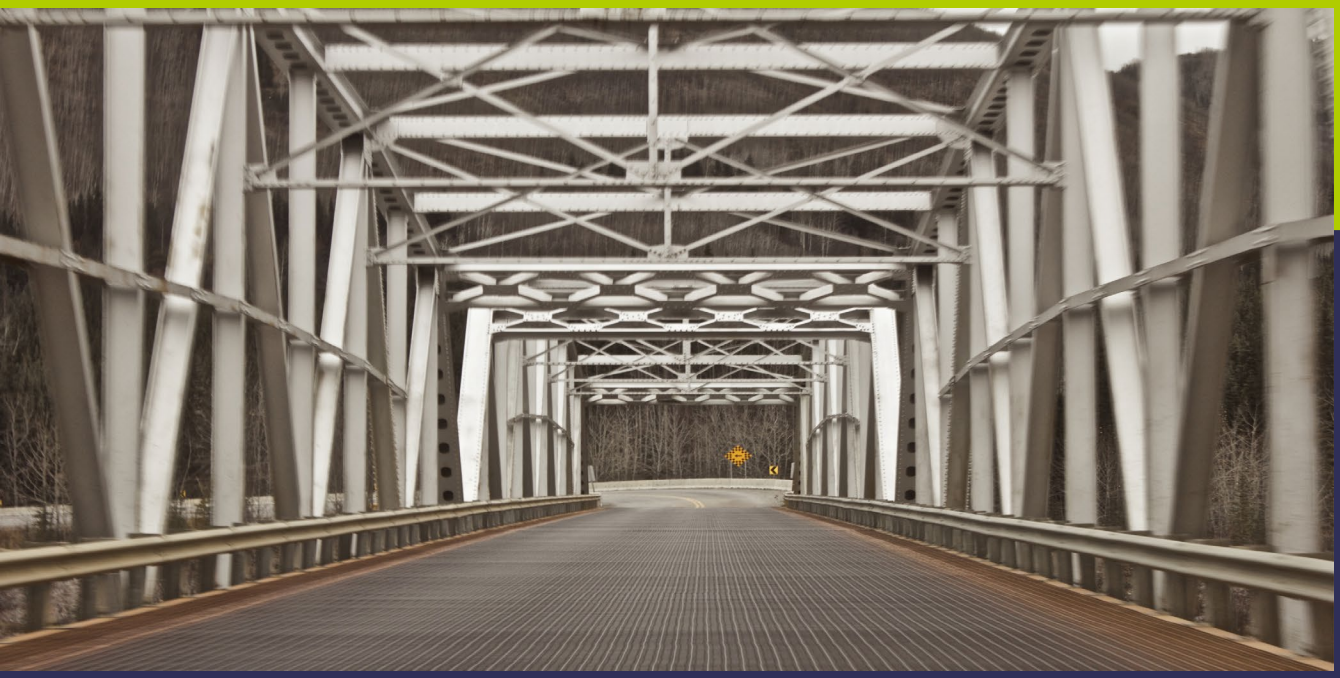
European Commission

EUROPEAN BARRIERS IN RETAIL ENERGY MARKETS



CYPRUS
Country Handbook

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Energy

EUROPEAN BARRIERS IN RETAIL ENERGY MARKETS PROJECT: Cyprus Country Handbook

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Manuscript completed in July 2020

Luxembourg: Publications Office of the European Union, 2021

PDF ISBN 978-92-76-30250-6 | doi:10.2833/738764 | MJ-02-21-181-EN-N

How to cite this report: Napolitano, L., & Zabala, C. (2021). European Barriers in Retail Energy Markets Project: Cyprus Country Handbook. Luxembourg: Publications Office of the European Union. ISBN 978-92-76-30250-6, doi:10.2833/738764.

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This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Please note that this and the other country handbooks form just part of the deliverables of the “European Barriers in Retail Energy Markets” project. For more detail on methodology, Europe-wide results and the Barriers Index, please refer to the following associated reports: “Final Report of the European Barriers in Retail Energy Markets Project”; “Report on the European Retail Energy Market Barriers Index”.

SUMMARY

Project Outline

The following project outline describes the overall European Barriers in Retail Energy Markets Project. It relates to all the countries and markets which are the focus of the project.

The Context

European retail energy market liberalization is now well into its third decade in the most mature markets. Customers of electricity and gas are now free to choose their electricity and gas suppliers in nearly all markets across the EU and in a number of other European markets. At the same time, the European Commission and national European regulators have created a basis for non-discriminatory market access for energy suppliers through a series of regulations and directives. In theory at least, the European retail energy market is a place where new suppliers and providers of retail services can enter the market and compete relatively freely and on equal terms for customers in the market; a place where formerly incumbent electricity suppliers can compete for gas customers and where gas suppliers can compete for electricity customers; a place where a supplier from one region or jurisdiction can compete in another, without facing unreasonable or excessive barriers; a place where a capacity aggregator or other innovative business model can compete to provide its services to retail energy customers.

Objective

The European Barriers in Retail Energy Markets project was established to research the extent to which the theory is the case in practice; the extent to which energy suppliers across Europe face a variety of barriers to enter and compete in the market; to identify which barriers exist and to provide some suggested solutions to those barriers. The project thereby aims to support the European Commission and Member States in developing policy and implementing actions to reduce barriers.

This project has also designed and calculated a performance index that ranks different countries according to how easy it is to do business in the retail energy segment by combining a selection of measurements into a single score. The project is on the other hand, not intended as a measure or indicator of the ‘competitiveness’ of any given market, and it does not in this respect judge the effectiveness of regulatory authorities or governments, many of which have put great effort into developing their markets.

It is also important to note that all the markets included in this research are continuously evolving. Changes are being planned and improvements (and in some cases additional barriers) are possible as a result. While this project highlights and considers known future changes, it cannot make assumptions as to the effectiveness and outcomes of those changes. This project is therefore weighted in the present, based on the actual context in the market, whilst accepting that the present context may change, in some cases imminently.

Competitor Perspective

What sets this project apart from previous Europe-wide projects looking at the issue of barriers is above-all that it primarily takes the perspective of the competitor rather than any objective view of regulators, economists or academics. This is an important distinction since it requires an acceptance that even if the existence of specific barriers may not seem logical or rational, and even if they are not permitted or legal, even if they were supposed to have been eradicated, those barriers are significant at least in the experience or expectations of competitors in the market.

Notwithstanding this however, the project does not simply accept whatever competitors claim. On the contrary, the researchers have gone to great lengths to ensure that claims are challenged and justified. Cooperation with regulatory authorities to understand the regulatory context of claims, along with survey and interview feedback from competitors (including incumbent suppliers) with alternative perspectives or points of view, have also been considered to ascertain a balanced evaluation of the barriers in any given market. This approach may therefore be of value to policy makers, and complementary to other studies addressing market outcomes.

In some cases, claims by respondents have been made which cannot be corroborated. For instance, there have been claims by many respondents across Europe about integrated utility behaviours that represent barriers to independent suppliers in the markets. Barriers apparently resulting from a lack full ownership unbundling. Such behaviours may well be regulated against, may even be considered illegal, and authorities may have powers to investigate them – and maybe do so. They are impossible to prove given the mandate and resources of the researchers of this project, yet they are widely reported by respondents and broadly documented in other researches. Such barriers may be considered allegations by the respondents, but where they appear to merit further consideration they have been raised since their potential impact on competition is substantial.

Scope & Scale of Research

The project focuses on electricity and (in most cases) gas markets in 30 European countries, namely the EU27 states plus Great Britain, Norway and Switzerland. It was conducted over the course of more than a year with the cooperation and assistance of nearly all of the relevant national regulatory authorities (the report does not however represent their views and has not been ratified by them), around 150 suppliers and many other stakeholder organizations, across all focus markets. Great Britain was included in the project and cooperation was received from numerous suppliers, the regulator (OFGEM) and other stakeholders. Switzerland and Malta were included to a lesser extent since they are not yet open markets for household customers.

Focus Markets

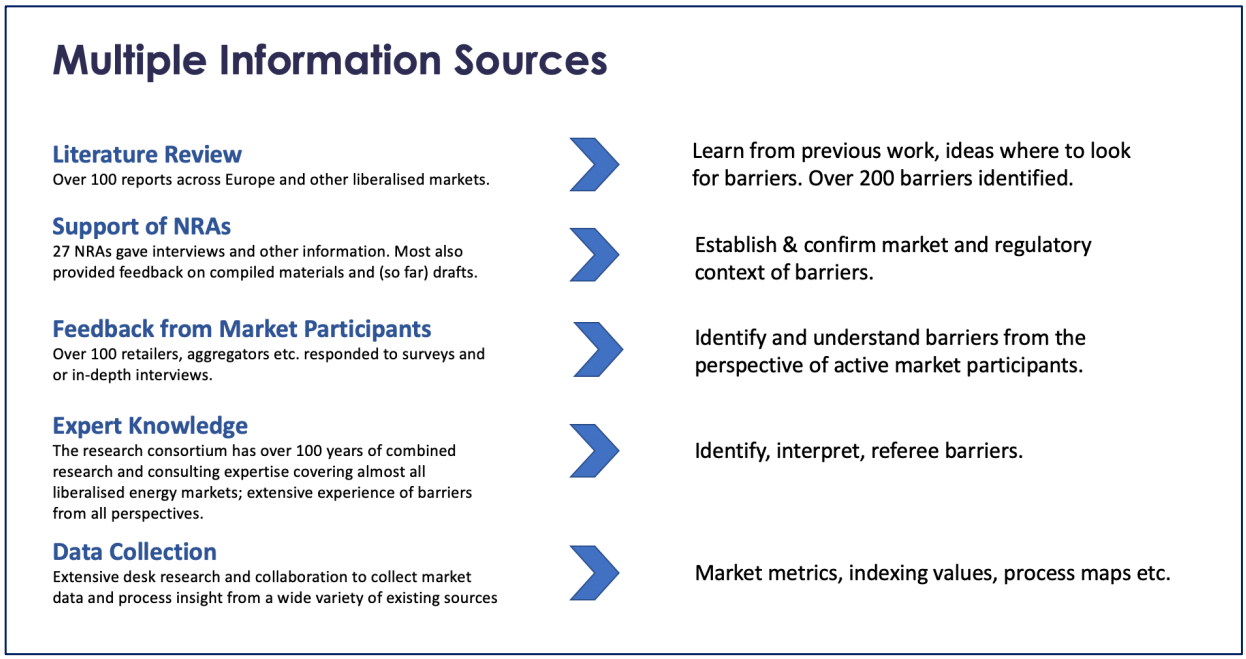
The project focuses on retail (supply), including also demand aggregation services, other additional offerings and new model retail, especially relating to the household segment customers (in some markets households and smaller SMEs may be difficult to distinguish). The project additionally concentrates primarily on barriers that are specific to the energy (electricity and gas) retail market – as opposed to barriers that are true of most markets, such as basic business costs and risk - and it gives priority to barriers for which a potential solution might be sought, as opposed to barriers which are a fact of any energy market and which could not realistically be overcome (such as the barriers relating to the core price volatility of energy as a commodity). The project does not aim to list every possible barrier in the market, however small.

Sources of Information

Many sources of information were used as part of the project. These included an extensive literature review of over 100 public reports, to assist in the targeting of survey questions; interviews with national regulatory authorities (NRAs) to understand the regulatory context in markets; feedback from market participants (suppliers and other competitors) and extensive data gathering for the purpose of collecting market metrics, market processes and

index values. For the latter the task of identifying sources that could deliver comparable and reliable index values was a key challenge of the researchers. The expert knowledge of the project consortium (which has extensive experience from the markets and issues concerned was also used to add judgement to the process. Specifically, the core project team comprised over a dozen researchers and experts from nine European countries, including international experts who have analysed Europe's energy markets since even before they liberalized.

Figure 1 – Multiple Information Sources



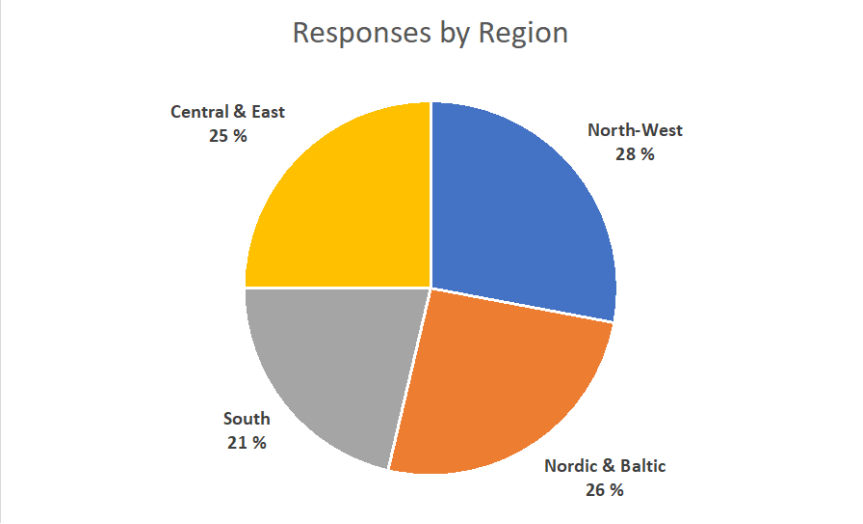
Surveys & Interviews

The primary research mediums used in the project were an extensive questionnaire and in-depth interviews. The purpose of the questionnaire, which contained separate questions depending on the type of respondent, was to provide a comprehensive and structured identification, weighting and magnitude of the barriers as experienced and perceived by suppliers and other competitors. Questions were categorized and broken down according to what was known through the body of existing literature and the experience of the project consortium, ensuring that all known barriers were addressed by the questionnaire. The questionnaire additionally facilitated the identification of barriers that hitherto had not been revealed by the literature review, or which were country specific. Interviews provided additional support and clarification to the findings from the questionnaire as well as allowing respondents to focus on top-of-mind barriers and the interviewers to dig deeper into key and / or unclear issues. While some respondents provided both questionnaire and interview responses, many provided one or the other.

The survey was publicly and widely promoted (via web sites, social media and by other direct means) to potential respondents from 17th June until late October 2019 but remained open until late February 2020 so that stakeholders contacted during Country Handbook development had the chance to respond. The dissemination of information on the project was further facilitated by a widely promoted public website through which over 300 people subscribed.

The Competitor Sample

143 questionnaire and interview responses were received representing 120 unique market-specific responses covering 28 focus markets. 71% of responses were through questionnaires versus 29% through interviews. Malta (a closed market for household customers) and Slovakia were the only markets from which responses were not received, although three additional markets received a level of response which was considered insufficient on which to conclude barriers based solely or primarily on respondent feedback. In these markets, namely Bulgaria, Cyprus, Czech Republic, the project consortium applied their expert insight and additional desk research to support the analysis of the markets. Switzerland, also a closed market for household customers, also naturally received insufficient response. The responses from 24 markets were therefore considered sufficient for the purpose of interpreting the barriers within those markets primarily based on respondent feedback. It is important to note that the response rate in no way impacted the index, which is not dependent on responses.



