear and precise information of the audited TSO and to revise its list of evidences.

The Audit Team has a much better opportunity to outline its main intentions at asking questions than within the scope of the self-assessment process. If the audited TSO actively participate in the audit (as HEP-OPS did), the Audit Team always receives high quality explanations. This is also true for the list of evidences, because its quality is not measured by its completeness and the number of details it contains, but by the readiness of the audited TSO to show the evidence, to discuss its content or to simply admit that there is no evidence.

On the other hand, the content of explanations and evidences has, of course, an impact on the compliance level the Audit Team will assign to the audited TSO in relation to its compliance with a specific OH standard.

The Compliance Audit requires a very good preparation of both the Audit Team and the representatives of the audited TSO. The audit itself absorbs a lot of time, patience and full concentration of the participants. Two days audits seem acceptable from the practical point of view, but duration of the audit depends mostly of how OH standards may have to be evaluated and discussed. In case of OH Policy 8 an extended on-site stay wouldn't produce better results; all OH standards were checked in depth in very efficient cooperation with staff of audited TSO.

In case of the HEP-OPS Compliance Audit, all preconditions for an excellent and successful audit were fulfilled, and the Audit Team wishes to express its gratitude for that to the HEP-OPS company management.

6 SIGNATURE PAGE

ENTSO-E Audit Team Members:

Alexander Mondovic

Alexander Mondovic (Audit Team Leader)

Olivier Beck

Olivier Beck (Audit Team Member)

Silvia Moroni

Silvia Moroni (Audit Team Member)

Lasse Kontinen

Lasse Kontinen (Compliance Monitoring Advisor)

Date and Place: 31.1.2011, Brussels, Belgium