

**ACER Decision on RCC Post-Operation and Post-Disturbances
Analysis and Reporting Methodology: Annex I**

**Regional Coordination Centre Post-Operation and
Post-Disturbances Analysis and Reporting
Methodology**

in accordance with Article 37 (1) (i) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity

Table of Contents

Whereas	3
Title 1 Subject matter, scope and definitions	5
Article 1.....	5
Subject matter and scope.....	5
Article 2.....	5
Definitions and interpretation	5
Title 2 RCC members and incident reporting.....	6
Article 3.....	6
RCC member.....	6
Article 4.....	6
Incident reporting and the RCC Investigation Threshold validation	6
Title 3 Relevant incidents and data collection	7
Article 5.....	7
Incidents that classify for the RCC Investigation Threshold	7
Article 6.....	7
Data Collection	7
Title 4.....	8
RCC investigation, results and reporting	8
Article 7.....	8
Investigation handling.....	8
Article 8.....	8
Results of the RCC investigation and reporting.....	8
Article 9.....	9
RCC recommendations	9
Title 5 Implementation and language.....	9
Article 10.....	9
Implementation of the Methodology.....	9
Article 11.....	9
Language.....	9

Whereas

1. Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (hereafter referred to as “Regulation (EU) 2019/943”)¹ was developed and adopted as part of the European Union’s Clean Energy Package for All Europeans.
2. Article 35 of Regulation (EU) 2019/943 provides for the establishment of regional coordination centres (RCCs) while Article 37 lists the RCCs’ tasks. Article 37(1)(i) mandates the RCCs to carry out post-operation and post-disturbances analysis and reporting while Annex I of Regulation (EU) 2019/943 provides further details.
3. This document sets out the methodology for Regional Coordination Centre Post-Operation and Post-Disturbances Analysis and Reporting (hereafter referred to as the “methodology”), developed by the European Network of Transmission System Operators for Electricity (ENTSO-E), in accordance with Regulation (EU) 2019/943 and in particular, Article 37(1)(i) and Article 37(5) on the obligation of the RCCs to carry out post-operation and post-disturbances analysis and reporting. This methodology provides definitions, describes the RCC investigation, defines the RCC investigation threshold, explains the data collection process, prescribes the work of the Expert Panel and guides the RCCs in the process of preparation of the post-disturbances report.
4. ENTSO-E’s methodology on the “Incident Classification Scale (ICS)” approved by ENTSO-E System Operations Committee on 04 December 2019² was used to support the development of this methodology.
5. This methodology was subject to public consultation and ACER approval according to Article 27 of Regulation (EU) 2019/943.
6. According to Article 42(3) of Regulation (EU) 2019/943, the RCCs shall issue recommendations to the transmission system operators (TSOs) in relation to the tasks listed in points (c) to (p) of Article 37(1) or assigned in accordance with Article 37(2). In accordance with the same article, where a TSO decides to deviate from a recommendation issued by RCCs, it shall submit a justification for its decision to RCCs and to the other TSOs of the system operation region without undue delay.
7. Synchronous areas do not stop at the Union's borders and can include the territory of third countries. The Union, Member States and TSOs should aim for secure system operation inside all synchronous areas across the Union. They should support third countries in applying similar rules to those contained in Regulation (EU) 2019/943. ENTSO-E should facilitate cooperation between Union TSOs and third country TSOs and their RCCs concerning secure system operation.
8. In this respect, recital 70 Regulation (EU) 2019/943 further stresses the need for close cooperation with Member States, the Energy Community Contracting Parties and other third countries which apply Regulation (EU) 2019/943 or are part of the synchronous area of Continental Europe. This cooperation should cover all matters concerning the development of an integrated electricity trading region and ensure that no measures are taken that endanger the further integration of electricity markets or security of supply of Member States and Contracting Parties.

¹ OJ L 158, 14.6.2019, p. 54–124

² ENTSO-E (2019), Incidents Classification Scale, Brussels, Belgium https://eepublicdownloads.entsoe.eu/clean-documents/SOC%20documents/Incident_Classification_Scale/200629_Incident_Classification_Scale_Methodology_revised_and_in_use_as_of_2020.pdf.

9. All TSOs of those synchronous areas neighbouring third country TSOs should endeavour where necessary to enter into agreements setting the basis for their technical cooperation and compliance with the relevant EU legislation.

Title 1

Subject matter, scope and definitions

Article 1

Subject matter and scope

1. This methodology establishes the process to carry out a post-operation and post-disturbances analysis and reporting performed by the RCCs.
2. The RCCs' process to carry out the post-operation and post-disturbances analysis and reporting interacts with the process run by the ICS Expert Panel established for the investigation of incidents on scale 2 and scale 3 in accordance with the ICS Methodology. An RCC Investigation Subgroup is created within the ICS Expert Panel, in case the RCC Investigation Threshold defined in Article 5(1) is met.