Analysis of the sample shows that responses were spread evenly among the regions. 66% of responses were non-incumbent competitors compared with 34% which were former incumbents in the markets concerned. In many cases the former incumbents are only former incumbents in one region within the overall country they are in. A large proportion of the former incumbents are furthermore active across multiple regions and countries, and therefore are both incumbents and non-incumbents, defenders and challengers. Among the non-incumbent players were a mix of more established competitors and more recent new entrants, along with more traditional supplies, new model suppliers and aggregators.

More information on the nature of the sample and responses can be found in the Final Report for this project.

Confidentiality

The importance of data protection and anonymity within the project cannot be stressed enough. Most respondents provided information on condition of anonymity. It was promised by default to questionnaire respondents and was in most cases explicitly requested by interviewees. Many participants additionally stated that they were nervous to respond at all since they were active in a market where there were only a handful of suppliers (or at least independent suppliers) which they felt meant that their responses could easily identify them. This risk was perceived as even greater in cases where the participant had made public statements on issues that would be contained in the research (the risk of readers putting two and two together was a concern). In some cases, respondents stated that they even feared a backlash from other stakeholders if their identity was revealed, or (for

e.g. a brand-new entrant in a market with one brand-new entrant) stated that if we revealed that they were a new entrant the market authority would instantly know who they were and that they were afraid it might inhibit their entry process.

Under such circumstances, it was decided that not only would all responses be anonymous, but also that the type of respondents would not be revealed in connection with given responses on a country level. It has been claimed by a handful of market authorities that this policy reduces the value of the research. The researchers feel that it in fact increases the value of the research since it has allowed respondents to provide information in an uninhibited fashion in a European market where, by and large, independent suppliers – and especially independent new entrant suppliers – are few and far between.

Deliverables

The project has three key deliverables:

- **28 country specific handbooks** detailing the barriers identified in each country together with suggestions for possible solutions. While most of the handbooks cover electricity and gas markets, some only cover electricity or cover gas to a lesser extent due to the absence or limited presence of gas. Additionally, two countries, Malta and Switzerland do not have country reports due to their closed nature with respect to household customers.
- **A robust, peer-reviewed barriers index** of how easy it is to do business in each country. The European Retail Energy Market Barriers Index, contained in the separate European Retail Energy Market Barriers Index Report, allows the objective comparison of market barriers across the focus markets. The report also includes a ranking of the focus markets.
- **An overall Final Report** containing a full project description and bringing together the findings and common learnings from all countries.

The Barrier Index and Ranking

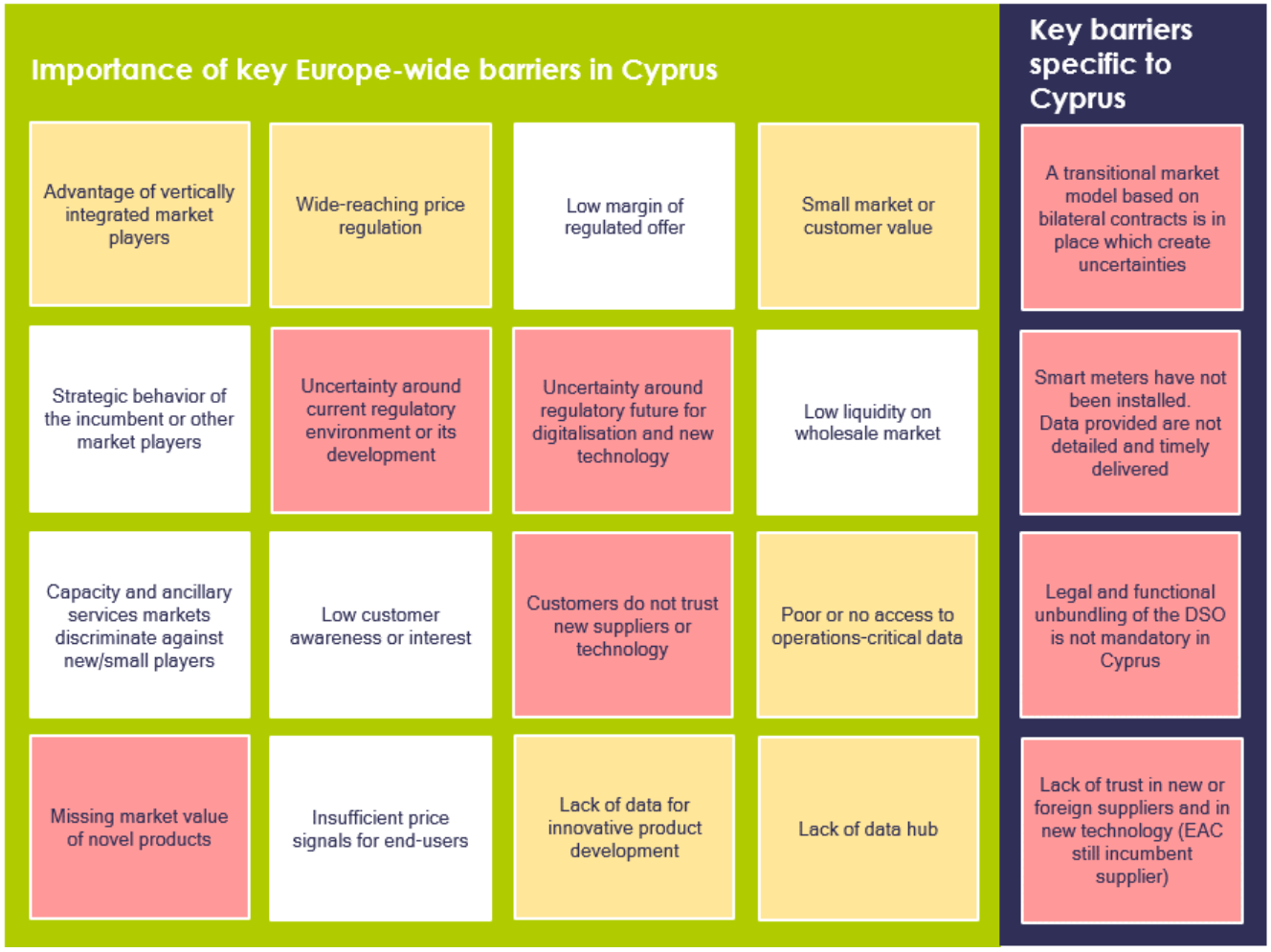
The purpose of the 'European Retail Energy Market Barriers Index' is to enable a degree of comparability between the barriers' context in each of the markets. It is based on metrics that can be collected for all markets, metrics for which available data currently exists. As such it provides a simple, best-available proxy benchmark measure for each of the categories of barriers identified by the project, for each market, and thereby ranks each market. It is intended to be used as an evolving periodical index and ranking on a European and national level.

The index and ranking should, however, presently be considered more of an approach and an indication than an absolute or definitive ranking. It represents the current state of market monitoring data in Europe and will evolve over time as data availability improves. Over time we would expect and recommend that governments and NRAs advance new metric collection to better enable future editions of the index and ranking.

A full description of the Index, its methodology and detailed findings and the ranking can be found in the separate Index report for this project. Within each country handbook the index values for that given country is presented.

Key barriers in the Cypriot market

The following figure highlights the key barriers identified in the Cypriot market. Please note, the terms are generic across all researched markets.



LEGEND

Has not been raised, indicated or identified as a barrier in this country

Has been raised or indicated as an issue in this country

- May include issues that still are present in the country or are experienced by suppliers even though regulation to address the issue has been enacted by the regulator and effects still awaited; reporting a lag between the regulatory framework structure and its awaited effects
- May include issues where suppliers suffer the effects despite the country being relatively advanced on this topic compared with other EU countries, pilot projects being in place or institutions working to overcome the problem.

Has been identified as an issue in this country and is supported by facts, data or substantial respondent evidence in light of limited initiatives deployed by institutions to control or overcome the issue.

Key recommendations

Identified barriers, can stifle market development and functioning, hence we set a list of recommendations going in the direction of a well-functioning retail energy market, as one where there is a good environment for innovation of energy services and products that benefit the consumer.

- Currently, in Cyprus, although other supply licenses have been issued, no one except the incumbent supplier is selling electricity to the end customers. The retail regulatory framework is a legacy of the monopolistic structure of the retail market and suppliers perceive it as unsuitable for competition. The wholesale market is still at a transitional stage based on bilateral contracts. This system should be reviewed with price regulation aimed only at real vulnerable customers and with incentives to switch for customer reducing their inertia and deploy new services also hindered by this situation.

- A new market model is in place but actions to implement tracked directives to define the new regulation at wholesale and retail level are recommended. The Regulator should also have a higher engagement with new suppliers that want to access a market that is beginning a new phase of having a competitive market.

- Being a small isolated market, it is hard to make a comparison exercise with other EU market in terms of solution to introduce competition and mitigate actual risks. However, if a certain degree of competition is envisaged for the retail market, ad-hoc actions must be deployed. Recommendations to this regard goes in the direction of compulsory reduction of EAC market share with fixed rules aiming at promoting a degree of liquidity at wholesale level (divestment up to 50% in generation, development of new transborder interconnection infrastructures and the start-up of wholesale market).

- Efforts for standardisation of formats and processes are recommended. It is recommended to adopt measures to tackle the hampering effects of lengthy licensing process, like cutting the bureaucracy and providing better information on the documents necessary for licensing, introducing one-window procedures and simplified procedures.

- To improve data access and provision, a central platform for gathering data for suppliers is of great importance and should include required information, regulation and centralized access to DSO platforms.

- Seminars on new procedures and data accessibility are recommended for new supplier induction.

- To raise customer awareness and trust towards new suppliers, offers comparison tools need to be introduced, together with customers associations to monitor supplier’s behavior.

- Other recommended activities are the enhancement on suppliers precontractual and customer information provision and the customers associations to better monitor suppliers’ behaviour, preventing unethical behaviour enhancing market attractiveness and reliability.

MARKET OVERVIEW

Introduction

In 2018, gross electrical energy generation reached 5,022 GWh (+1% from 2017 levels, +2% from 2016 level). Electricity demand is recovering rapidly following a substantial reduction in 2013-2014 due to the economic crisis. The incumbent EAC contributed with 4,570 GWh (91%) produced by diesel oil power plants (CCGT, steam turbines and internal combustion engines). RES producers (Onshore wind, PV, biomass) generated 452 GWh (9% of the gross yearly generation). Natural gas is not yet available in the country.

Number of customers	Electricity	Gas
Household	444,895	n.a.
SMEs	87,065	n.a.
Industrial	9,760	n.a.

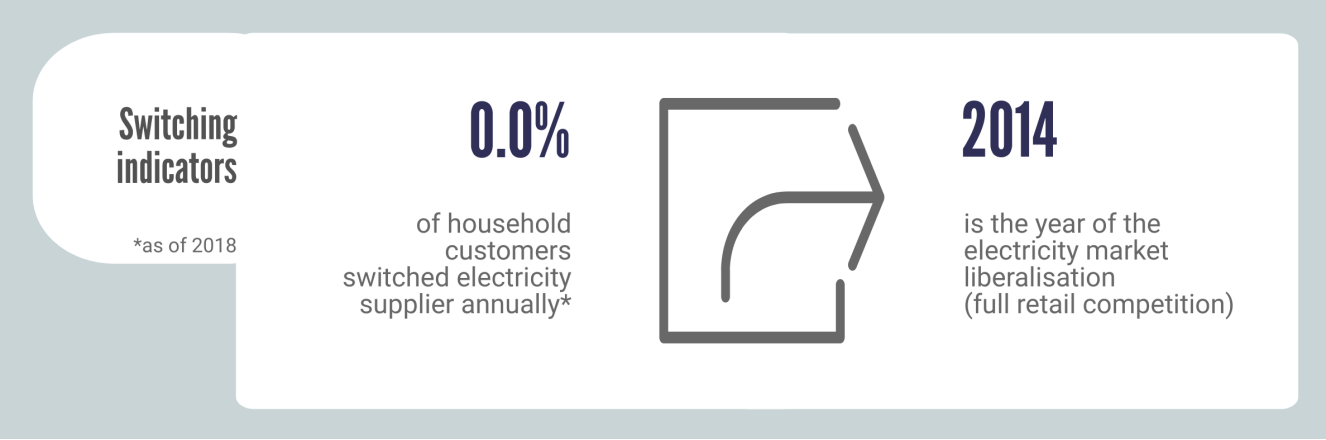
Background

The Republic of Cyprus is qualified as a “small isolated system”, as defined in point 26 of Article 2 of Directive 2003/54/EC. According to that provision, a “small isolated system” means any system with consumption of less than 3,000 GWh, and where less than 5% of annual consumption is obtained through interconnections with other systems. In 1996, the Republic of Cyprus consumed 2,315.3 GWh and still has no electricity interconnections to other countries. However, a new subsea interconnection cable, with a total capacity of 2000 MW (twice the current Cyprus peak load) is going to be built[1], connecting Cyprus with Israel on one side and with Crete and continental Greece on the other. Now, both countries register much lower electricity prices suggesting that agreement and structure regulating Cypriot future interconnections may impact electricity prices (e.g. market coupling). Will Cypriot customers be able to purchase imported electricity? Will it be cheaper than EAC generated one? What will be the fate of EAC market share? The Commission, by its Decision of 25 September 2006 (2006/653/EC), granted Cyprus a derogation from Article 21(1) of Directive 2003/54/EC, regarding the “Progressive market opening towards full competition”. The derogation from Article 21(1)(b) of Directive 2003/54/EC, which concerns the

[1] https://euroasia-interconnector.com/

eligibility of non-household consumers, was granted until 31 December 2008. The derogation from Article 21(1)(c) which concerns all remaining customers was granted until 31 December 2013.

Hence, the theoretical liberalization of the electricity market was legally achieved on 1st January 2014. However, in practice, the incumbent the Electricity Authority of Cyprus (EAC), a public body, remains the sole power supplier. In 2018, gross electrical energy generated reached 5,022 GWh. EAC contributed with 4,570 GWh (91%), while RES producers generated 452 GWh (9%). To date most electricity is generated in oil fired power plants; the plan is to switch to cheaper and cleaner natural gas.



Currently Cyprus operates under a transitional arrangement which permits bilateral contracts between producers and suppliers (above a threshold set by CERA). The threshold was originally set at 4.5 MW for producers and 10 MW for suppliers. The supplier threshold was reduced to 50 kW in April 2019. The transitional phase, according to the law would automatically end with the entry into force of the TSR which implement the EU target model, which according to Regulatory Decision 01/2017 - ΚΔΠ 34/2017 regarding the "Application of a binding Timeframe for the full commercial operation of the new electricity market model" was originally foreseen for 1 July 2019. However, complications with the tendering procedure for obtaining a Market Management Software by the TSO delayed this process, with the current expected date for Entry into force of the TSR and alignment to the EU Electricity Target Model foreseen to be the end of 2021.

Regarding the natural gas sector, currently, there is no natural gas for industrial and commercial use in Cyprus. Further to the study carried out by the Natural Gas Public Company Ltd (DEFA Ltd) on the development of the natural gas market in Cyprus in order to exploit the most suitable solution for the import of LNG in the coming years, a Decision of the Council of Ministers assigned DEFA Ltd in June 2017 to announce two tenders for long-term LNG supply and for a strategic investor for the required infrastructure.

Following a Decision of the Council of Ministers in April 2018, a Special Purpose Vehicle (SPV) was established under the name of Natural Gas Infrastructure Company Ltd (ETYFA LTD - EAC owns 30% of ETYFA share

capital[2]), which will implement the necessary LNG facilities. Benefiting from an EU grant from the Connecting Europe Facility (CEF) budget and from an EIB soft loan.

DEFA Ltd, acting on behalf of ETYFA, published in October 2018 a tender for the design, construction and operation of the LNG terminal in Vassilikos bay (across EAC power plant).
The LNG construction contract at Vassiliko with an international consortium has been finalized, on 13 December 2019. Under the terms of the contract, the construction of the project is estimated to be completed in 24 months from the day ETYFA instructs the Consortium to begin work. In accordance with ETYFA , in theory, the project is expected to be completed by 2022.

Concerning the structure of the market, the Council of Ministers with its decision dated 5 June 2019 decided to appoint DEFA as Transmission System Operator, Distribution System Operator and LNG Facilities Operator for a period of 30 years upon obtaining the required licences by CERA. Also, gas from Cyprus recently found reserves is not expected to be available before 2025.

Market structure

Cyprus is currently preparing for the full implementation of a net pool model and full market opening.

The Cyprus Transmission System Operator of Electrical Energy (TSOC-ΔΣΜΚ) is the legally unbundled transmission system operator. TSOC is located separately from the vertical integrated incumbent EAC and has its own brand name. Under the current legislation, the TSO is obliged to act independently from production, distribution and supply. However, under the current law the personnel of the TSO are employees of EAC. This is currently under revision as the law has undergone public consultation and is expected to be finalized within 2020. In accordance with this draft bill the TSO will be legally unbundled and will have its own employees. . Article 9 of Directive 2009/72/EC and the EU certification process for TSOs is not applicable to Cyprus, however as per the draft bill a hybrid model of the TSO is included that will follow a type of certification procedure.

The electricity distribution operator is a business unit within EAC obliged to establish a compliance program.
An annual report, setting out the measures taken in the context of the compliance program is submitted to the Cyprus national regulatory authority (CERA) for approval.

EAC is the incumbent, main power producer and sole supplier. The regulator, CERA, has issued 13 supply licenses but no other suppliers are active yet. It is expected that the situation will change following the implementation of the net pool model (see next section).

[2] http://www.gasprocessingnews.com/news/eac-takes-a-30-stake-in-defa-subsidiary-etyfa.aspx.

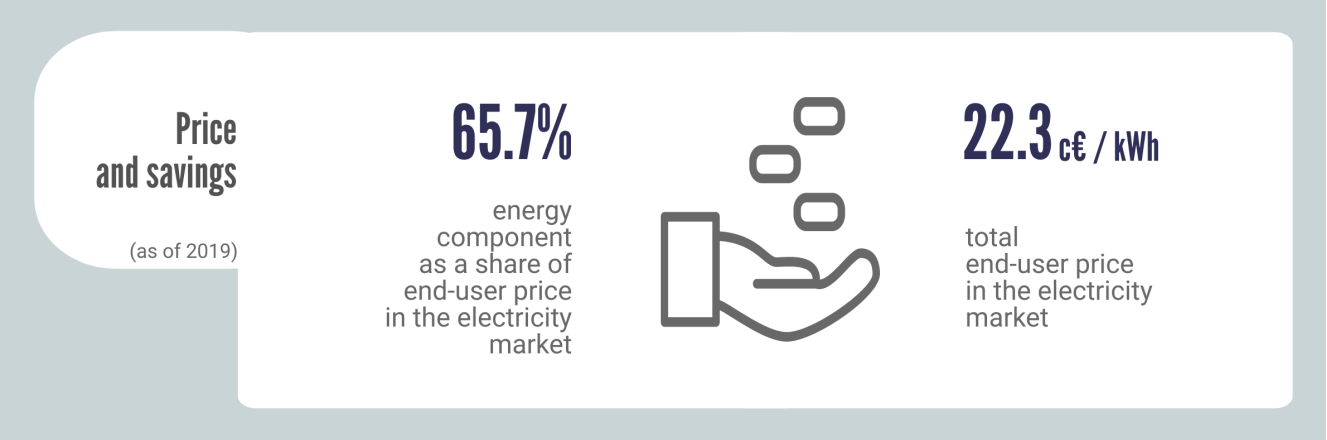
Political and regulatory orientation

Cyprus is taking actions towards the finalisation of the net-pool design and the operation of the market under the new rules by the end of 2021. An open tender for the procurement of the market management system is close to its conclusion and the signing of a contract (March 2020). Following the award of the tender, the system is expected to become operational within 18 months. The Commission in its evaluation of the Draft integrated National Energy and Climate Plan of the country submitted in the context of Regulation (EU) 2018/1999 acknowledges progress but notes delays in the implementation. The Commission also calls for emphasis on flexibility and the need to reflect real-time price signals and for the removal of barriers the participation of aggregators. In accordance with the draft bill that was on public consultation part of flexibility issues are incorporated as well as aggregators. It is expected that revised plan will include further provisions to address the comments of the Commission.

Regulatory market characteristics

Price regulation

Electricity prices are currently regulated by CERA. The tariffs are set according to RD 02/2015 - ΚΔΠ 208/2015 “Statement on Regulatory Practice and Methodology of Electricity Tariffs” and tariffs for natural monopolies are regulated for all suppliers while tariffs for competitive activities are regulated only for suppliers and/or producers with dominant position. The price of electricity (energy price) is only regulated for suppliers and/or producers with a dominant position.



Regulatory orientation

Currently the market operates under a transitional regime which foresees solely for bilateral contracts between producers and suppliers for the supply of a standard quantity of electricity (kWh) on a monthly basis. The transitional period of the electricity market in Cyprus started on 1 September 2017 and will be in force until the full implementation of the new electricity market model (approximately by the end of 2021).

Planned regulatory developments

The Net-Pool model, currently under implementation, will incorporate a bilateral contracts market, a central Day Ahead Market (DAM) and a real time balancing mechanism. An Intra-Day Market will be provided at a later stage (2 years after the beginning of operation of the Net-Pool model).

Context for aggregation/demand response

Aggregation according to the TSR that implement the Net-Pool model is allowed for RES producers only. Specifically, RES producers with plants under 1 MW cannot participate directly in the market but have to do so through a “RES” aggregator. Yet, no aggregators are currently active in Cyprus. A RES aggregator can represent RES plants of a total maximum capacity of 20 MW.

The current TSR is version 2.1.0 which was approved by the CERA on 26th of November 2019, included changes that allows the participation of demand response in the market through the Demand Response Representative which is an independent entity.

BARRIERS

The European Barriers to Entry and Competition in Retail Energy Markets project has researched barriers across 30 European markets. From this research, barriers to entry have been identified and grouped into four over-arching pan-European barriers' blocks.

Over-arching pan-European barrier blocks

Barrier Blocks		
	1	Regulatory disincentivisation
	2	Market inequality
	3	Operational and procedural hinderance
	4	Customer inertia

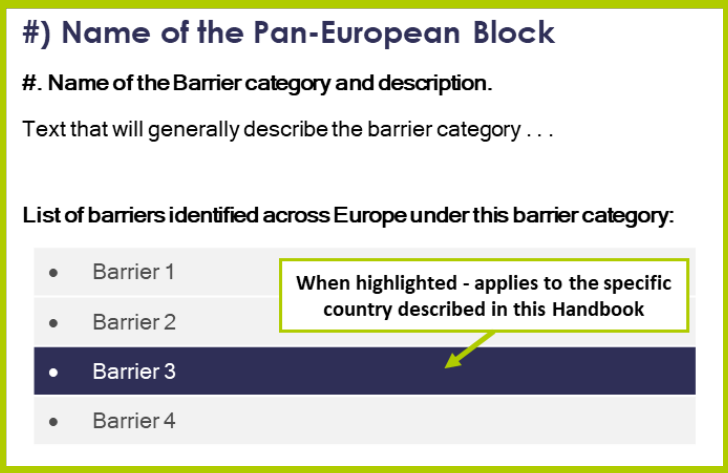
Description of the four-over-arching pan-European barrier blocks:

1. **Regulatory disincentivisation:** barriers arising as a consequence of the general regulatory framework of the natural gas and electricity retail markets. We address the impact of price regulation, burden (-sharing), regulatory unpredictability and access to innovation. All these items may disincentivize competition within the natural gas and electricity retail markets, as well as entrance by new suppliers.
2. **Market inequality:** barriers arising from an uneven playing field for different types of suppliers. Often, certain market players already have a competitive advantage by being very close to the formerly integrated DSO (or still being vertically integrated in case the de-minimis rule applies), controlling a large amount of generation capacity or having a large market share. If market rules do not prevent this, such players can exercise their market power to treat other market players in a discriminatory way, creating market barriers. We examine issues related to unbundling, historical roles and access to market mechanisms.
3. **Operational and procedural hindrances:** barriers arising as a consequence of the complexity and national/regional differences in standards and procedures in different process areas, affecting how easily new entrants can enter and operate in the energy retail market. We look at issues and differences in licensing, signing up and operations compliance, as well as data access, processes and data management from the suppliers' point of view.
4. **Customer inertia:** barriers arising due to customer behavior and attitude. For the energy market to function, end-users must be willing and able to switch supplier. If customers do not switch supplier, suppliers need not worry about losing customers, so there is no incentive for suppliers to improve their services, minimize prices or innovate to compete for customers. We examine barriers related to customer inactivity or disinterest in the energy markets.

Within each of these high-level blocks are contained sub-categories, which are also mostly pan-European in nature. Each of these sub-categories contain the specific barriers which relate to individual markets as described in the following page. Altogether, we identified 45 barriers, most of which broadly across Europe. Only a selection of them apply to the Cypriot case as reported in the following chapters of this handbook.

HOW TO READ AND INTERPRET THE FOLLOWING SECTIONS

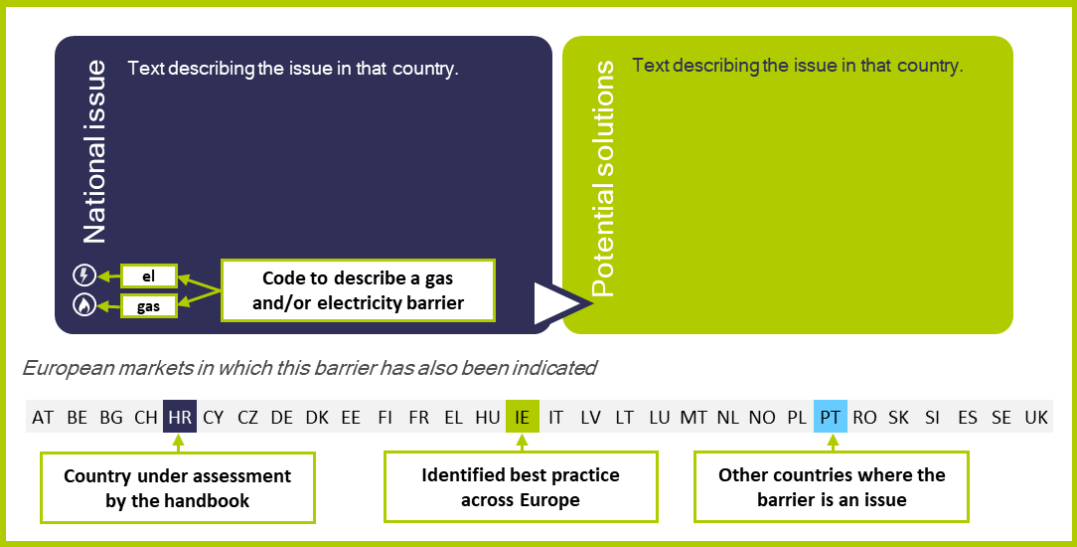
Each of the following four chapters explores one of the four pan-European blocks of barriers and report how each sub-category barrier apply to Cyprus. When a barrier applies to Cyprus, it will be highlighted in the table following a general description of the barrier itself, as shown in the example below:



As showed in the above figure, the table lists all the barriers we have identified in Europe within the specific barrier category. **Only if a sub-category barrier is highlighted in the table, it means that suppliers raised it as a barrier, and it is perceived as a prevalent issue in Cyprus**.

Highlighted sub-category barriers are then briefly described following a twofold methodology which:

- reports what the suppliers are experiencing in the market as a national issue and
- suggests potential solutions to the problem as depicted in the below figure.



At the end of each chapter, Cypriot's performance within the category, according to quantitative indicators, is then presented.

For additional market context, please see Appendix 1: Process Maps, which gives a high-level graphical overview of the most critical steps involved in establishing and operating as a supplier in the national market.

1) Regulatory disincentivisation

Within regulatory disincentivisation, barriers across Europe have been sub-categorised into four areas encompassing 17 specific barriers[3].

1. **Price regulation.** Regulated prices usually refer to regulation or control of end-user's prices by a public authority, usually the National Regulatory Authority (NRA). Price regulation can take different forms, such as setting or approval of prices, price caps or various elements of these. In Europe, there still exist Member States which have maintained end-user regulated prices during the market opening process and after, in the intention of protecting households or even non-household customers from significant increases in energy prices, especially in a context of limited competition. In some cases, this regulation has led to below cost prices and to low margin to cover the supplier activity risk, discouraging investments and the emergence of newcomers.

   According to CEER[4], 14 European countries out of 27 answering a recent CEER survey have price intervention in electricity for household consumers. Where regulated prices remain, NRAs tend to consider them as a significant barrier to entry for alternative suppliers. All Member States, where NRAs consider regulated prices as a significant barrier, are planning to remove them, at least for non-household customers. Across Europe, the following specific barriers related to price regulation were detected by this study. Those highlighted in blue have been either raised, indicated or identified as barriers in Cyprus:

   - Price regulation discriminates against certain suppliers.
   - High penetration of price regulation
   - Low margin of regulated offer (margin squeeze)

2. **Burden sharing.** Energy suppliers across Europe are often required to collect payments for services not part of their business, or to provide other services such as services related to energy efficiency, or to manage assets such as those of the metering system. These requirements can pose a barrier for suppliers' operation on the retail market by raising their costs and distracting focus from their core business and might deter entry into the retail market by newcomers. Across Europe, the following specific barriers related to "burden(-sharing)" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus:

   - Obligation to collect tariffs unrelated to energy on behalf of others
   - Obligation to keep a minimum-security stock as a gas reserve

3. **Regulatory unpredictability.** The establishment of an internal natural gas and electricity market in the European Union is an ongoing process. European legislative packages are boosting this process, making

[3] Please note: these definitions are Europe focused, not Cypriot specific. Highlighted barriers have been identified as country specific

[4] Monitoring Report on the Performance of European Retail Markets in 2018. CEER Report 4 November 2019.

market regulation evolve rapidly. Transposition of regulation into the national regulatory frameworks is not always smooth and NRAs' actions are sometimes unpredictable. This leads to uncertainties for suppliers related to unclear and unknown future developments of the regulatory framework, including the attitude of the institutions that regulate the retail market and oversee market operation and organization. This uncertainty is a barrier that impacts suppliers' business, preventing their entrance in the market, making strategic business planning difficult or forcing them to adopt different approaches during operation. Across Europe, the following specific barriers related to "unpredictability of regulatory framework" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus:

- Suppliers face uncertainty because of a newly liberalized regulatory environment or uncertain future development of the regulatory framework
- Uncertainty caused by industry actors influencing legislation, e.g. incumbent or associations shape legislation
- Uncertainty regarding future regulatory developments, especially in the field of digitalization and new technology
- Attitude of authorities hinders development of the market
- Uncertainty regarding environmental obligations and non-renewable generation capacity

4. **Access to innovation.** Most European energy market are currently designed based on practices as they were during the period of national monopolies by what today are incumbent suppliers. Allowing suppliers and new entrants to be innovative depends not only on the opportunity to compete on prices, but also to diversify, welcoming new products, market actors and business models. When national regulatory frameworks do not take into account innovation in the retail market (regarding e.g. availability and functionality of smart metering, the possibility of flexible contracting and tariffs, or whether the demand side can bid in the balancing system), this may pose a barrier for new market entries, particularly more modern players. If new entrants are to be enabled in order to increase the level of competition in the retail market, regulations must accommodate future developments on the energy markets, especially considering that in the future new entrants may not only be electricity and gas suppliers but also act as aggregators or energy service companies (ESCOs). Across Europe, the following specific barriers related to "innovation-friendliness" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus:

- Data protection issues
- Lack of incentivisation for novel pilot projects or post-pilot market rollout
- Lack of data for innovative product development
- No fit between new business models and existing regulation/obligations
- Missing flexibility in tariff structures
- Missing information and incentives for demand-side grid management
- Market structures does not incentivize novel products (missing market value)

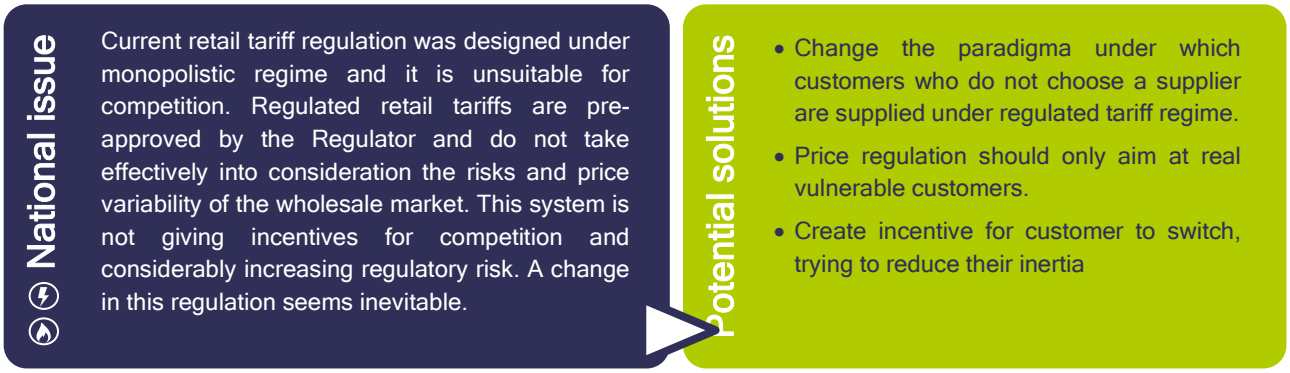
1.1 Description of regulatory disincentivisation barriers in Cyprus: Price regulation

Price regulation discriminates against certain suppliers. In the research this barrier was indicated as an issue in Cyprus.

Generally, the level of discrimination depends on the specific design of the country regulation. For instance, setting rigorous thresholds to enable suppliers to offer regulated price to a specific customer segment, may per se exclude suppliers of a certain size or characteristic.

In Cyprus, however, the dominant operator tariffs are regulated by CERA. Nonetheless customers are free to choose whether they will be supplied by a regulated supplier or by another supplier with prices settled by the market.

Identified national issue and related potential solutions regarding the Cypriot case are reported in the graphic below.



European markets in which this barrier has also been indicated

AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

1.2 Description of regulatory disincentivisation barriers in Cyprus: Burden sharing

No substantial barriers were raised in relation to burden sharing in Cyprus.

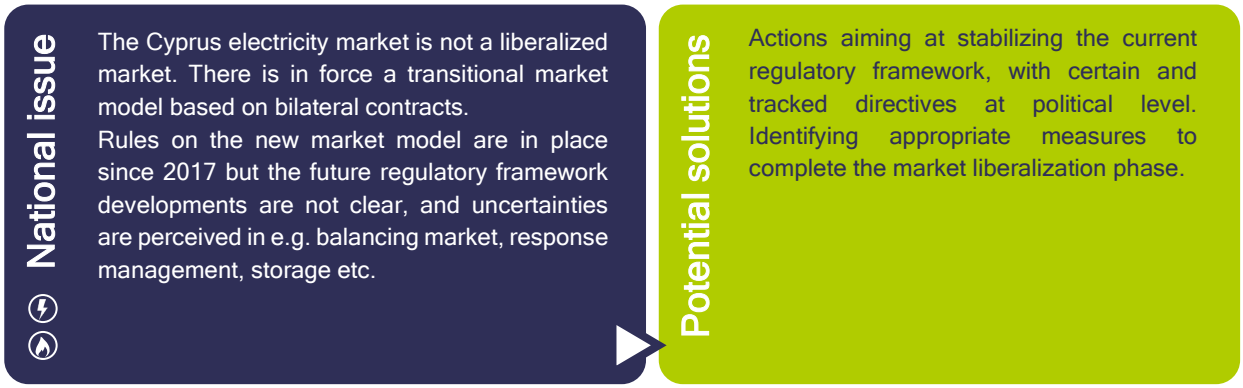
1.3 Description of regulatory disincentivisation barriers in Cyprus: Regulatory unpredictability

Suppliers face uncertainty because of a newly liberalized regulatory environment or uncertain future development of the regulatory framework. In the research this barrier was raised as an issue in Cyprus.

In general, suppliers may experience uncertainty because of unpredictability around what the future regulatory framework will look like and hence what business opportunities will be possible.

In Cyprus, new rules on the new electricity market model are published since May 2017, However, suppliers perceive uncertainty regarding thin new regulation.

National issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.



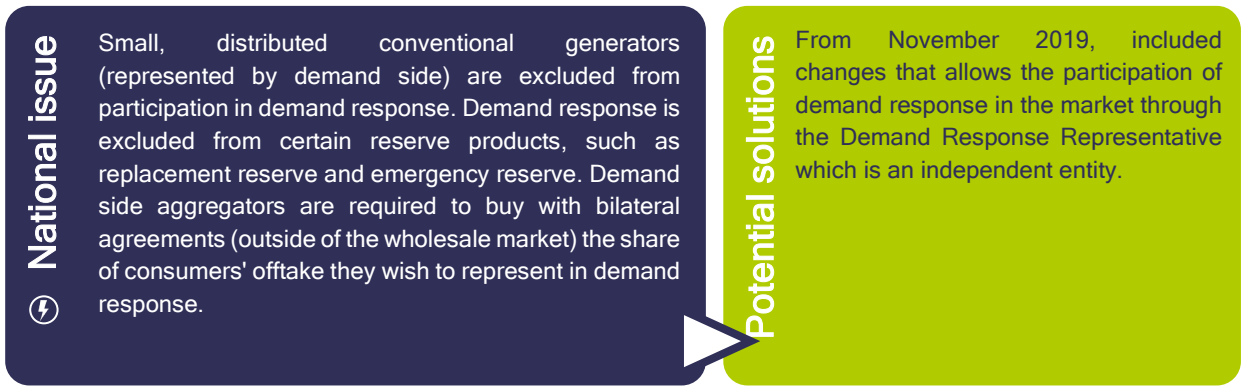
European markets in which this barrier has also been indicated

AT	BE	BG	HR	CY	CZ	DE	DK	EE	FI	FR	EL	HU	IE	IT	LV	LT	LU	NL	NO	PL	PT	RO	SK	SI	ES	SE	UK

Uncertainty regarding future regulatory developments, especially in the field of digitalization and new technology. In the research this barrier was identified as an issue in Cyprus.

Generally, new technological advances require regulatory frameworks in order to be fully rolled out without excessive business risk for suppliers. Also, regulatory uncertainty regarding the future of demand response aggregation or other novel services can hinder investment/innovation in these areas.

National issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.



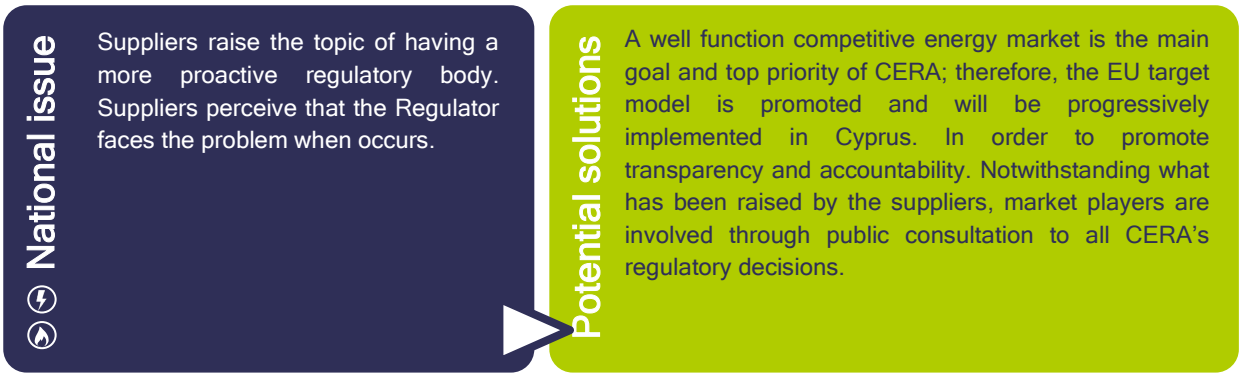
European markets in which this barrier has also been indicated

AT	BE	BG	HR	CY	CZ	DE	DK	EE	FI	FR	EL	HU	IE	IT	LV	LT	LU	NL	NO	PL	PT	RO	SK	SI	ES	SE	UK

Attitude of authorities hinders development of the market. In the research this barrier was raised as an issue in Cyprus.

In general, the Regulator, the TSO and/or government do not view a well-functioning competitive energy market as a high priority or are mistrustful towards new products and services.

National issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.



European markets in which this barrier has also been indicated

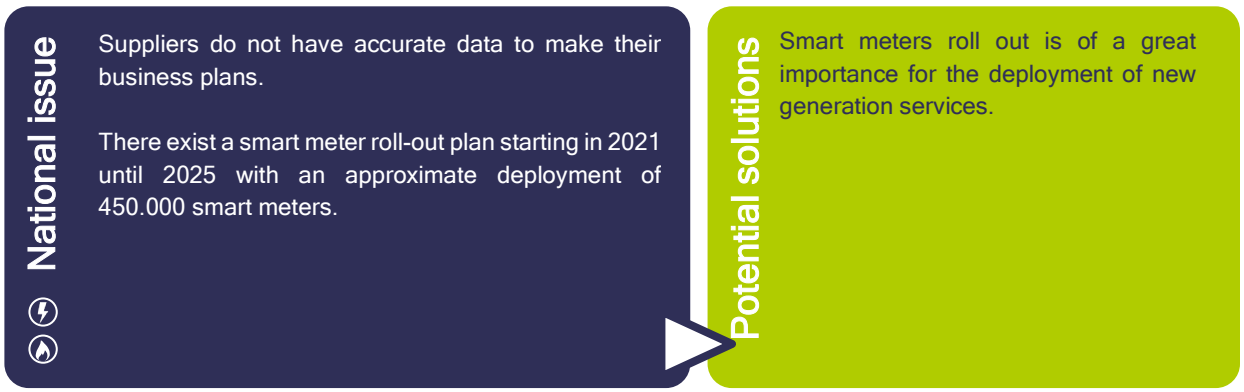
AT BE BG HR **CY** CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

1.4 Description of regulatory disincentivisation barriers in Cyprus: Access to innovation

Lack of data for innovative product development. In the research this barrier was raised as an issue in Cyprus.

Generally, smart meters open-up opportunities for novel demand-side and aggregation services that rely on almost real-time consumption data to be able to match grid requirements and balancing product bids.

National issue raised by suppliers and related potential solutions regarding the Italian case are reported in the graphic below.



European markets in which this barrier has also been indicated

AT BE BG HR **CY** CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

No fit between new business models and existing regulation/obligations. In our research this barrier was raised as an issue in Cyprus.

In general, regulatory frameworks need to provide an environment for not only piloting new business models but also allow for further advancements without risking any grid stability, e.g. net-metering schemes and self-consumption. Also, regulatory requirements/obligations designed for traditional suppliers may not make sense for innovative players who are nonetheless bound by them.

National issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.

European markets in which this barrier has also been indicated

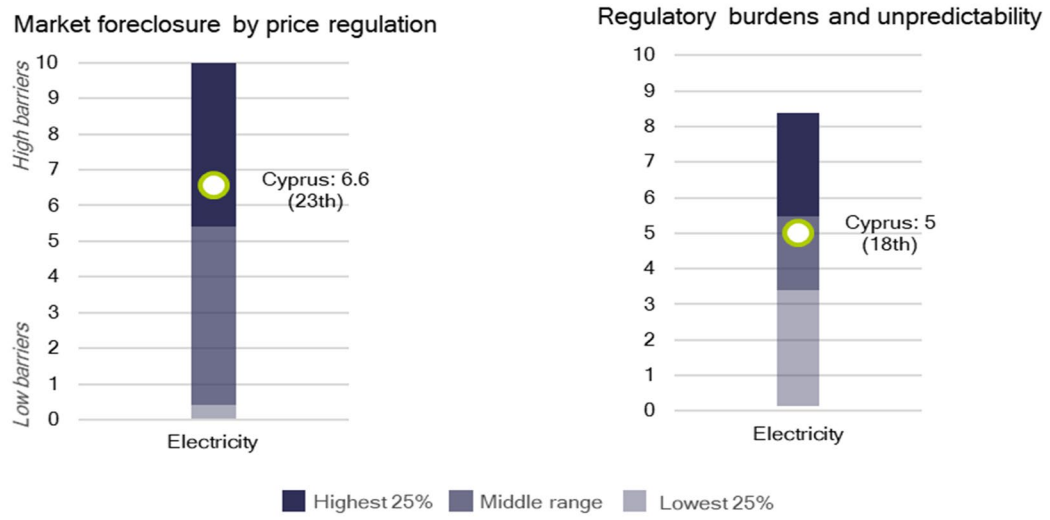
AT BE BG HR **CY** CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

1.5. Cyprus's performance in this barrier category

The following figure shows quantitative indicators of how far regulatory disincentivisation acts as a barrier in this market. The values for Cyprus are shown against the range across all analyzed countries. These scores contribute to the performance index. The performance indicators of regulatory disincentivisation are the following:

- **Market foreclosure by price regulation**: The index consists of two sub-indicators, the penetration of price regulation (among residual customers), and the mark-up of the regulated offer. A high score is attributed if a high share of customers is supplied at regulated price, and the mark-up is significantly lower than the average mark-up on the competitive markets.
- **Regulatory burdens and unpredictability**: The index consists of two sub-indicators. Regulatory burdens reflect the non-energy share of the energy bill in an average household, which are regulated (taxes, network fees). Regulatory unpredictability was measured via the related question in the supplier survey conducted for this project. A high score is attributed if the share of the non-energy elements is high, and if survey respondents scored the question highly (as an important barrier).

Performance indicators



Cyprus was ranked in the high range for market foreclosure indicator. Nonetheless in regulatory burdens and unpredictability has been ranked in the upper bound of the middle range. Scoring respectively 23rd and 18th in the two indexes.

2) Market inequality

Within market inequality, barriers across Europe have been sub-categorised into two areas encompassing 8 specific barriers[5]:

1. **Unbundling and market power.** In order to facilitate better competition and improve performance of the individual parts of the energy companies, the Energy Directives introduced rules for legal, functional and accounting unbundling between DSOs and supplier. Although legal unbundling has been implemented throughout all EU member states, barriers arising from vertical integration can still be observed in many markets, raising the question if the required level of unbundling is sufficient in order to meet the goal of a fair and competitive retail market. Companies serving less than 100,000 customers are only obliged to implement accounting unbundling.

   In order to avoid confusion among end customers between the separate parts of integrated energy businesses, brand unbundling has been a focus area for NRAs over the last years. Nevertheless, in several EU countries, the difference in the branding of the supplier and the DSO is perceived as insufficient. Strategic and unfair advantages for incumbent suppliers around transparency, pricing and access to information and data occur in most of the European countries studied. Access to production capacities can also be limited for small suppliers if market players with a large generation portfolio can

[5] Please note: these definitions are Europe focused, not Cypriot specific. Highlighted barriers have been identified as country specific.

withdraw production capacity from the accessible markets. Balancing and ancillary services markets can also be distorted as they are often still designed to mainly benefit large-scale generation, discriminating against smaller market participants. Below, we describe these barriers related to market power in more detail.

Across Europe, the following specific barriers around "unbundling and market power" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus:

- Lack of brand unbundling
- Discriminating, strategic behaviour of incumbent, and obstruction by other market players.
- Strategic, unfair advantage of vertically integrated market players and lack of transparency.
- Limited or biased access to production.
- Discrimination against new and small market players in capacity and ancillary services markets.

2. **Equal access to and maturity of wholesale market.** The wholesale markets present one of the most important sources for energy procurement for all market participants. New and small suppliers tend to have weaker bargaining position in bilateral negotiations, which occurs higher sourcing costs, therefore leading to a competitive disadvantage. Access to a well-functioning wholesale market (an energy exchange) therefore enables smaller suppliers to buy energy for competitive prices.

   Barriers related to the wholesale market can arise by discriminatory market platform access and the absence of any viable alternative. Furthermore, a lack of available products and low liquidity can both lead to an increase in risk, disadvantaging small market participants substantially more than large, established suppliers. Across Europe, the following specific barriers around "equal access to and maturity of wholesale market" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus:

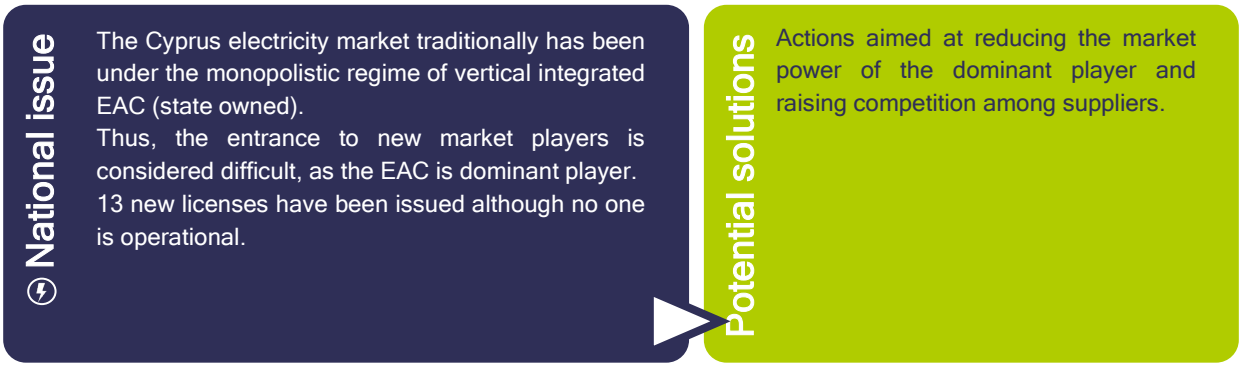
- Discriminatory market platform access (standards, guarantees, etc.)
- Low liquidity in the wholesale market
- High price or volume risk in energy procurement

2.1. Description of market inequality barriers in Cyprus: Unbundling & market power

Discriminating, strategic behaviour of incumbent, and obstruction by other market players. In our research this barrier was identified as an issue in Cyprus.

In general, the incumbent/existing suppliers across Europe are able to use tactics in pricing, customer access, combined billing (including the cost of social tariffs) etc. not available to new entrants. Negatively affecting small suppliers with only a limited customer base.

National issue identified by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.



European markets in which this barrier has also been indicated

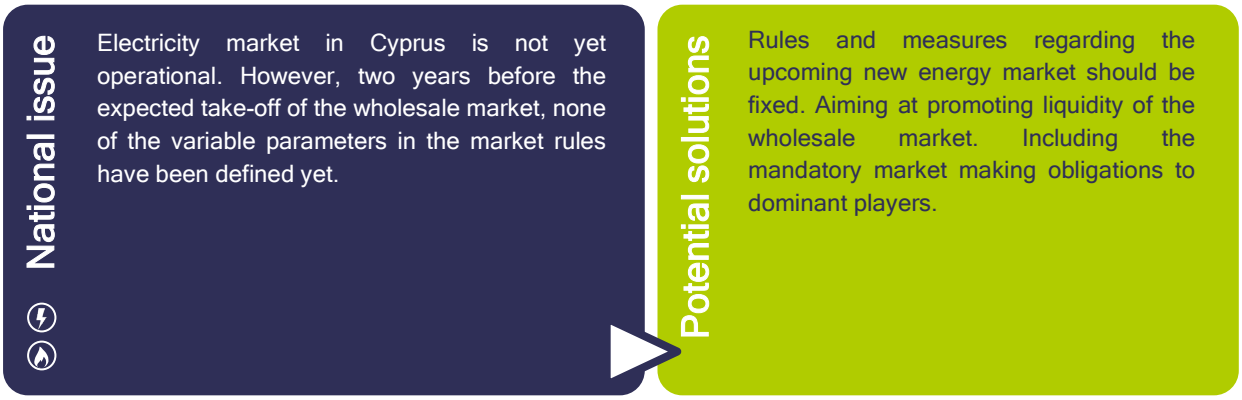
AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

2.2. Description of market inequality barriers in Cyprus: Equal access to & maturity of wholesale market

Low liquidity in the wholesale market. In our research this barrier was raised as an issue in Cyprus.

In general terms, a lack of liquidity in the wholesale market is a barrier to operation as it leads to higher prices and risks, and therefore increases sourcing costs.

Cypriot national issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.



European markets in which this barrier has also been indicated

AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

High price or volume risk in energy procurement. Some respondents in Cyprus raised this as a barrier. Volume and price risk, due to the difference in time and volume between procurement and billing, raises risks for market participants and therefore presents a barrier. This is a problem in combination with a lack of hedging opportunities that would allow companies to insure against wholesale price fluctuations.

European markets in which this barrier has also been indicated

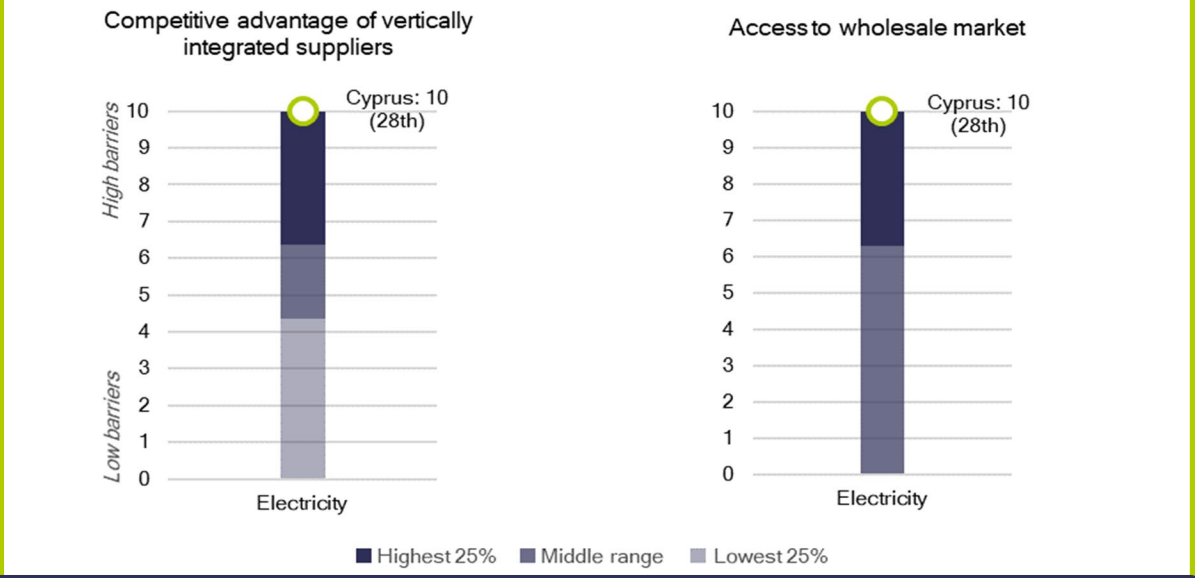
AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

2.3. Cyprus's performance in this barrier category

The following figure shows quantitative indicators of how far market inequality acts as a barrier in this market. The values for Cyprus are shown against the range across all analyzed countries. These scores contribute to the performance index. The performance indicators of market inequality are the following:

- **Competitive advantages of vertically integrated players.** The index consists of two sub-indicators, the market share of vertically integrated suppliers (on the residential market), and the strictness of DSO unbundling. A high score is attributed if the vertically integrated suppliers have a high aggregated market share, and the unbundling regime is not very strict (brand unbundling is not in force, high share of local, integrated companies).
- **Access to wholesale market.** The indicator measures the accessibility of the wholesale market by quantifying the liquidity of wholesale markets. High score is attributed if the traded volume is relatively low compared to the consumption of the country (churn rate). Traded volume includes volumes that are traded at hub as recorded by brokers (OTC) or exchanges and does not include 'contracted' (LTC or other bilateral deals) volumes which are conducted 'off market'.

Performance indicators



Given the situation in the Cyprus electricity market, for both indicators Cyprus scored in the higher range. Scoring 28th in the Competitive advantage of vertically integrated suppliers and 28th in the access to wholesale market general ranking.

3) Operational and procedural hindrances

Within operational and procedural hindrances, barriers across Europe have been sub-categorised into two areas encompassing 13 specific barriers[6]:

1. **Sign-up & operations compliance.** Sign-up, licensing or registration, along with other administrative requirements or system establishment such as arranging contracts with relevant stakeholders (TSOs, DSOs, BRPs) are among the first steps that a new supplier undergoes to enter and operate in a retail energy market. To deliver natural gas or electricity to final consumers in Europe, an energy supplier usually needs to be registered to a certain institution list, or to proceed with a notification, or follow a process to grant a licence. Entrance processes for suppliers often requires commitments such as a minimum standard of customer service obligations, requirements on service quality, to provide financial guarantees or to have a communication system in place.

   In most responding NRA countries, suppliers need to register and make contracts with certain stakeholders (mainly TSOs and DSOs) to procure the access to the energy grid: transport capacity, balancing. This procedure can be very different from a country to another. Accessing wholesale markets and balancing may also require a license or prior agreement/registration with the market operator. In some markets, business processes to enter and operate in the retail market can be extremely detailed and

[6] Please note: these definitions are Europe focused, not Cypriot specific. Highlighted barriers have been identified as country specific.

burdensome. The lack of a functioning national wholesale market may also hinder the entrance of retail companies that are not vertically integrated.

Across Europe, the following specific barriers around "sign-up & operations compliance" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus.

- Poor availability of information for market entrants & active participants
- Heavy administrative process for entry (registration / licensing)
- High financial requirements (incl. long working capital cycles) and forced risk during operations
- Excessive reporting requirements during operations
- Excessive information requirements around billing and energy labelling
- Highly complex or country-specific systems & processes
- Regional differences or differences between DSOs within a country
- Cumbersome or biased switching process
- Unduly burdensome environmental obligations
- Unduly burdensome or insufficiently regulated market exit

2. **Data access & processes.** Data access and management refers to the processes by which data are sourced, validated, stored, protected and processed and by which it can be accessed by suppliers or customers. In a well-functioning energy retail market, it is important that the information required to operate in the market is available to newcomers (subject to applicable legislation on data protection). This may include information on, for example, individual consumption or more specific meter details. This data is required in order for suppliers to carry out their market role, such as initiating a switch, or billing a customer. A standardized approach to the provision and exchange of data creates a level playing field among stakeholders and helps to encourage new, challenging market actors to enter the market. In order to avoid data management and access processes acting as a significant barrier to entry, Member States' initiatives to standardize data format and processes, including investments in data hub infrastructure, have the potential to make a positive impact.

   Across Europe, the following specific barriers around "data access & processes" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus.

