Introduction

Mediterranean countries experience rising levels of end-use demand for energy consumption, growing urbanisation, greater imbalances across urban/rural areas and the challenges of connecting a larger number of distributed generation units. These challenges include the capability to serve this growing demand with products and services that reflect the sophistication that consumers are expecting while coping with the tariff pressure from end users.

Regulating new consumers’ connection to the grid

Why is it important?

The necessity to regulate the connection process is fundamental to ensure non-restrictive access to the electricity transmission and distribution networks and for all market participants to enjoy equal and non-discriminatory conditions.

Recommendations

- Define tolerance time limits in which Distribution System Operators (DSOs) are obliged to finalise the realisation of the different steps of the new connection procedure.
- Monitor the operators’ activities and impose sanctions and fines against the operators in case of a breach of tolerance time limits or other existing regulations.
- Define the methodology for calculating the customer’s contribution to connection costs and concrete fees.
- Define the cases for refusing connection requests and set out the obligation to provide justifications in case of refusal.
- Implement dispute settlement procedures to solve any possible connection related disputes.
Case study: France

In France, under the supervision of the Energy Regulatory Commission (CRE), the DSOs are responsible for ensuring, under non-discriminatory conditions, the connection and access to the public electricity distribution network.

Network operators must comply with a technical reference documentation, which they use in their relationships with the connection applicant, which includes:

- The connection procedure, which describes all connection stages: preliminary information to applicants, contractual process, deadlines at each stage of the connection; conditions for entering, maintaining, and exiting connection queues, etc.

- The technical requirements that the installations must meet.

Any new connection or modification to an existing connection must be formalised in a connection request. In response to the request, the DSO shall send the applicant a technical and financial proposal, which describes the technical solution envisaged, the time limit for making the connection available, and the amount of the contribution to be paid by the applicant. If the applicant accepts the proposal, the DSO sends him a connection agreement for approval. Work can then begin.

Steps for processing connection requests of public Distribution System Operators

If a network operator exceeds the maximum time limit for the transmission of the technical and financial proposal to the applicant, a penalty may be due by the network operator to the connection applicant. Any refusal to examine a connection request or to produce a connection agreement must be justified and notified to the applicant, the private network operator and CRE.

In this regard, CRE has set up incentive mechanisms for distribution system operators as part of the tariff for the use of public electricity networks.
Managing complaint handling procedures

Why is it important?

Complaint handling procedures available to all customers are a fundamental consumer right that national energy regulatory authorities must ensure to guarantee effective consumer protection. They are also an important tool used by the energy regulators to monitor the market and ensure the development of retail market competition. Indeed, the transparency of information, which might include the categories of most frequently appearing complaints and a list of recommendations to be followed by service providers, including the names of non-compliant operators, is one of the means to empower customers in their rights, counterbalancing the asymmetry between a large company and small customer.

Recommendations

- **Collect data**: With the aim of monitoring retail markets, a regulator can ask data on complaints from third parties as well as from service providers.

- **Publish complaint data**: It is a way of pressuring the industry indirectly to cooperate and act fairly and promptly regarding customer complaints.

- **Monitor complaints and provide indicators**: Customer complaints are an indicator of the quality of service provided by operators. The publication of such indicators reinforces customers’ position in the market and contributes to an increase in the commercial quality of service.

- **Classify the complaints**: Data collection by the regulators must be standardised according to a precise classification. Indeed, consistency in the definitions of consumer dissatisfaction is a key element to guaranteeing the accuracy of statistical data on complaints.
Case study: Malta

The Maltese Regulator for Energy and Water Services (REWS) receives and considers disputes arising between a consumer and an energy provider that have failed to be solved at lower level.

Who receives the complaint?

- **Complaints related to billing** are addressed to the sub-contractor of the DSO to seek resolution.

- **Complaints related to technical issues** are addressed to the DSO - in this case, EneMalta - by phone, email, or through a website contact form, to which the latter must reply within 7 calendar days.

- **All unresolved cases** are escalated upwards to EneMalta and subsequently to the regulator REWS.

Filing a complaint to the Regulator

The consumer must provide detailed information on the nature of the complaint, specifying among different categories:

- **Service connections**: Delay or obstacles to connection.

- **Quality and continuity of supply**.

- **Metering**: Meter functioning, incorrect meter readings, meter switching, unfair commercial practices, changes in contractual terms, etc.

- **Activation**: Moving in, reconnection and disconnection.

- **Invoicing issues**: Unclear, incorrect or double invoice, non-issue of invoice or difficult access to the invoice of a monthly statement, high consumption estimation, etc.

- **Other**: Information on price of tariff, price tariff change, social tariff, poor or deficient customer service.

The decision of the regulator is **binding** and must be notified within **19 days**. If the concerned party fails to comply, the regulator may impose an administrative fine amounting up to €600 for each day of non-compliance.
Setting performance standards for billing and metering

Why is it important?