Article 2

Definitions and interpretation

1. For the purpose of this methodology, the definitions included in Article 3 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation shall apply.
2. Additionally, the following abbreviations and definitions shall apply to this methodology:
 - a. "ACER" means European Union Agency for the Cooperation of Energy Regulators;
 - b. "EAS" means ENTSO-E Awareness System;
 - c. "ENTSO-E" means European Network of Transmission System Operators for Electricity;
 - d. "ICS" means Incident Classification Scale;
 - e. "ICS Methodology" means the applicable methodology on incident classification scale developed by ENTSO-E in accordance with Article 30(1)(i) of the Regulation (EU) 2019/943
 - f. "ICS Subgroup" means the group that is responsible for building and maintaining the ICS Methodology within the ENTSO-E. This group is responsible for the collecting the necessary data;
 - g. "ICS Expert Panel" means the expert panel that conducts the investigation on scale 2 and scale 3 incidents as described in the ICS Methodology;
 - h. "ICS Factual Report" means a report produced by the ICS Expert Panel;
 - i. "fault tree analysis" means a top-down approach to identify underlying failures that cause the system level failure to occur;
 - j. "ICS Final Report" means a report produced by the ICS Expert Panel;
 - k. "RCC Investigation Threshold" means the threshold, assessed for at least scale 2 incidents as defined by the ICS Methodology, that is defined as being exceeded if as a result of certain actions taken by a transmission system operator being in Emergency, Blackout or Restoration system state, another transmission system operator has moved from Normal or Alert System State to Emergency System State;

- l. “RCC Investigation” means the post-operation and post-disturbances analysis performed by the Regional Coordination Centres, that is a sub-procedure of the ICS Expert Panel, as described in Title 2 of this methodology;
- m. “RCC Investigation Subgroup” means a subgroup created within the ICS Expert Panel once meeting the RCC Investigation Threshold is confirmed;
- n. “NRA” means National Regulatory Authority;
- o. “RCC” means Regional Coordination Centre;
- p. “RCC SPOC” means a single point of contact that functions as a point of communication between the RCC and the ENTSO-E ICS Subgroup.
- q. “RCC member” means a member nominated by each RCC to participate in the RCC Investigation and all related discussions with the ICS Expert Panel.;
- r. “TSO” means transmission system operator.

Title 2

RCC members and incident reporting

Article 3

RCC member

1. Each RCC shall appoint an RCC SPOC and shall communicate this to the ICS Subgroup via email. The ICS Subgroup shall update the list of RCC SPOCs on an annual basis.
2. Each RCC SPOC shall nominate a main and a backup RCC member responsible to participate in the concerned RCC Investigation with the ICS Subgroup.
3. Each RCC SPOC shall, via email, confirm with the ICS Subgroup the nominated RCC members within one week after the incident occurred and before classification of the incident.
4. The convenor of the ICS Subgroup shall, as soon as possible, inform the ICS Expert Panel of the nominated RCC members.

Article 4

Incident reporting and the RCC Investigation Threshold validation

1. TSOs shall report all incidents that are suspected to be classified as scale 2 or scale 3 incidents in accordance with the ICS Methodology, by using the ICS reporting process as prescribed in the ICS Methodology.
2. If a reported incident affects two or more TSOs, the ICS Subgroup shall classify the incident according to the ICS Methodology and invite all RCC members to verify whether the RCC Investigation Threshold was met. The convenor of the ICS Subgroup shall invite, early on, the RCC members to participate in a meeting where this is discussed.
3. The ICS Subgroup and the RCC members shall assess whether the RCC Investigation Threshold was met using the data collected pursuant to paragraph 1. This initial data will be updated with a more recent and accurate data, to the extent available, during the ICS Expert Panel meetings.

4. If, based on the initial data, it is confirmed that the RCC Investigation Threshold was met, at least one RCC member shall participate in the ICS Expert Panel meetings for the applicable incident under investigation. Where the incident did not affect all RCCs, the ICS Expert Panel shall include also at least one RCC member from each RCC whose region was not affected by the incident. In case all RCCs were affected, all RCCs shall agree on the RCC members that participate in the ICS Expert Panel meetings for the applicable incident under investigation.
5. ICS Expert Panel shall decide based on the analysis of incident data and sequence of events as to whether the RCC Investigation Threshold was met and include this information in the ICS Factual Report.

Title 3

Relevant incidents and data collection

Article 5

Incidents that classify for the RCC Investigation Threshold

1. The incident classifies as meeting the RCC Investigation Threshold if the following criteria are met:
 - a. as a result of actions taken by a TSO being in emergency, blackout or restoration system state, another TSO has moved from Normal or Alert System State to Emergency System State; and
 - b. the incident has been confirmed as at least a scale 2 incident as defined by the ICS Methodology.
2. The occurrence of the emergency state shall be assessed and validated by the ICS Expert Panel in the ICS Factual Report.
3. The EAS shall remain an operational tool that is created to inform TSOs about the system states. The ICS Expert Panel shall validate whether the incident is relevant for the RCC Investigation by performing post-analysis. During the post-analysis the ICS Expert Panel shall determine the factual system states for the relevant control areas during the incident.

Article 6

Data Collection

1. The RCC Investigation Subgroup shall use data gathered by the ICS Expert Panel.
2. The RCC Investigation Subgroup shall define what additional data related to the RCCs' tasks, in accordance with Article 37 and Annex I of Regulation (EU) 2019/943, is necessary for each RCC Investigation. The data requested shall be specific for each incident.
3. The RCC Investigation Subgroup shall collect the additional data required from the RCCs and TSOs with a questionnaire sent to the ICS Expert Panel. The ICS Expert Panel shall in turn circulate the questionnaire with the concerned parties (RCCs and TSOs).
4. The concerned parties (RCCs and TSOs) shall, as soon as possible and ultimately within 14 calendar days of the receipt of the questionnaire, provide the RCC Investigation Subgroup with the additional data. If the gathering of the additional data via the questionnaire requires more time, the RCC Investigation Subgroup may extend the deadline via email.

Title 4

RCC investigation, results and reporting

Article 7

Investigation handling

1. In case the ICS Factual Report finds the RCC Investigation Threshold was met, the RCC Investigation Subgroup, composed of the members nominated in accordance with Article 3, shall be created under the ICS Expert Panel. Where the incident did not affect all RCCs, the RCC whose region was not affected by the incident shall lead the ICS Expert Panel. In case all RCCs were affected, all RCCs shall agree on the RCC member that shall lead the RCC Investigation Subgroup.
2. The NRAs in the concerned system operation region and ACER may be involved in the investigation upon their request.
3. The ICS Expert Panel shall appoint a TSO representative that will participate in the RCC Investigation Subgroup. This TSO representative shall come from a TSO not impacted by the incident. In case all TSOs were affected, TSOs shall agree on the TSO member that shall participate in the RCC Investigation Subgroup.
4. The RCC Investigation Subgroup of the ICS Expert Panel shall investigate further the incident as per RCCs' tasks in accordance with the Article 37 and Annex I of Regulation (EU) 2019/943.
5. The RCC Investigation Subgroup shall meet regularly to analyse the incident related to the RCC tasks.
6. The method used to analyse the incidents shall be based on a well-known method such as the fault tree analysis.
7. The RCC Investigation Subgroup shall regularly update the ICS Expert Panel on its work, timeline, preliminary results and conclusions.
8. The ICS Expert Panel shall discuss with the RCC Investigation Subgroup the preliminary results and conclusions of the RCC Investigation Subgroup and may ask for additional analysis or clarifications.

Article 8

Results of the RCC investigation and reporting

1. The ICS Factual Report shall be prepared by the ICS Expert Panel at the latest 6 months after the end of the incident, and shall provide factual basis for the ICS Final Report as described in the ICS Methodology.
2. ICS Final Report, prepared by the ICS Expert Panel, shall contain the results of the investigation of the scale 2 or scale 3 incident described the ICS Methodology.
3. The conclusions of the RCC Investigation shall be added in a dedicated chapter of the ICS Final Report.
4. The RCC Investigation conclusions shall include at least:
 - a. a description of the functioning of the RCC(s) tasks affected by the incident and how these impacted the incident;
 - b. explanations of the reasons for the incident;

- c. recommendations based on the findings of the RCC Investigation with the aim to avoid similar incidents in the future.
5. The RCC investigation chapter of the ICS Final Report shall include only content related to the RCC tasks in accordance with Article 37 and Annex I of Regulation (EU) 2019/943.
6. The ICS Final Report, including the RCC Investigation chapter, shall be published by the RCCs as indicated in point 6.2 of Annex I of Regulation (EU) 2019/943.
7. The RCCs shall publish the ICS Final Report, including the RCC Investigation chapter, at latest by the publication of the Annual Incident Classification Scale report for the year in which the incident occurred.

Article 9

RCC recommendations

1. The recommendations in the RCC Investigation chapter of the ICS Final Report shall be provided with respect to the RCCs' tasks, in accordance with Article 37 and Annex I of Regulation (EU) 2019/943.
2. Recommendations not related to the RCC tasks in accordance with Article 37 and Annex I of Regulation (EU) 2019/943 shall be included in the ICS Final Report.

Title 5

Implementation and language

Article 10

Implementation of the Methodology

1. The RCCs shall apply this methodology within six months after it has been approved by ACER in accordance with Article 37(5) of the Regulation (EU) 2019/943 and published on ACER's website.
2. No later than ten months after the approval by ACER of this document, all TSOs of those synchronous areas neighbouring to third country TSOs not bound by Regulation (EU) 2019/943 shall endeavour to conclude with those third country TSOs agreements aiming at third country TSOs' cooperation in the RCC Investigations and reporting of incidents that are suspected to be classified as scale 2 or scale 3 incidents in accordance with the ICS Methodology.

Article 11

Language

The reference language for this methodology shall be English. For the avoidance of doubt, where RCCs need to translate this methodology into their national language(s), in the event of inconsistencies between the English version published by ACER and any version in another language, the relevant RCCs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the methodology.