   - Lack of data hub
   - Complex, heterogenous IT infrastructure and/or low level of digitalisation
   - Missing access or poor quality of operations-critical data

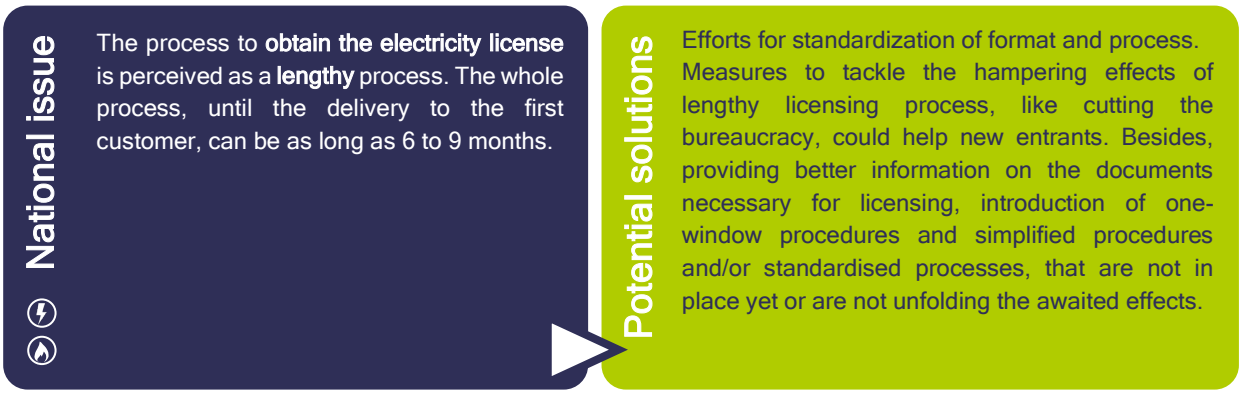
.

3.1. Description of operational and procedural hindrances barriers in Cyprus: Sign-up & operations compliance:

Heavy administrative process for entry (registration/licensing). In our research this barrier was raised as an issue in Cyprus.

In general terms, the processes required to enter a market can constitute a large administrative burden. Overly complicated and very time-consuming processes and requirements present a barrier in terms of the time and money that new entrants must invest. This barrier refers to all steps required to obtain a license or registration allowing participation in the market as a retailer.

Cypriot national issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.



European markets in which this barrier has also been indicated

AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

3.2. Description of operational and procedural hindrances barriers in Cyprus: Data access & processes

Lack of data hub. In this research this barrier was raised as an issue in Cyprus.

In general terms, when there is no centralized data hub or a platform for switching and access to DSOs information, this increases the time and effort required by suppliers to access customer or network data, e.g. to enact a switch or target potential new customers. This tends to favour suppliers with a high market share (and hence access to large amounts of customer data, including historical usage data) or suppliers vertically integrated with a DSO such that the parent company benefits from DSOs providing data directly to the supplier side.

However, in Cyprus a central data platform is not organized yet.

Cypriot national issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.

National issue

A central **datahub** for data exchange, to simplify and accelerate switching processes is **not in place.**

Potential solutions

A central platform for gathering data for suppliers is of great importance and should include required information, regulation and centralized access to DSO platforms.

European markets in which this barrier has also been indicated

AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

DENMARK BEST PRACTICE CASE: Denmark's DataHub

The development of the DataHub is held up by market actors in other countries as a good example of regulatory development that involved and cooperated with market players. A key aspect of the successful development process was that a single organization (the TSO) had a clear system-wide responsibility to implement the changes, enabling streamlining of the process. Market players report the launch of the DataHub as the most important recent innovation in Denmark's energy system.

NORWAY BEST PRACTICE CASE: A well-designed data hub improved market equality in Norway

The Norwegian market is characterized by a large number of small, local, currently vertically integrated supplier-DSOs. Across Europe, this study has found vertical integration to cause issues around data access, where the integrated supplier (usually the incumbent) has an advantage in data access through its affiliation with the DSO, which collects and controls the information. However, such issues were not raised in Norway.

This favourable situation results from the existence since 2019 of a centralized data platform, Elhub, that is functioning near-perfectly according to suppliers to even out the playing field around data access (see section 3.2). Previously, independent suppliers faced delays and obstruction in obtaining customer data from DSOs. The impact on data exchange was so great that one supplier described their dealings with DSOs as "different pre- and post-Elhub worlds". The Elhub moreover allows the regulator to technologically control that actors are behaving appropriately.

Missing access or poor quality of operations-critical data. In this research this barrier was raised as an issue in Cyprus.

In general terms, non-availability or delayed or low quality of operations-critical data (incl. smart meter data) presents a main barrier as it increases the need for manual processing and therefore costs.

The national issue raised by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.

European markets in which this barrier has also been indicated

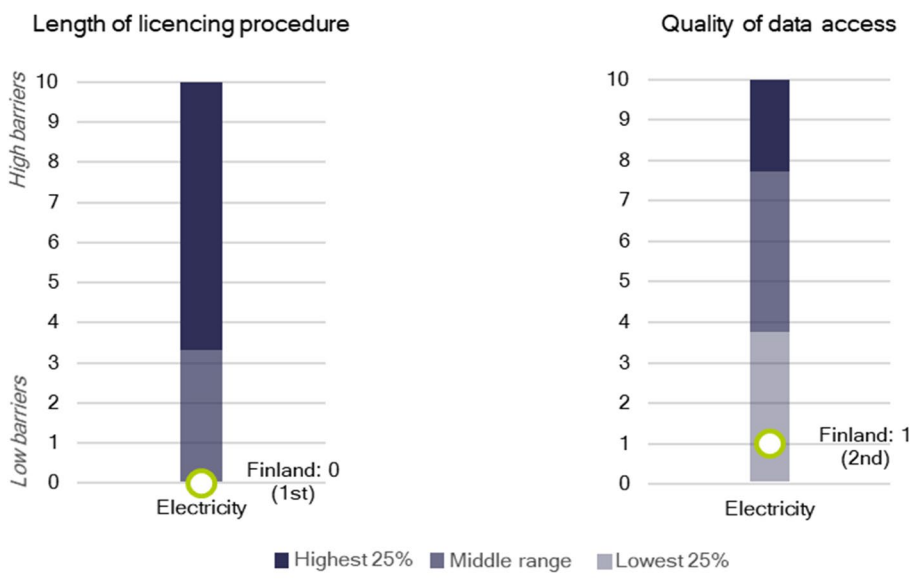
AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

3.3. Cyprus's performance in this barrier category

The following figure shows quantitative indicators of how far operational and procedural hindrances act as a barrier in this market. The values for Cyprus are shown against the range across all analysed countries. These scores contribute to the performance index. The performance indicators of operational and procedural hindrances are the following:

- **Length of licensing procedure**. The complexity of the licensing procedure is quantified using the legal deadline of the licensing procedure. A higher score is attributed the longer the regulator's authorization period, while a score of 0 is attributed if there is no licensing obligation in the country.
- **Quality of data access**. Barriers relating to the quality of data access are measured with a checklist indicator, which focuses on the DSO's practices regarding data collection and access provision to suppliers. A high score is attributed if the format of the data provision is not standardised, third party access is not available via website or data hub, and the smart meter rollout is small.

Performance indicators



Cyprus was ranked in the higher tier range for both indicators, scoring 28th for length of licensing procedure and 27th in quality of data access.

4) Customer inertia

Within operational and procedural hindrances, barriers across Europe have been sub-categorised into one area encompassing 6 specific barriers[7]:

1. **Customer orientation.** Whether customers want to or can engage with the market depends on a broad range of market characteristics, including how well authorities inform and support customers and how energy companies are viewed by the customer. For example, if there is no trusted central place to compare offers from different suppliers, customers may struggle to make an informed choice; or if customers perceive all energy companies as irresponsibly profit-driven, or providing a poor service, they may feel there is nothing to be gained from switching. Moreover, across Europe, most energy markets have been liberalized relatively recently (last 20 years, some only a few years ago), so for a considerable portion of customers the potential for them to engage may still feel unfamiliar.

   Across Europe, the following specific barriers around "customer orientation" were detected by this study. Those highlighted in blue have been raised, indicated or identified as barriers in Cyprus.

   - Lack of information regarding available offers and switching possibilities

[7] Please note: these definitions are Europe focused, not Cypriot specific. Highlighted barriers have been identified as country specific.

- Low customer awareness or interest makes it difficult to attract customers
- Insufficient price signals for end-users
- Changing supplier is cumbersome or has little pay-off for the customer
- Consumers prefer status quo
- Lack of trust in new or foreign suppliers and in new technology

4.1. Description of customer inertia barriers in Cyprus: Customer orientation

Lack of trust in new or foreign suppliers and in new technology. In this research this barrier was indicated as an issue in Cyprus.

Generally, the lack of trust towards new and/or foreign suppliers can be caused by previous bankruptcies in the market or simply customer unfamiliarity with the new supplier's quality of service. Also, customers do not trust new suppliers because of untruthful commercial practices, wrong price information and price discounts. Posing a barrier for new suppliers that are trying to attract customers, as they must invest heavily in building a new relationship.

The national issue identified by suppliers and related potential solutions regarding the Cypriot case are reported in the graphic below.

European markets in which this barrier has also been indicated

AT BE BG HR CY CZ DE DK EE FI FR EL HU IE IT LV LT LU NL NO PL PT RO SK SI ES SE UK

4.2. Cyprus's performance in this barrier category

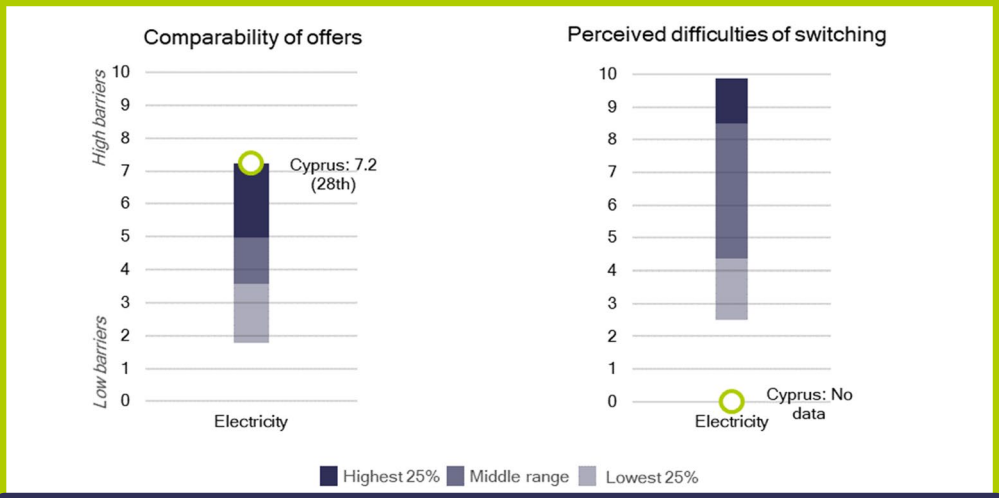
The following figure shows quantitative indicators of how far customer inertia acts as a barrier in this market. The values for Italy are shown against the range across all analyzed countries. These scores contribute to the performance index. The performance indicators of customer inertia are the following:

- **Comparability of offers**. The index consists of two sub-indicators. The first measures consumers' ability to compare offers, based on a survey commissioned by the DG Justice and Consumers. The second is a checklist indicator which quantifies the availability of comparison websites, based on their number and

functionalities. A high score is attributed if the consumers gave low scores for comparability, and there are no comparison websites in the country.

- **Perceived cost of switching.** Difficulties around the switching process are also measured based on DG Justice's survey. The indicator incorporates the experience and opinions both of customers who have switched, and also of those who have not because they faced obstacles or thought it might be too difficult. A high score is attributed if a high share of consumers reported a bad experience of or poor opinion on the switching process, among all customers who considered switching.

Performance indicators



Given the very early stage of market liberalization where few other licenses have been granted but are not operational, Cyprus was ranked in the high barriers range for comparability of offers. While no data were available regarding the difficulties of switching.

5) Other

Other aspects of the market not directly related to its functions, as addressed above, may also impact suppliers' ease to enter and operate in the market. These relate to characteristics of the market that are not necessarily a barrier per se, but their impact on the energy retail environment could be minimized to benefit market function.

5.1 Description of other barriers in Cyprus

No substantial other barriers were raised in Cyprus.

FINDINGS & RECOMMENDATIONS

This handbook provides a high-level framework of relevant barriers to entry and operate for energy suppliers into the Cypriot retail electricity and gas markets, as well as examples of actions that relevant institutions as NRAs, ministries, etc., have taken, are taking or could take in the future to remove them.

In particular, the handbook groups the barriers to entry and operate in the energy retail market into four different categories as listed below.

1. Regulatory disincentivisation.
2. Market inequality.
3. Operational and procedural hindrances.
4. Customer inertia.

In this section we report the main findings and recommendations for each category.

Under the first group, **regulatory disincentivisation**, suppliers' main concerns relate to the model under which customers are supplied under price regulation regime provided by the dominant operator. Currently, in Cyprus, although other supply licenses have been issued, no one except the incumbent supplier is selling electricity to the end customers. The retail regulatory framework is a legacy of the monopolistic structure of the retail market and suppliers perceive it as unsuitable for competition. Having high regulatory risks and tariffs that do not follow the wholesale market dynamics. However, still at a transitional stage based on bilateral contracts. This system should be reviewed with price regulation aimed only at real vulnerable customers and with incentives to switch for customer reducing their inertia and deploy new services also hindered by this situation. A new market model is in place but actions to implement tracked directives to define the new regulation at wholesale and retail level are recommended. The Regulator should also have a higher engagement with new suppliers that want to access a market that is beginning a new phase of having a competitive market. This is important also to address issues on having accurate data and data access as reported by suppliers. A smart meters' roll-out plan exists and starts in 2021. A very important point for innovation development.

Regarding **market inequality**, barriers have been identified arising from a perceived uneven playing field for different types of suppliers. In Cyprus the energy market still has a monopolistic structure with EAC, the state-owned company, being the only supplier. 13 new licences have been issued but none of them is operational. Also, energy market platforms are not in place yet but are expected, however still some rules have to be defined. Being a small isolated market, it is hard to make a comparison exercise with other EU market in terms of solution to introduce competition and mitigate actual risks. However, if a certain degree of competition is envisaged for the retail market ad-hoc actions have to be deployed. Recommendations to this regard goes in the direction of compulsory reduction of EAC market share with fixed rules aiming at promoting a degree of liquidity at wholesale level. Given the early stage of liberalization in Cyprus and the status of EAC, as the only supplier, a rule to reduce the incumbent market share is divestment up to 50% in generation. The development of new transborder

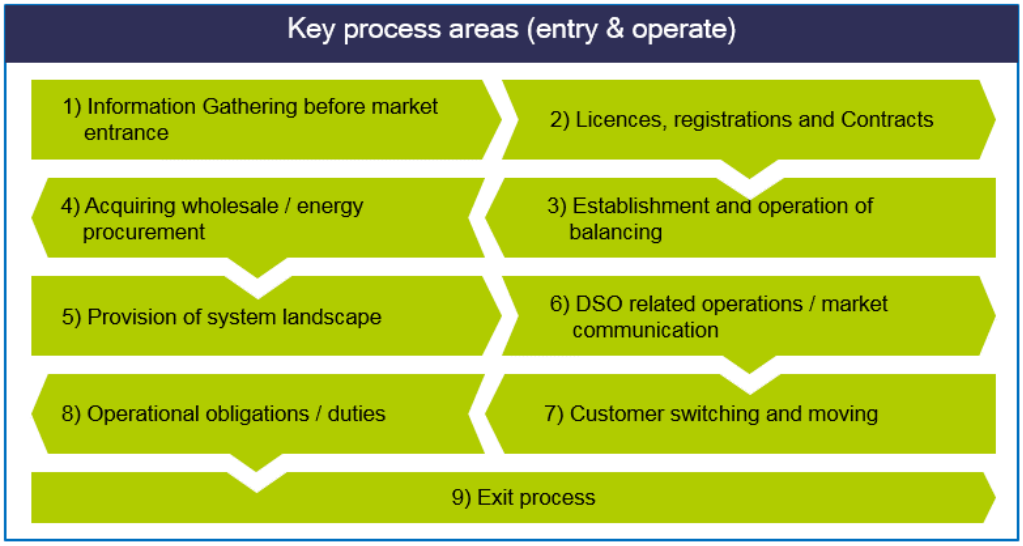
interconnection infrastructures and the start-up of wholesale market are also envisaged as solutions. As already implemented in other European markets.

Operational and procedural hinderances are regarded as barriers by some of the suppliers responding to the survey or being interviewed. Complexities and differences in standards and procedures may affects suppliers' entrance and operation in the retail market. Suppliers report that the process to get a license is lengthy. The whole process up to the delivery to the first customer, can be as long as 6 to 9 months. Hence, efforts for standardisation of formats and processes are recommended. Of course, taking into account the characteristics of a small and isolated market it is recommended to adopt measures to tackle the hampering effects of lengthy licensing process, like cutting the bureaucracy and providing better information on the documents necessary for licensing, introducing one-window procedures and simplified procedures. Subsequently, to improve data access and provision, a central platform for gathering data for suppliers is of great importance and should include required information, regulation and centralized access to DSO platforms. Seminars on new procedures and data accessibility are recommended for supplier induction.

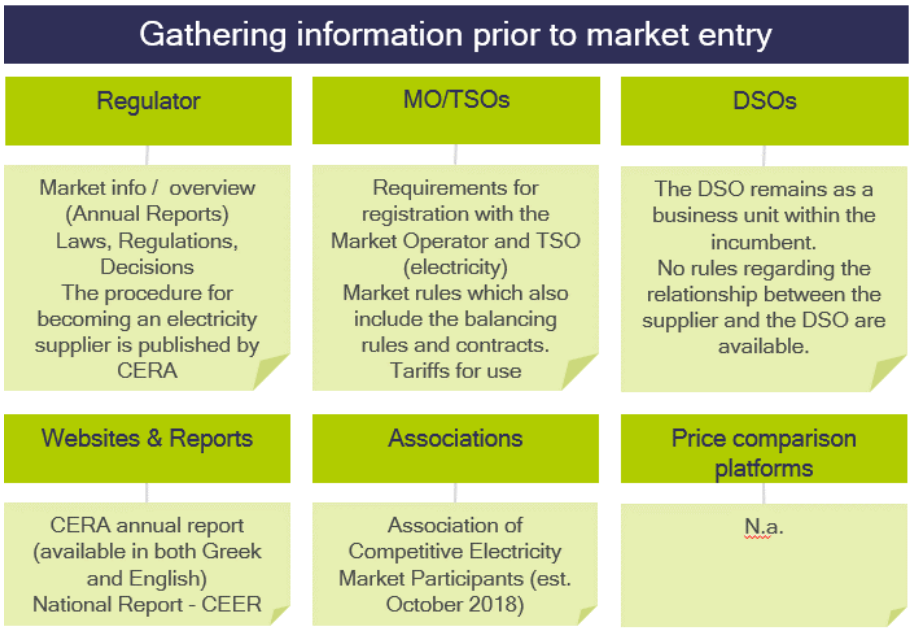
Customer inertia barriers category, groups all those issues related to customer behaviour and attitude within the retail energy market. If the Cyprus electricity market aims to install a certain degree of competition in its retail market, to raise customer awareness and trust towards new suppliers, offers comparison tools need to be introduced, together with customers associations to monitor supplier's behaviour. In this direction, other recommended activities are the enhancement on suppliers precontractual and customer information provision and the customers associations to better monitor suppliers' behaviour, preventing unethical behaviour enhancing market attractiveness and reliability.

APPENDIX 1: PROCESSES

This section describes market processes in energy retail in Cyprus. This gives a high-level overview of the most critical aspects involved in establishing and operating as a supplier in the national market. The stages of market entry and operation are described in sequence, each with an illustration ("process map") showing that stage's various processes together with comments/details on market specifics.



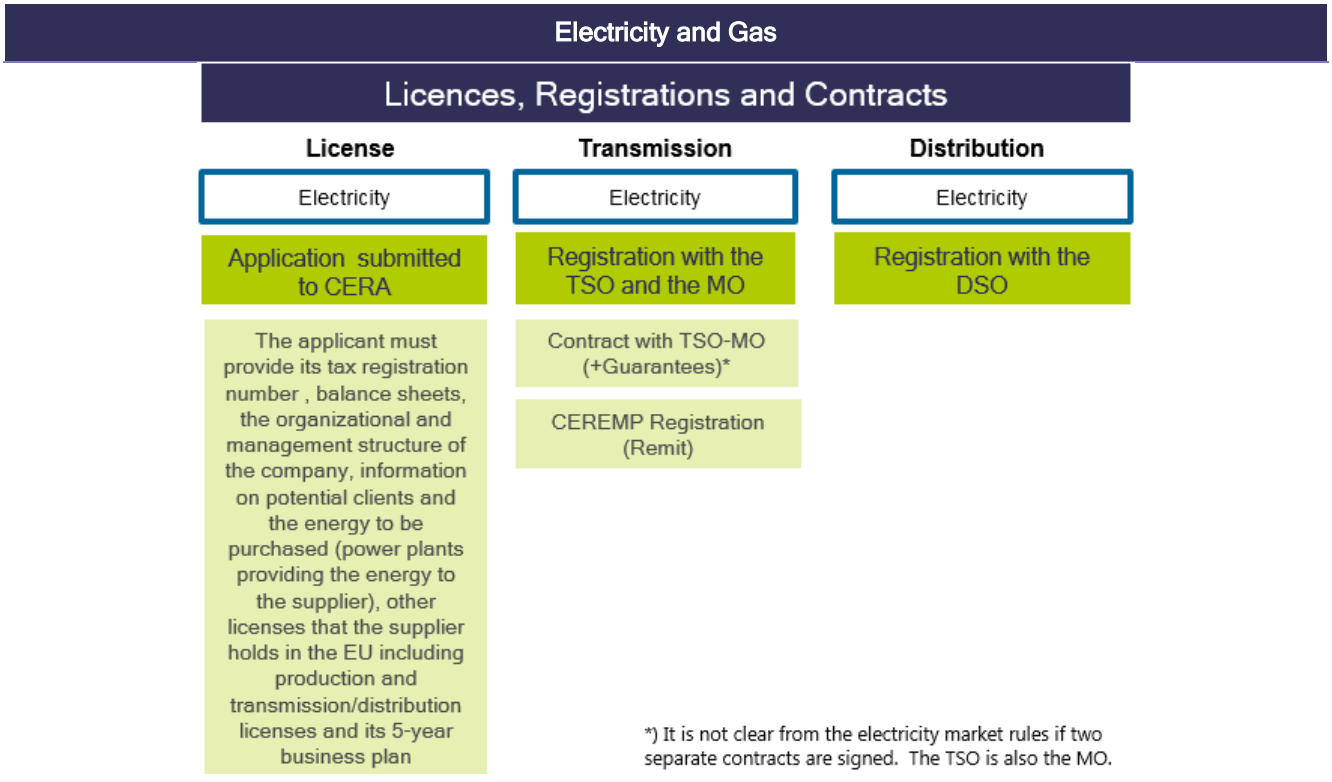
1) Information gathering before market entry



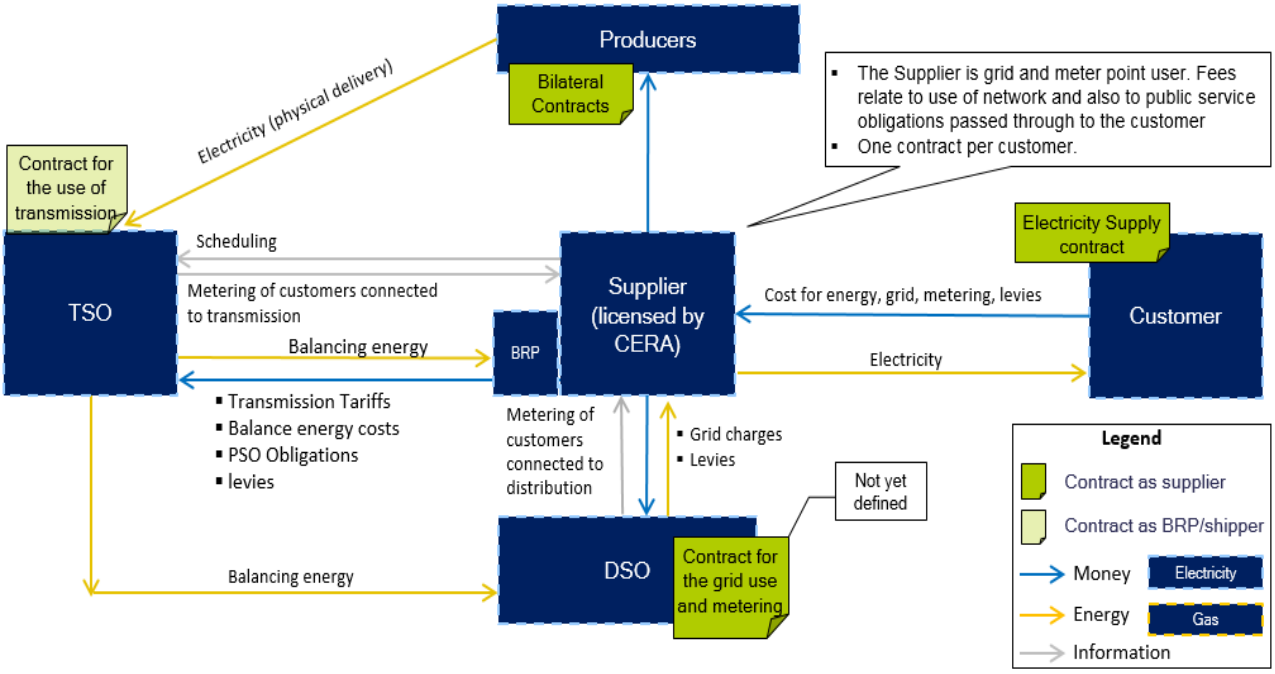
Relevant comments on information gathering

- The Annual National Report of the Regulator (CERA) provides a good high-level overview of the electricity market (also available in English and published on the CEER website). Additional information can be sourced from CERA's Annual Report, annually submitted to the President of the Republic of Cyprus. It is available at CERA's website (Greek and English versions).
- Primary and secondary legislation is only available in Greek.
- As stated by the article 26 of Directive 2009/72/EU, Cyprus is an isolated system and legal and functional unbundling of the DSO is not mandatory.
- Currently there is only one active supplier.
- CERA's website (https://www.cera.org.cy/en-gb/ilektrismos/details/adeia-promithias) provides the supply license application form and the terms and conditions included in a supplier license. The information is available in both Greek and English.The Law, the Licensing Regulation, the Supply Regulation and the Electricity Market Rules are only available in Greek, however all necessary information regarding licensing procedure are translated in English. https://www.cera.org.cy/en-gb/ilektrismos/details/ilektrismos-adeiodotisi.
- Cyprus does not yet have access to natural gas. A plan for introducing natural gas to the island in the coming years exists but no solid information on plan progress made is yet available. The primary and secondary legislation in relation to natural gas is only available in Greek.

2) Licenses, registrations and contracts



Dependencies / Contracts for Electricity



Further comments

1. Supply licenses are granted according to the License Regulation (https://www.cera.org.cy/Templates/00001/data/nomothesia/ethniki/hlektrismos/Kanonismoi/2004_538-Ekdosi_adeiwn.pdf) .
2. CERA, the Transmission System Operator which is also the Market Operator and a department within the incumbent EAC in its role as a Distribution System Operator are the key counterparties for licensing. Cyprus is an isolated system under article 26 of Directive 2009/72/EC so that there are no requirements for the unbundling of distribution.
3. Registration (licensing) is with CERA, then the interested party needs to sign agreements (contracts) with the TSO/MO (access to transmission including balancing, access to market) and the DSO (access to distribution including metering).
4. The obligations and rights of the licensees are set by the terms and conditions of their licenses. The terms and conditions are included in the License Regulation.
5. The application form for a supplier license is submitted in Greek. The License regulation makes no reference as to whether supporting documents may be also accepted if submitted in English. In practice supporting document are often submitted in English.
6. CERA is obliged to inform the applicant on the completeness of the application within two months from application submission. If the applicant needs to submit additional information, CERA confirms

completeness within one month from final submission. If no confirmation is received, then this is considered as a tacit acknowledgement of completeness.

7. CERA decides within 3 months from the date that the application is considered as complete. It is possible for CERA to extend this time by an additional 3 months. Overall estimated time for obtaining a licence from the time of the application ranges from 3-9 months.
8. The electricity market is in a transitional phase towards a full implementation of the Target Model.

Conditions for the provision of an electricity Supply License

9. The applicant should demonstrate
10. the existence of an adequate organizational and administrative structure.
11. financial strength and creditworthiness, as evidenced by the accompanying financial statements and business plan.

Application Fees

Applicants pay an on-off application fee of € 854.30 to CERA upon submission of their application. License holders also pay an annual fee of 17 €/MWh licensed. Fees of €170,86 are charged for each request for a modification in the license (e.g. increase in the level of energy supplied). Licenses maybe transferred to another party. A fee of €170,86 needs to be paid for each transfer application.

Transparency

- CERA informs the applicant when the application is considered complete.
- All CERA's decision regarding licensing are published on the website, along with the licensees list.
- Publication for the submission of application is also done by the applicant within five days of the submission of the application.
- Following CERA's notification (by writing or tacit acknowledgement), the applicant makes a public announcement of the fact that an application for a supply license has been submitted and invites all interested parties to provide comments. The deadline for the submission of comments cannot be less than 15 days from the publication. Publication means a printed announcement in a national newspaper of wide circulation. The announcement needs to appear for at least two consecutive days.

3) Balancing

The electricity market of Cyprus currently operates on bilateral contracts. A balancing market where the TSO is the central counterparty to all the transactions. Currently there is only one participant in the electricity market, the incumbent EAC. The Electricity Market Rules regulate the status of BRP, however, currently, the only BRP is the incumbent.

Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing is not yet implemented.

Currently in the new TSR balancing is described in detailed in relevant chapters together with the imbalance charges for instructed and non-instructed imbalances. Balancing is done on a unit basis for producers and RES producers and on a portfolio basis for RES aggregators.

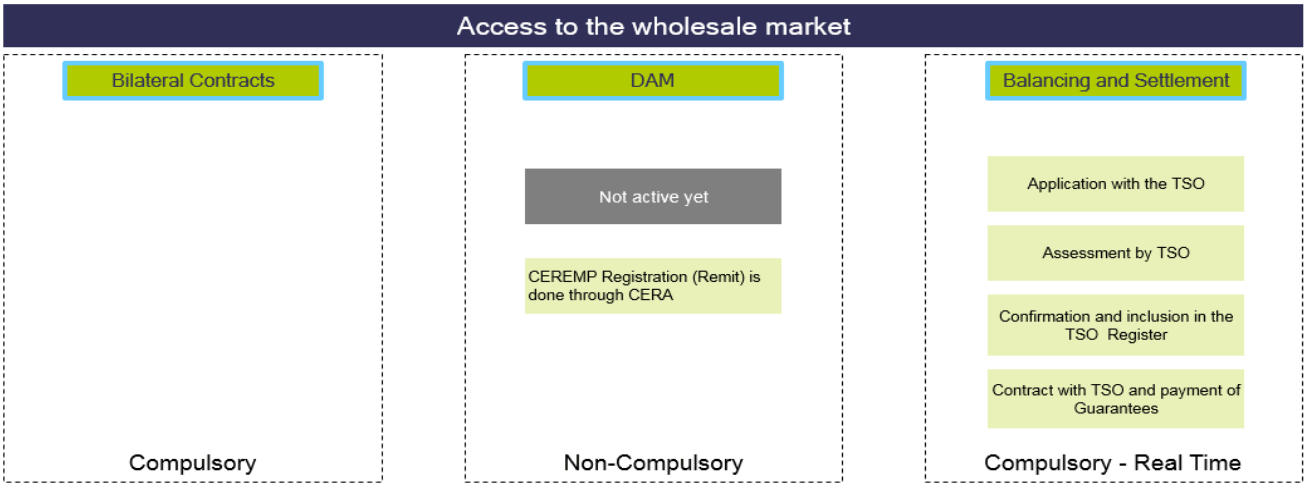
Participants are invited to:

- take all necessary measures for their own Balancing Service Providers to be operationally available according to their declared features; and
- implement the Dispatch Schedule and comply with the Dispatch Instructions issued by the Transmission System Operator.

The cost of balancing will be calculated according to the procedure of article 88 of the National Balancing Code as the average of the Upward Activated Balancing Energy and Downward Activated Balancing Energy offers made during the settlement period.

Guarantees are defined in Chapter 11 of the Electricity Market Rules. The Rules provide for reductions in the levels of guarantees required for large suppliers (paragraph 5.2 of the Electricity Market Rules).

4) Wholesale



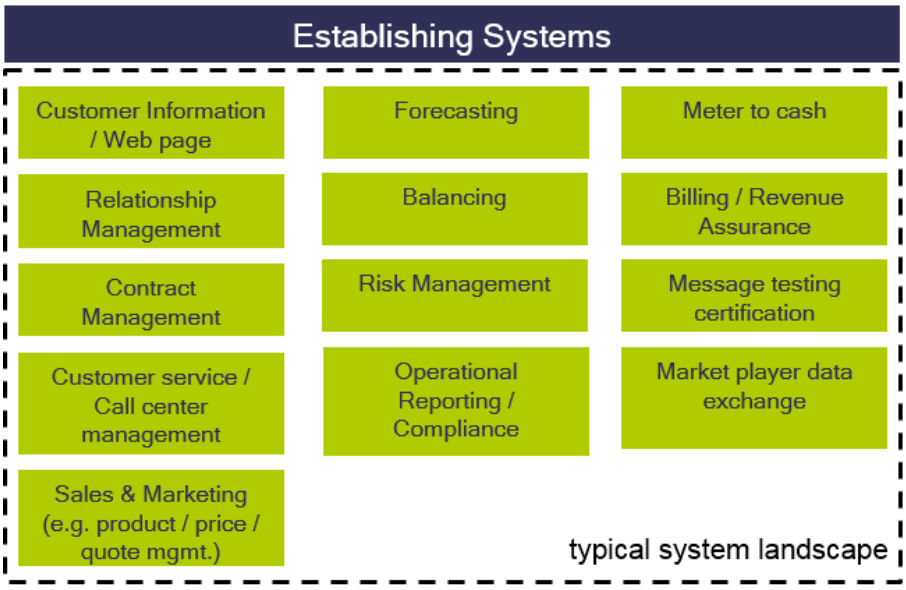
Further comments

- Cyprus does not have an organised wholesale market in place. Energy is procured through bilateral contracts.
- It is not mandatory to own generation capacities in order to participate in the wholesale market.
- The proposed market organisation is that of a “Net-Pool”
- The Net Pool design foresees the incumbent EAC being assigned the following tasks:
    - Offer bilateral forward products under regulated terms

- Purchase the energy produced by RES plants that are under Support Schemes and be responsible for the settlement of corresponding quantities through the various market segments
- Mandatorily trade specific portion of its consumption volumes through the DAM (the corresponding quantities are calculated based on the percentage [X] of the national demand regulated by CERA to be covered through the DAM)
- Place bids and offers to the DAM and the Balancing Market within a regulated range; and
- Carry the Last Resort function (at least during an initial period).

- According to a CERA Regulatory Decision (04/2017), the 1st of September 2017 was set as the commencement date of a Transitional Arrangement to the Cyprus Electricity Market. The transitional arrangement permits bilateral contracts between producers and suppliers (above a threshold set by CERA). For producers the current threshold related to production licenses over 50 kW. For suppliers the respective threshold is 10 MW.
- The application of the Trading & Settlement Rules (TSR) in line with the EU Electricity Target Model is anticipated to start in end of 2021.
- The transmission system operator is a member of AIB and thus the Cyprus Guarantees of Origin are EECS compatible. GOs are issued but no trading is recorded and there are no cancellations (source AIB).

5) System landscape



Further comments

- An excel based communication for the exchange of information between the TSO/MO and EAC is in place.

- A full MMS is in preparation but no expected to be online before 2021.

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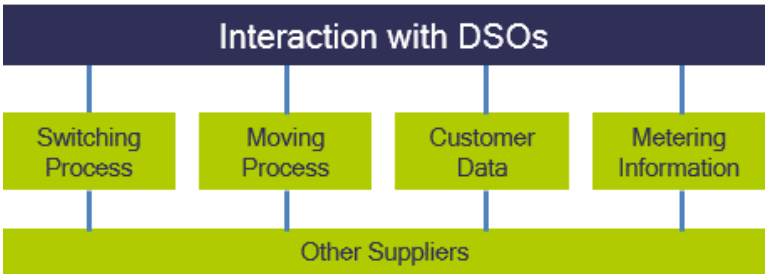
6) Supplier interaction with the DSO



Further comments

- The procedures for the interaction between the suppliers and the DSO are not defined.
- Exchange of meter data
- The DSO is responsible for metering.

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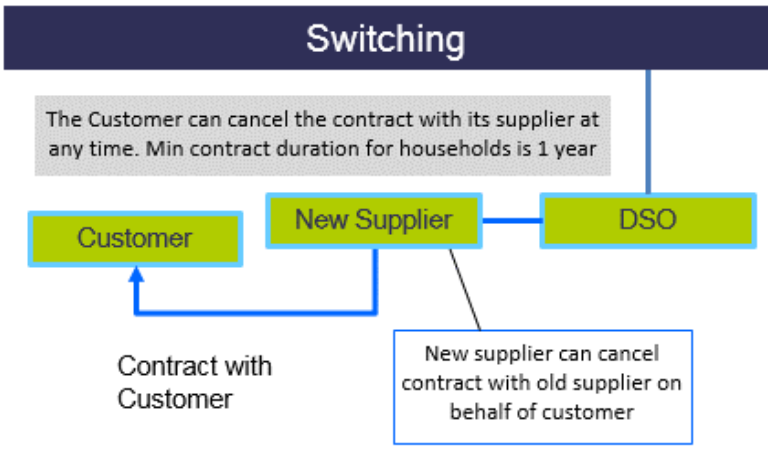
7) Customer switching & moving



Further comments

Switching process

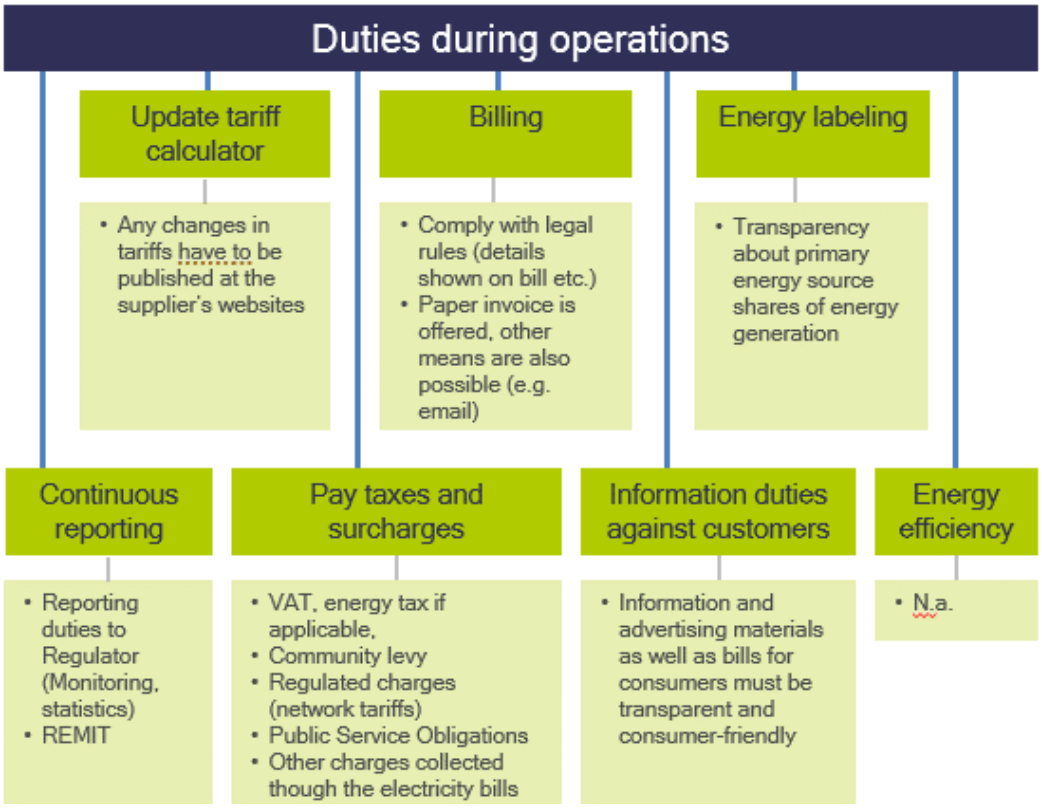
- The Supply Regulation sets basic rules for supplier switching.

- Supplier switching is possible only after the expiration of the contract of the customer with the previous supplier
- For non-household consumers, the duration of the supply contract is agreed between the buyer and the seller. For households, minimum duration is set at 1 year. The Supply Code sets that penalties if any are agreed with the supplier. (art. 5.4.1).

Moving

- The procedure is described in Chapter 8 of the Supply Code.
- A Default Supplier is a supplier obliged to supply electricity to consumers who after the end of their representation by their last supplier:
  - have done nothing with their right to freely choose a supplier or
  - cannot find a supplier in the deregulated market at the current commercial terms.
  - their previous supplier is unable to provide them with energy
- The Energy Law Regulating the Electricity Market sets that the Regulator, CERA, should determine the criteria for the selection of the Default Supplier.
- The incumbent EAC is the Default Supplier.

8) Operational obligations / duties



Further comments

- Tariff information and all actions of the Supplier are upon continuous monitoring and scrutiny of the Regulator. The procedure and rights of the Regulator to request information are described in the Supply Codes for electricity
- The bill must contain certain pieces of information (e.g. system charges, taxes and surcharges, and energy costs must be stated separately). The type of information included in the bill is also described in the Supply Code.
- Combined billing (energy + grid charges) is compulsory.
- Charges for each service are reported separately. All additional taxes and levies are also reported separately.
- Only one supplier; prices are regulated.

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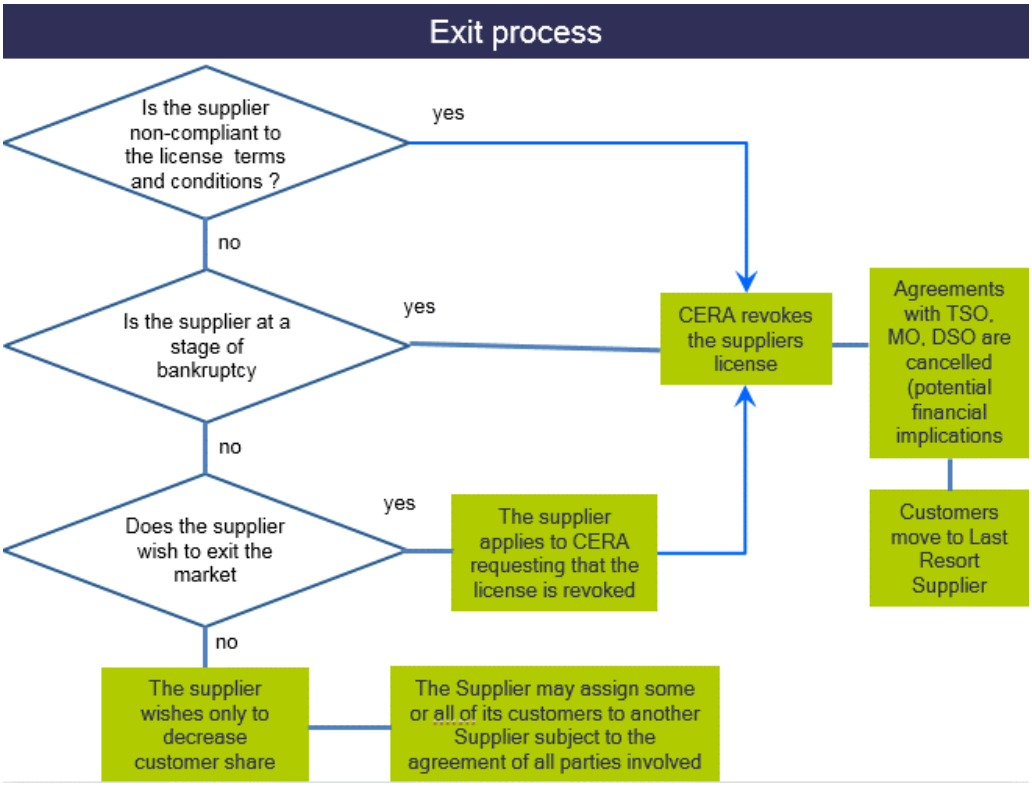
9) Market exit



Further comments

- The supplier may leave the market on its own request, at the case of bankruptcy or if CERA revokes the license (in case of non-compliance to the license terms and conditions).
- There are no fines/penalties regarding the revocation of the supply license per se but there may be outstanding obligations and fines towards the TSO, DSOs and MOs.

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MJ-02-21-181-EN-N

Publications Office
of the European Union

ISBN 978-92-76-30250-6