- Bills directly touch on the relationship between consumers and suppliers.
- They represent a formal document verifying that consumers are receiving electricity as per their contracts.
- Consumers from all education levels have the right to understand energy prices as they can amount to a relevant share of their monthly budget.
- Higher consumer awareness, better understanding of energy bills and prices, coupled with easy access to real-time consumption data may enable consumers to adapt their consumption patterns and save energy.
- Consumers’ trust and engagement in the energy market increases with more transparent and updated billing information.

Recommendations

- Provide detailed information in the bills, such as consumed energy, prices, payment instruments, the regularity of payment, risk of disconnection, among other aspects.
- Ensure that bills contain all the tariffs and costs related to energy supply: The price of energy itself, transmission and distribution tariffs, taxes and other types of charges. This information should be reported synthetically, in an easily understandable language.
- Make sure that consumers are promptly informed on any change, both concerning prices and other bureaucratic and contractual agreements.
- Allow consumers to easily access their historical information on their energy consumption for free at least of the previous two or three years.
- Monitor the regular issuing of electricity bills and reading of meters.
- Incentivise stakeholders to speed up the deployment of smart meters. Smart meters can accurately reflect consumers’ energy consumption, providing regulators information on the time of use as well as allowing remote meter reading.
Case study: Italy

The regulation on billing requires energy suppliers to:

**Issue periodic billing for electricity**
- Every 2 months for domestic customers and non-domestic customers with up to 16.5 kW installed;
- Every month for non-domestic customers with more than 16.5 kW installed.

**Release each invoice**
within 45 calendar days from the last day of consumption charged on the same invoice.

**Calculate the consumption**
accounted for in the invoice, using the metering data in the following order:
- Data made available by the DSO;
- Self-readings communicated by the customer and validated by the DSO;
- Data estimated by the supplier.

**Issue an invoice**
that accounts for actual consumption at least once every 12 months.

**Carry out meter reading**
- Every month if an electronic meter is installed;
- At least every 4 months if a traditional non-electronic meter is installed, for customers with up to 16.5 kW power installed.
Calculating power interruptions and related performance standards

Why is it important?

• **Continuity of supply** concerns a single service, the supply of electricity to consumers.

• **Interruptions** in the supply to final consumers depend on the reliability of the entire power system, made up of a generation system, a transmission grid, and a distribution network.

• Continuity of supply regulation focuses on quality indicators that capture the frequency and duration of supply interruptions.

Recommendations

→ **Collect data on the number and duration of supply interruptions.**

→ **Follow 4 main steps to collect data** on continuity of supply:

  1. Record all interruptions and their characteristics;
  2. Compute the relevant quality indicators from the register;
  3. Report of these indicators to the regulatory authority; and
  4. Verify the reliability of the figures reported by the relevant utilities.

→ **Require utilities to register 5 basic characteristics of the interruption:**

  The point of origin (e.g., the transmission network or distribution network); the type (planned or unplanned); the cause (i.e., if any exemption applies); the duration (long or short); and the number of consumers affected by the interruption.

→ **Consider rewards and penalties scheme** that can induce the regulated utility to an optimal level of service, considering both planned and unplanned interruptions.

→ **Adopt a scheme that allows utilities to reduce planned interruptions** to encourage companies to use more efficient maintenance programs for the networks — inducing them to plan maintenance when consumption is low.

→ **Consider and define exemptions:**

  Defining precisely what is an exceptional event or force majeure event and what is not is of paramount importance as distribution companies are requested to pay penalties.

→ **Focus on network reliability in the medium-term:**

  Try to get closer information on fault statistics and asset management to understand what happens behind the standard quality regulation indicators.
## Technical performance indicators

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<th>Description</th>
<th>Details</th>
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<tr>
<td>1</td>
<td>Reliability:</td>
<td>Based on the average number of interruptions, the average time period of service interruption and the average time taken for each interruption.</td>
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<td>2</td>
<td>Productivity:</td>
<td>Reflects the percentage of the period during which the subscriber is having electrical energy during the year or the registration period.</td>
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<tr>
<td>3</td>
<td>Network characteristics:</td>
<td>Ratio of ground cable lengths to network lengths for low and medium voltages.</td>
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| 4 | Two indicators of network load ratio: | - Distribution network usage factor  
- Distribution converters usage factor |
| 5 | Number of consumer complaints. | |
| 6 | Efficiency: | Percentage of technical and non-technical electrical loss. |
| 7 | Two indicators for worker productivity: | - Net number of employees per 1,000 subscribers  
- Net number of employees to the total amount of energy sold |

- Indicators for each of the company’s departments are calculated separately using the data provided by each company for renewing the license.

- The management that achieved the best value of the index is determined and this value is what is called best practice.

- The results are divided from the best performance to a very weak practice. Each management takes a score for each indicator from A to E depending on the area where the index value is located.

- The indicator values for each company's departments are compared with the previous years to measure the progress of performance.

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**Case study: Egypt**

The regulator evaluates the technical performance of all electricity distribution companies through **12 technical performance indicators**, which are divided into 7 groups: