



Energy Community Regulatory Board

**Data collection and reporting process in the
Contracting Parties**

2024

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Executive Summary

This report provides an evaluation of the data collection and reporting processes namely related to implementation of Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency as adapted and adopted in the Energy Community (EnC REMIT) across Contracting Parties (CPs). The primary objective is to identify existing data collection practices, outline challenges, and offer recommendations for enhancing the efficiency and coordination among national regulatory authorities.

The assessment focuses on the implementation of REMIT within the Energy Community, where an adapted version of the regulation has been adopted (EnC REMIT). This version contains essential elements such as prohibition of market abuse (insider trading and market manipulation), publishing inside information, establishing registration requirements, and empowering NRAs to monitor and enforce compliance. However, it does not include centralized data collection, handling, and surveillance.

In examining the current state of REMIT data collection across the Contracting Parties (Albania, Bosnia and Herzegovina, Georgia, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia, Ukraine) and Turkiye as an observer, the report highlights notable variations in practices and the specific challenges each country faces.

Additionally, the report provides an analytical overview of the progress made in aligning their practices with EU standards under REMIT. It explores specific obstacles, such as insufficient resources, differing regulatory frameworks, and varying institutional capacities. The findings emphasize the need for enhanced coordination and collaboration among regulatory authorities to create a more coherent and effective data collection environment.

Key Findings:

- Most CPs have initiated REMIT data collection; however, practices vary significantly in management and implementation.
- Legal frameworks for data collection are in place, but challenges regarding data quality and resource allocation persist.

Recommendations:

- Invest in technical resources and training programs for NRA staff to enhance expertise.
- Enhance collaboration among NRAs to standardize data reporting processes, where applicable.
- Establish clearer guidelines for reporting formats to improve consistency and reliability.
- Ensure consistency in REMIT implementation by fully incorporating the EU REMIT into the Energy Community.

National Regulatory Agencies in the Energy Community:

Albania (AL) - Energy Regulatory Authority (ERE)

Bosnia and Hercegovina (BIH) – State Electricity Regulatory Commission (SERC)

Georgia (GE) – Georgian National Energy and Water Supply Regulatory Commission (GNERC)

Kosovo* (KO*) - Energy Regulatory Office (ERO)

Moldova (MD) - National Agency for Energy Regulation (ANRE)

Montenegro (ME) - Energy and Water Regulatory Authority of Montenegro (REGAGEN)

North Macedonia (MK) – Energy Regulatory Commission (ERC)

Serbia (RS) – Energy Agency of the Republic of Serbia (AERS)

Ukraine (UA) – National Energy and Utility Regulatory Commission (NEURC)

Turkiye (TR)¹ - Energy Market Regulatory Authority (EMRA)

¹ Observer Country

1. Introduction, background, and scope

At the end of 2018, the Energy Community² adapted and adopted the Regulation (EU) No 1227/2011, in a version known as EnC REMIT, focusing on key aspects such as definitions, prohibition of market abuse, publication of inside information, registration requirements, responsibilities of persons professionally arranging transactions (PPATs), role of Energy Community Regulatory Board (ECRB), and monitoring, investigatory and enforcement powers for the National Regulatory Authorities (NRAs).

Unlike the full REMIT, the EnC REMIT does not mandate data collection requirements. However, effective prevention of market abuse necessitates robust surveillance of wholesale market activities. Consequently, different CPs have implemented diverse practices for data collection to ensure compliance and uphold market integrity.

This report assesses the current state of data collection and reporting processes in Energy Community Contracting Parties (CPs), aligning with standards under EU REMIT. Close coordination among NRAs is crucial as CPs consider a more centralized trade data reporting, handling, and monitoring under the Agency for the Cooperation of Energy Regulators (ACER), in accordance with the obligations imposed by full REMIT. This coordination will be essential in fostering a level playing field for all energy market participants. In the EU, ACER plays a pivotal role in collecting data to monitor wholesale energy markets within the EU REMIT framework. This involves gathering data from market participants or their designated Registered Reporting Mechanisms (RRMs), which is essential for ensuring transparency and integrity in energy trading activities across Europe.

The analysis of current data collection processes in CPs will provide an indication into their preparedness for full REMIT implementation. This will help estimate future steps needed to enhance coordination and compliance with full REMIT across the Energy Community. It also underscores the importance of adequate resources for ACER to effectively monitor a unified European market.

This report provides analysis of the data collection and management practices across 10 countries: Albania, Bosnia and Herzegovina, Georgia, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia, Turkey, and Ukraine. Data was collected through structured questionnaires completed by the NRAs, focusing on their current practices and challenges in data collection.

² www.energy-community.org The Energy Community comprises the EU, as a party represented by European Commission, the Contracting Parties, Albania (AL), Bosnia and Herzegovina (BH), North Macedonia (MK), Georgia (GE), Kosovo* (XK), Moldova (MD), Montenegro (MN), Serbia (RS) and Ukraine (UA), and the Observers, Armenia (AR), Turkiye (TR) and Norway (NO).

Throughout this document the symbol * refers to the following statement: *This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Advisory Opinion on the Kosovo* declaration of independence.*

2. Data Collection and Reporting under REMIT in the EU

2.1 Legal basis

Regulation (EU) No 1227/2011 (EU REMIT) establishes a comprehensive framework for data collection and reporting in wholesale energy markets. Central to this framework is the ACER, which is collecting essential data to assess and monitor these markets, as outlined in Article 7 of EU REMIT.

Under Article 8(1) of EU REMIT, market participants, along with any third parties acting on their behalf, are required to provide ACER with records of wholesale energy market transactions, known as “trade data”. Additionally, Article 8(5) mandates the reporting of information concerning the capacity and utilization of facilities for producing, storing, consuming, or transmitting electricity and natural gas, referred to as “fundamental data”.

The EU REMIT also empowers NRAs to monitor wholesale energy markets at the national level, requiring Member States to grant them appropriate investigation and enforcement powers as stated in Article 13. Furthermore, ACER is responsible for establishing a system to share the collected information with NRAs and other relevant authorities, subject to fulfillment of certain data protection requirements.

The European Commission (EC) plays a crucial role in adopting uniform reporting rules through Implementing Acts. As specified in Article 8(2), the EC must:

- Create a list of contracts and derivatives that must be reported, including appropriate de minimis thresholds for transactions,
- Establish uniform rules for reporting information,
- Determine the timing and format for these reports.

The amended EU REMIT³ triggered the amendment of the Implementing Act, as well as the need of new acts that regulate the framework under which the RRM and the Inside Information Platform (IIPs) operate, and with regards to threshold for inside information publication.

Article 8(6) requires the Commission to set uniform rules for the reporting of fundamental data, ensuring consistency and reliability across all reporting entities.

Article 4(1) of REMIT obligates market participants to publicly disclose any inside information regarding their businesses in a timely manner. This obligation extends to information about parent or affiliated undertakings. To facilitate this process, Article 10(1) of the Implementing Regulation requires participants or their service providers to provide web feeds to assist ACER in efficiently collecting inside information. When reporting transactions and fundamental data, market participants must be identifiable through their ACER registration code. This requirement ensures accountability in the reporting process.

³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1106>

2.2 ACER's Monitoring and Data Quality Framework

ACER is charged with monitoring trading activities in the EU wholesale energy markets to detect and prevent market manipulation. The REMIT Implementing Regulation provides detailed specifications on how ACER should collect data, along with the associated reporting obligations and timelines. ACER Issued a range of regulatory guidance and user manuals to facilitate the reporting process.

To ensure data quality, ACER employs a robust framework that operates in two stages⁴:

1. **Data Collection Stage:** During this stage, data is entered into ACER's REMIT Information System (ARIS), where it undergoes validation. This process includes two levels of checks: a technical validation and a more in-depth database validation. Any invalid data is flagged and addressed, ensuring that the necessary high-quality data is processed.
2. **Data Quality Assessment Stage:** This stage involves additional methods to verify data quality and ensure timely resolution of issues. Non-compliance at either stage can lead to enforcement actions. ACER aims to resolve data quality issues through cooperation, which can result with enforcement actions.

According to EnC REMIT:

- ACER has no role and responsibility, and the role related to coordination of investigations rests with ECRB. ECRB relies on information provided by NRAs.
- There is no centralized data reporting and handling in the same manner as in the EU with ACER centralized data collection.

These adaptations create a data collection process that is quite different from the EU framework, highlighting the need for further unification and tailored strategies for compliance and reporting in the CPs.

⁴ <https://www.acer.europa.eu/>

3. Methodology

The information and analysis presented in this report are based on responses from NRAs to a questionnaire assessing their data collection and reporting processes in the CPs for the purpose of market monitoring. The questionnaire comprised 22 questions that examined various aspects of data collection, including the existing legal framework, types of collected data, data validation processes, needs for full REMIT implementation, the preparedness and capacity of NRAs regarding data collection processes. The Task Force undertook the following steps:

- Developed a questionnaire and conducted a survey to gather information on current regulatory practices.
- Evaluated the results of the survey.

The data and analyses in this report are derived from the information provided by the regulatory authorities of the analyzed countries, which include Albania, Bosnia and Herzegovina, Georgia, Kosovo*, Montenegro, Moldova, North Macedonia, Serbia, Turkiye and Ukraine.

4. Data collection and Reporting in Contracting Parties

4.1 Status of Data Collection

The status of REMIT data collection varies significantly across the CPs. NRAs from Albania, Montenegro, Ukraine, and Turkiye (observer) have successfully implemented and have ongoing processes to manage and utilize the collected data. In contrast, NRAs from Georgia, Serbia, Bosnia and Herzegovina and North Macedonia are in the partial implementation stage, indicating that while some aspects of data collection are operational, additional measures are likely needed to ensure effective monitoring. ANRE from Moldova has yet to commence data collection. This varied landscape highlights the differing levels of preparedness and implementation across the region, emphasizing the need for continued support and coordination among NRAs to enhance compliance and market transparency.

4.2 Management of Data Collection Process

In most CPs, data collection for the purpose of market monitoring is managed primarily by the NRAs, although in some instances, energy exchange operators play a role. In Albania, Bosnia and Herzegovina, Georgia, Montenegro, Moldova, North Macedonia, Ukraine, Serbia, and Kosovo*, NRAs are responsible for managing the data collection process. In Turkiye, the Energy Exchange Operator manages the data collection process.

In Albania, Georgia, Montenegro, North Macedonia and Turkiye, data collection is managed centrally by a dedicated department within the respective NRA. In Serbia, Bosnia and Herzegovina, Ukraine, Moldova and Kosovo*, data collection is managed across multiple departments within the respective NRA.

4.3 Legal Basis for Data Collection

The legal basis for data collection varies in different countries, where the specific laws are referenced:

- Albania: REMIT regulation approved by ERE decision and Power Sector Law no. 43/2015.
- Bosnia and Herzegovina: Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina.
- Georgia: Energy Market Monitoring and Reporting Rules.
- Kosovo*: Article 12 of the Law on Energy Regulator and the license issued by the NRA.
- Moldova: Law no. 108/2016 regarding natural gas, Law no. 174/2017 regarding energy.
- Montenegro: Law on the Surveillance of Wholesale Electricity and Natural Gas Market.
- North Macedonia: Rulebook on the manner and procedure for monitoring the functioning of energy markets.
- Serbia: Energy Law and Rules on Prevention of Abuse in Electricity and Natural Gas Market, Methodology for Setting Natural Gas Transmission Use-of-System Charges, Access to and Use of Electricity Transmission System Charging Methodology, Access to and Use of Electricity

Distribution System Charging Methodologies, Access to and Use of Natural Gas Transportation System Charging Methodology, Access to and Use of Natural Gas Distribution System Charging Methodology, Criteria and Standards for Determining Energy License Fee.

- Turkiye: Electricity Market Balancing and Settlement Regulation, Regulation on Transmission Network Operation, Market Procedures and Principles, and Board Decision No. 7912.
- Ukraine: Laws of Ukraine “On NEURC”, “On Electricity Market”, “On Natural Gas Market”, “On amendments to certain laws of Ukraine regarding prevention of abuse on wholesale energy markets”; Markets monitoring Procedure; Procedure of gaining the status, suspension and termination of RRM's status; Procedure for submitting information about records of wholesale energy market transactions.

4.4 Registration of Market Participants and Data Collection Methods

Most countries use a manual registration process, requiring market participants to submit forms completed with the required information. The information requested for REMIT registration is aligned and harmonized across NRAs through the ECRB REMIT Procedural Act⁵. The registered market participants are equipped with an identification code, the so-called ‘ECRB code’.

When it comes to data collection methods, there are various approaches. Georgia, North Macedonia and Turkey use automated tools and software. Bosnia and Herzegovina employs online forms or surveys, whereas Albania, Kosovo*, Montenegro, and Serbia primarily use manual data collection. Moldova has not yet started its data collection process. Ukraine uses automated tools for REMIT data collection and manual methods for reporting forms.

4.5 Types of Data Collected

The primary types of data collected include wholesale trade transactions, inside information, and, in some cases, fundamental data. The table below shows the data types collected across contracting countries.

Most CPs are collecting essential transaction data, however in most cases this is done in an aggregated and periodic form. Only few capture inside information. In Albania, Bosnia and Herzegovina, Georgia, Montenegro, Kosovo*, Ukraine, the collected data related to wholesale trade transactions. In Bosnia and Herzegovina, Kosovo*, North Macedonia, Ukraine, Serbia and Turkiye, the fundamental data related to the energy markets are collected. In Georgia, Montenegro and Turkiye inside information related data are collected.

The wholesale data collection process by some of the NRAs began before EnC REMIT and improved further with transposition of REMIT. NEURC in Ukraine started its REMIT-specific wholesale data collection process from 2024 and is in process of developing systems for data handling and surveillance in line with EU practice.

⁵ Procedural Act 2020/01 ECRB-EnC on coordination of NRAs under EnC REMIT

Figure 1: Types of data collected in CPs

CP	Wholesale trade transactions	Fundamental data	Inside information	Other
AL	√			√
BH	√	√		
GE	√		√	
XK*	√	√		
MD				√
ME	√		√	
MK		√		√
RS		√		
UA	√	√		√
TR	√	√	√	

4.6 Data Quality Standards or Criteria

As the data handling process is not yet highly automated, data quality is primarily ensured through manual reviews conducted by the respective NRAs. However, some NRAs have already started implementing automated tools to enhance this process.

- NRA in Ukraine follows ACER's standards for data quality and employs an automated analysis tool when it comes to REMIT-related data.
- NRAs from Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, and Serbia rely on manual reviews for assessing data quality and integrity.
- NRAs from Georgia, North Macedonia, and Turkiye use a hybrid approach that combines both automated tools and manual reviews. North Macedonia has specified criteria in its Rulebook on Market Monitoring, while Georgia outlines minimal data quality requirements in its Energy Market Monitoring and Reporting Rules.
- NRA in Moldova has not yet initiated its data reporting and analysis process.

This overview highlights the varying approaches to ensuring data quality across different NRAs.

4.7 Frequency of Reports

The table below outlines the reporting frequencies among the CPs, reflecting the legacy of diverse monitoring processes adopted by the NRAs. These variations emphasize the growing role of market monitoring in preventing abuses as a cornerstone of regulatory oversight.

Figure 2. Reporting frequency in CPs

CP	Daily	Monthly	As soon as information becomes available	Other
AL		√		
BH		√		
GE	√	√		
XK*		√		√
MD				√
ME		√	√	
MK		√		√
RS				√
UA	√	√	√	√
TR			√	

For example, in Albania and Bosnia and Herzegovina daily reporting is in place, while in Georgia data are reported daily and monthly. In Kosovo* monthly reports are to be provided, while in Serbia information are collected on a yearly and semi-annual basis. In Ukraine, REMIT-related data collection mirrors the requirements under Implementing Regulation (EU) 1348/2014, which stipulates that collection depend on contract type, and reporting forms are collected on a daily, monthly, or yearly basis. In Montenegro there is a structured framework that includes both daily and monthly reporting. In Montenegro, data on executed transactions are gathered monthly, with reports due by the 15th of the month for the previous month. In North Macedonia information are collected on daily, quarterly and semi-annually basis. In Turkiye, data are reported as soon as information becomes available. This variation in timelines highlights the diversity of each CPs in managing their data collection processes.

4.8 Classification and protection of information

Regarding the classification and protection of information collected, specific policies are applied in most cases. In Albania, North Macedonia, Montenegro, Serbia, Ukraine and Turkey, specific policies are in place for data protection. For instance, Montenegro's Law on the Surveillance of Wholesale Electricity and Natural Gas mandates the REGAGEN to ensure the protection of data to prevent their unauthorized access and misuse. Additionally, REGAGEN has established rules for maintaining the confidentiality of commercially sensitive information and procedures for accessing electronic documents. In Georgia a general legal requirement is already in place for GNERC to protect commercially sensitive data. Additionally, GNERC has approved a separate resolution that defines the list of commercially sensitive information.

In Serbia, AERS is required by energy law to protect commercially sensitive data acquired in its activities. Albania's ERE regulations protect not only data collected for the purpose of market monitoring, but also other confidential information. North Macedonia's Rulebook on Market Monitoring stipulates that all

submitted data is confidential, with measures in place to prevent misuse and unauthorized access, which will be further specified for information collected.

Conversely, Moldova and Bosnia and Herzegovina do not currently have policies developed for this purpose, while Kosovo* is also lacking such policies.

The public availability of collected data varies by country. In Moldova, data is not accessible to external parties. In Albania and Kosovo* data can be provided only upon individual request, as there is currently no platform in place for public access. In Ukraine, the results of market monitoring are published on NEURC's website (with some restrictions due to war conditions) and can also be provided upon individual requests in compliance with the rules for handling confidential information. Georgia publishes its data on a dedicated platform and issues monthly reports on the electricity market on its website, making this information publicly available. In Turkiye, nearly 200 types of data are collected and publicly published by the Market Operator, EPIAS. In Serbia some collected data are included in the yearly report of AERS, while in Bosnia and Herzegovina data are made publicly available. In North Macedonia integrated data in the Annual Report of the ERC are presented and can also be provided upon the request.

4.9 Full REMIT implementation

The implementation of the full REMIT framework in a consistent manner will have significant impacts on national data collection practices across different countries. A significant impact is anticipated on market participants that will need to comply with ACER's data reporting standards., therefore preparedness of market participants and NRAs is crucial.

To ensure effective implementation of data reporting to ACER in, using ACER's reporting standards, an assessment of readiness of market participants and NRAs on national basis is essential. NRAs are best placed to perform such assessment in the coming years, as the discussion on full REMIT implementation reveals itself.

A proactive approach and early engagement in the process, in particular by the NRAs, will help identify any preparedness gaps and enable smoother transitions to standardized reporting obligations.

4.10 Main Challenges in Implementing Reporting Requirements under REMIT

NRAs encounter various challenges in implementing data collection/reporting and handling requirements effectively to support adequate monitoring.

Nearly all NRAs, including from Bosnia and Herzegovina, Ukraine, Kosovo*, Albania, Moldova, Serbia, North Macedonia, Montenegro, and Georgia, report technical issues, emphasizing the need for more advanced infrastructure and information technology. NRAs from Bosnia and Herzegovina, Moldova, North Macedonia, and Georgia also struggle with regulatory compliance, making it difficult to align their existing regulations with EnC REMIT market monitoring needs. Data quality assurance is a concern for NRAs from Ukraine, Turkey, Moldova, North Macedonia, Montenegro, and Georgia, with Albania's NRA specifically noting the need for automated data collection tools to improve quality.

Figure 3. Identified challenges regarding data reporting and handling

CP	Technical challenges	Regulatory compliance complexities	Data quality assurance	Other
AL	√			√
BIH	√	√		
GE	√	√	√	
XK*	√			
MD	√	√	√	
ME	√		√	
MK	√	√	√	
RS	√			
UA	√		√	
TR			√	

Looking ahead, NRAs identified the need to address additional challenges:

- Albania: ERE needs to develop specific automation platforms.
- Bosnia and Herzegovina: SERC needs to build capacity, adopt new technologies, and address cybersecurity risks.
- Georgia: GNERC identified data quality assurance and staff shortages as key issues.
- Kosovo*: ERO lacks dedicated personnel and monitoring departments, complicating compliance efforts.
- Moldova: ANRE plans to implement data protection requirements.
- Montenegro: REGAGEN emphasized the need for financial resources and training programs.
- North Macedonia; ERC faces staff shortages and training needs.
- Serbia: AERS emphasized technical challenges in collecting, handling and assessing the data.
- Ukraine: NEURC identified automation, data quality, standardization, and resource constraints as key issues.
- Turkiye: EMRA is working on ensuring data quality.

Overall, these challenges show that while NRAs recognize their obstacles, they must prioritize strategic solutions to overcome them effectively.

4.11 Planned Developments in Data Collection Processes and Regulatory Framework

Most of the NRAs are exploring ways to improve their data collection processes and regulatory frameworks to ensure efficient implementation of EnC REMIT. In Albania, Bosnia and Herzegovina, Georgia, North Macedonia, Serbia, Turkey, and Ukraine, the NRAs are taking steps to enhance their systems. SERC is introducing automated data collection, NEURC is adopting new legislation to facilitate data collection, and ERE is working on a data collection platform and updating its Power Sector Law. ANRE is considering procedures for timely publication of information, while AERS uses XLS files for data collection and is developing new data reporting/handling software. GNERC has also created an electronic platform for market participants to submit their reports and is continually improving its system.

However, the use of standard reporting formats varies widely. SERC uses its own formats, while NEURC primarily uses XML. ERO currently has no specific standard that applies. ERE has a publicly available reporting format, and EMRA uses different formats based on data requirements. ERC relies on semi-automatic excel spreadsheets submitted via a specialized web platform, and REGAGEN does not have a standardized format, allowing submissions in various electronic formats. GNERC has specific standards in its "Market Monitoring and Reporting Rules", with data entries made through an electronic platform. This diversity shows the need for consistent reporting standards to ensure clear and comparable data across countries. For market participants engaged on regional level, such varying requirements create significant administrative burden with increased operational risk.

4.12 Human resources

In the current landscape of data collection, the number of personnel involved varies significantly across NRAs. NRAs from North Macedonia, Bosnia and Herzegovina, Albania, Kosovo*, Montenegro, and Georgia, have less than five individuals involved in data collection and handling, while being involved on a range of other activities. NRAs from Serbia and Turkey have between five and ten people involved, while NRA in Ukraine employs more than ten. NRA in Moldova does not have applicable personnel involved in data collection at the time of assessment.

Looking ahead, there are expectations regarding the need to increase human resources and enhance capacities for data collection and efficient REMIT implementation. NRAs, such as, SERC, ERE, ANRE, ERC, GNERC, anticipate a definite need for more personnel in the near future. Others, NEURC, AERS, REGAGEN, and EMRA, are open and exploring the possibility of expanding their teams. Overall, while current staffing levels vary, there is a general acknowledgment among several CPs that an increase in human resources is necessary to enhance data collection efforts moving forward.

5. Conclusion and Recommendations

This report outlines the varying levels of data collection across Energy Community Contracting Parties and in one observer country. It emphasizes the need for improved coordination and compliance mechanisms. The full implementation of REMIT will require substantial enhancements in data collection practices, necessitating more rigorous reporting standards and improved data analytics capabilities. To address the challenges faced in implementing data collection and reporting, the following recommendations are proposed:

- **Enhance Technical Infrastructure:** Invest in modern data handling and assessment systems and tools to improve efficiency and accuracy. Automation can significantly reduce manual errors and expedite data assessment and processing.
- **Capacity Building and Training:** Provide training programs for NRA staff to enhance their skills in data management and efficient discharge of its obligation under applicable integrity regime. Building and maintaining a knowledgeable workforce on continuous is crucial for effective implementation.
- **Strengthen Regulatory Frameworks:** Review and update existing regulations to align as much as possible with EU practices.
- **Promote Collaboration:** Foster collaboration among NRAs, as well as close communication with market participants, and technology providers to share best practices and develop common solutions for data assessment and market monitoring.
- **Allocate Sufficient Resources:** Ensure that regulatory authorities have sufficient budget and human resources to support compliance in general.

By addressing these areas, NRAs from the Energy Community Contracting Parties will contribute to an increased confidence in the price formation and enhance the integrity and transparency of the energy markets in general.