Regulatory Evolution of the Risk Analysis and Crisis Management Tools of the European Gas Supply

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Abstract

The development of the regulatory framework of the risk analysis and crisis management of the European gas supply has become primarily crisis-driven in the past 10-15 years due to the Russian-Ukrainian gas debates of years 2006, 2009 and 2014 combined with the prevailing high dependence of several EU Member States on Russian natural gas. The new regulation led to the creation of a new sector-specific bodies ACER and ENTSO-G as well as to more detailed regulation of measures to be taken by the policy actors concerned. Even if these new actors are much more involved, due to their still prevailing 'non-Treaty nature' the major tasks remained at Commission's and Member States' level. Therefore the not necessarily easily regulable daily cooperation of the actors concerned could be crucial to face the challenges of European gas supply.

Keywords: Risk analysis, crisis management, gas supply, ENTSO-G, non-Treaty bodies

INTRODUCTION

This paper examines the development of the regulatory framework of the risk analysis and crisis management of the European gas supply, which has become primarily crisis-driven in the past 10-15 years. This was the clear consequence of the gas supply crises caused by the Russian-Ukrainian gas debates of years 2006, 2009 and 2014 combined with the prevailing high dependence of several EU Member States on Russian natural gas. The new institutions of this policy area involve the creation of new sector-specific actors as well as the more detailed regulation of measures to be taken by the policy actors concerned.

The policy design of energy supply reflects not only the risk situations and crisis mitigation responses of the EU as such but deals with daily regulatory tasks of the Union with the creation of even more sector-specific bodies being primarily responsible for the ongoing management of the European gas supply. This approach has also been followed by the Union legislator by the establishment of the new EU agency called ACER and of a new transgovernmental network called the ENTSO-G in 2009.

As for the regulatory framework this paper primarily examines the *Regulation (EU) No. 1938/2017 concerning the measures of the security of gas supply and repealing Regulation (EU) No. 994/2010* (furthermore: 'the new Regulation'), which has brought several new elements in this regard. The paper is intended to reveal the challenges in regulation of the related policy area addressed to legal and economics scholars with main focus on the newly introduced market and non-market based tools in risk analysis and crisis management.

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1. THE NEW SECTOR-SPECIFIC POLICY ACTORS OF THE EUROPEAN GAS SUPPLY

The EU has three different energy packages originated back to mid-1990s from which the third one of 2009 led to the creation of an EU level decentralized agency (furthermore: ACER) as well as the formal establishment of the network of transmission system operators (furthermore: ENTSO-G). The creation of the Agency for the Cooperation of Energy Regulators as ACER in 2009 was based on the former functions and mandate of a sector-specific trans-governmental network called ERGEG. The European Regulators Group for Electricity and Gas (furthermore: ERGEG) was meant to serve as an advisory forum for the European Commission consisting of the heads of national regulators. The institutional evolution followed by the EU legislator by the establishment of an EU agency (with own legal personality) in form of the ACER was not unique considering the changes of the banking and financial sector a couple of years later. Nevertheless the ACER kept some patterns and characteristics of ERGEG considering its functions, mandate and acts issued are mainly based and addressed to national regulators.[2] ACER is less involved in risk analysis and crisis management of European gas supply, where the major player is ENTSO-G. However the similar mandate and status of ACER to that of ENTSO-G's could reveal potential difficulties related to the functioning of ENTSO-G's[3].

Regarding the activities provided by these new bodies the 'risk' could be considered as a sector-neutral term, however, the related regulation determines what it means to have risk in the area of gas supply. Therefore the risk is when 'the Member State's security of gas supply is threatened (...) by measures unilaterally developed by that Member State may jeopardise the proper functioning of the internal gas market and damage the gas supply to customers in other Member States'[4]. Risk analysis can be simply seen as a 'technique used to identify and assess factors, which may jeopardize the success of a project or the achievement of a goal' (Allen-Derr 2015:26). Additionally, risk assessment helps to 'define preventive measures to reduce the probability of these factors and to identify countermeasures to successfully address them, when they do occur'(Allen-Derr 2015:26). This paper is intended to present the regulatory evolution of such tools combined with the crisis management measures regulated by EU gas supply law.

The so-called mushrooming of EU agencies refers not only to the phenomenon, that the number of such bodies expanded tremendously in recent decades, but to the fact, that substantial powers have been conferred upon them by acquiring direct powers over market participants/citizens just like powers over national authorities (responsible for indirect implementation of EU law) as well. The last decades are characterised by the fact, that direct implementation of EU law could gain momentum over the indirect implementation performed by national authorities. The shift of these powers as one of the main concerns of 'agencification' can also be highlighted in relation to TGNs, even the later ones have no legal personality functioning as cooperation forum sometimes legally recognized by EU law. These agencies and other bodies are 'non-Treaty bodies' as they still today lack the proper (sector-neutral) primary legal basis on their creation and functioning.[5] Therefore their definition was also laid down by

[2] Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators (ACER Regulation)

[3] Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (ENTSO for Gas or ENTSOG Regulation)

[4] Preamble (7) of the Regulation (EU) No. 1938/2017 concerning the measures of the security of gas supply and repealing Regulation (EU) No. 994/2010

[5] Article 263.1 of the Treaty on the Functioning of the European Union as almost single reference to agencies guarantees the judicial review against their acts for third parties before the Court of Justice of the European Union.

the scholars with the formulation of their main characteristics. In case of agencies these characteristics include the relative independence, non-terminated mandate, own legal personality, creation by Union law for specific purposes (competences). Due to their 'non-Treaty' status some common rules on their establishment and functioning in form of the soft law Joint Statement and Common Approach of the European Parliament, the Council and the European Commission on decentralised agencies have been enacted in 2012. The Court of Justice of the EU mainly kept the 'restricted model of powers' to be conferred upon agencies, which only partly recognizes the increased role of agencies, however still treating them as mere 'supporters' of the EU's policy-making, denying the prerogative of making own policy choices without the involvement of further EU/national counterparties.[6] The dilemma of such model can be clearly highlighted in the risk analysis and crisis management situations, which should necessarily involve swift and effective decision-making procedures with less actors as well as with the prerogatives to make own policy choices.

Further dilemma in case of EU agencies and TGNs occurs related to their *internal structure* and to the *decision-making* of their internal bodies. Their major decision-making bodies (e.g. management boards) primarily consisting of the representatives of Member States (with further involvement of representatives of the Commission, the European Parliament as well as of the stakeholders). Even if the national representatives have various legal integrity requirements related to their tasks to prioritize EU interest, in practice the national interests might overrule that of the Union's. This might occur especially in the cases, when the acts issued by such bodies or competences are rather country-specific.

2. THE MAIN MERITS AND PROBLEMS OF THE EARLIER REGULATION

The EU also started to regulate the issue of gas supply security from 2004 with a directive, then with a regulation in 2010 shortly after the publication of third package and the second major Russia-Ukraine gas dispute of 2009 (Boersma, 2015:62). Before the new Regulation was enacted, the main regulatory framework had been determined by the Regulation *(EU) No. 994/2010 concerning measures to safeguard security of gas supply* (furthermore: 'the old Regulation'), which was the successor of the earlier *Directive (EC) No. 2004/67 concerning measures to safeguard security of natural gas supply* (furthermore: 'the Directive') and which has been repealed later by the new Regulation. Nevertheless, the Lisbon Treaty was the one that made energy security a European issue (Boersma, 2015:61).

Regarding the merits of the old regime(s), the most important elements of the old *Directive* were some reporting requirements and the installation of the Gas Coordination Group (GCG).

The *old Regulation*'s greatest step forward was the increased level of information and transparency requirements (Boersma, 2015:62-65). However, the risk assessment was mainly to be performed by the Member States under the old Regulation (Art. 9). Additonally, the Commission, especially its Joint Research Centre introduced a mass-balance model of European gas system called GEMFLOW, which followed EU-level approach in stress testing of the gas supply by theoretically simulating supply disruptions in various scenarios (Rodrígez-Gómez et al., 2014: 461-74).

It has also introduced the so-called 'Preventive Action Plans' and 'Emergency Plans' (Art. 4.). In practice clear concerns occurred as the plans were only formally exchanged between the Member States, while no substantial impact has been provided by the incoming plans of the

[6] C-270/12, United Kingdom v Parliament and Council, EU:C:2014:18, paras. 46-50 and 67.

other countries due to administrative and procedural obstacles as well as translation difficulties (Cisewski et al., 2017: 26).

The old Regulation has also established three main crisis levels to give certain classification thresholds of crisis situations, namely: 1) early warning - which was an indication without real disruption; 2) alert - which meant a disruption that could be solved by market-based measures; and 3) emergency - in which case despite all market interventions supplies could still not meet demand and therefore additional measures were required +1 regional or Union level emergency (Art. 10).

The main concern related to old Regulation was the lack of proper implementation and uniform interpretation across the European Union. The Member States had their own systems of crisis levels and most national plans simply ignored transnational actions. In a more detailed context traditional gas supply approaches had too much focus on purely national dimension, therefore lacked the effectiveness in case of severe disruption, while kept over-protective measures, which reduced the liquidity of markets (Cisewski et al., 2017: 26). Even if the old Regulation had merits on the fields of transparency and information, its overall effects on the security of the gas sector remained rather 'modest' (Boersma, 2015:65-68). On the other hand some authors concluded that the old Regulation could at least create 'European approach' by starting to shift the central role of Member States towards European level (Talus, 2013:103).

The major positive steps taken in form of *old Regulation* included the introduction of EU-level approach in gas coordination and stress-testing, just like the creation of 'Preventive Action Plans' and 'Emergency Plans' and the laying down the new regulation of 3+1 level crisis scenarios. Even if the Union's regulator put more emphasis on supranational approach it seemed that most of the national counterparties kept the former national level approach in policy-making as well as risk analysis and crisis management.

3. THE REGULATION (EU) NO. 1938/2017

The *new Regulation* in force from 1 November 2017, is clearly built upon the policy instruments introduced by the old Regulation, while it has also taken further several steps forward. The high-level political momentum towards the Europeanization of energy supply was related to the creation of the new Commission's Vice President for Energy Union position as well as to the election of Mr. Tusk as the President of the European Council in 2014, both events reflecting the reprioritization of energy policy among other EU policy areas (Tagliapietra, 2015: 41).

The Union-wide stress testing of gas supply belongs to the responsibilities of ENTSO-G in cooperation with GCG, while the ENTSO-G is in charge of laying down the methodologies of stress testing. However, no such body has been created exclusively dedicated to elaborate the systemic risk of the given policy sector. The new Regualtion requires carrying out of the simulation at least once per 4 years by ENTSO-G, where the cooperation with NCAs as well as with the territorial risk groups identified by the Regulation are the cornerstones of the EU-wide risk assessment (whose results will be taken into account in the planning phase as well). The geographically determined risk groups are necessarily the result of the gas supply networks and hubs (Art. 7). As for the problem of the 'restricted power model' the ENTSO-G deals with fact finding and further elaboration of market simulation methodologies as stress test co-ordinator (which could serve as basis for further policy choices) avoided the dilemma concerned.

The adaptation of preventive action plans as well as emergency plans remained among responsibilities of NCAs, even in case of the regional chapters, which necessarily involves several NCAs. The consultation process between NCAs is to be reported to the GCG and supported (mediated), assessed by the Commission and finally disclosed to the Commission (Art. 8-10). However it could be the dilemma, whether such plans can be issued timely, as the

issuing of similar network codes with involvement of several actors (national authorities, ACER, ENTSOs and Commission) has proven to be a long and much delayed process (ECA Report, 2015: 30). Moreover the ENTSO's majority votes system led to lowest common denominator solutions in codes rather representing national interests over that of the Union's (ECA Report, 2015: 31), even if the plans of gas supply are to be facilitated and verified by the Commission itself.

The *system of levels of crisis situations* resembles the former *3+1 approach*, which are as follows:

There is an *early warning level*, where there is concrete, serious and reliable information that an event which is likely to result in significant deterioration of the gas supply situation may occur and is likely to lead to the alert or the emergency level being triggered; the early warning level may be activated by an early warning mechanism.

There is an *alert level* where a disruption of gas supply or exceptionally high gas demand which results in significant deterioration of the gas supply situation occurs but the market is still able to manage that disruption or demand without the need to resort to non-market-based measures.

Finally, the *emergency level* includes exceptionally high gas demand, significant disruption of gas supply or other significant deterioration of the gas supply situation and all relevant market-based measures have been implemented but the gas supply is insufficient to meet the remaining gas demand so that non-market-based measures have to be additionally introduced with a view, in particular, to safeguarding gas supplies to protected customers (Art. 11 para 1). The plus-one-element is the *regional or Union emergency level* (Art. 12).

The difference between the 3 basic emergency levels and the plus-one is that the former three is declared by the national competent authorities (furthermore: NCA). The Commission has to be informed, while it verifies or even modifies the measures taken, however the national authorities are primarily responsible to act in these situations. Based on the requests of NCAs the Commission may also declare a regional or Union emergency with the subsequent convention of GCG and a crisis management group, while the Commission coordinates the diverse measures, ensures the exchange of relevant information, may also request Member State or the competent authority to modify its action or to take further actions in order to ensure compliance with EU law during the regional or Union emergency (Art. 11-12). Interestingly the main actors to take decision in these crisis situations are NCAs or the Commission itself, therefore the Union legislator could avoid the dilemma of the 'restricted power model'.

There is a genuine novelty in comparison with the old Regulation, namely the *solidarity clause* (Art. 13), which has also some primary legal basis in form of Art. 194(2) TFEU (Cisewski et al., 2017: 28). Although the old Regulation also encouraged the solidarity between Member States, especially in case of crisis, the term itself was mentioned rather in the Preamble and just a few times in the text. The new Regulation dedicated a separate clause for the solidarity. The solidarity can only be requested by a Member States as an *ultima ratio* measure. This is the case, when Member States concerned have already exhausted all market-based measures as well as measures provided in its emergency plan, nevertheless it still cannot cover the deficit in gas supply to its solidarity protected customers. In practice it means that the Member State providing solidarity must take the necessary measures to ensure that the gas supply to customers not protected by solidarity in its territory is reduced or does not continue to the extent necessary and for as long as the gas supply to solidarity protected customers in the requesting Member State is not satisfied (Art. 13.). The Commission remained the main coordinator/facilitator in this situation, while initiative power is left in hands of NCAs, therefore the restricted conferral of powers dilemma does not occur in this regard either. While the regulation only reflects to the principles of solidarity including compensation and prioritization

of market-based measures, keeping the role of ENTSO-G to serve as cooperation forum during solidarity period (Cisewski et al., 2017: 30).

Even if the regulatory evolution reveals the steps taken by the EU legislator in recent years, the market-related aspects and the market-based regulation of the gas supply still determine the daily realities of the given policy area. Several policy papers and articles refer to the need to set up new financial schemes to support the development of strategic energy infrastructure by intensifying private investments or even institutional investors as pension funds, insurance companies (Tagliapietra, 2015: 43; Austvik, 2016: 380). Moreover, there is no overall EU-level data assessment methodology to prioratize investments of the European energy infrastructure (ECA Report, 2015: 43-44), which makes it even more necessary to use the data provided by stress testing to identify vulnerabilities of the infrastructure networks and to take decisions on future infrastructure investments.

The new Regulation could primarily address the shortcomings of the old one by conferring more powers upon EU-level institutions/bodies. However, the conferral of such powers to EU agencies and TGNs functioning as 'non-Treaty bodies' is still restricted by the clause of the CJEU. Therefore, most of the major risk analysis and management tools such as stress testing and planning requirements just like the crisis management measures such as emergency level and solidarity procedures are performed with the wider involvement of EU actors. This includes the broader involvement of the Commission while keeping the mandate of the ENTSO-G on moderate level, presumably in order to avoid the dilemma of the 'restricted power model'. Nevertheless, the new Regulation prefers the market-based measures just like before, while non-market based measures such as solidarity are only taken into account as an *ultima ratio* option.

CONCLUSION

As for the changes, what the Directive, then the old Regulation and most recently the new Regulation have brought, it is obvious that there is an evolutionary process how the regulation of EU's gas supply emerged and improved.

The related requirements have become more detailed, while also new actors and EU bodies/institutions received stronger powers. There was a clear shift to the Europeanization of policy-making in design of European gas supply. EU-level actions and approach could better address the problems of non-common preparation of related policy planning or the translation problems, which necessarily occurred as too much emphasis had been given to measures on the national level. The EU-level as well as regional approach of the regulation (e.g. risk groups) ensure common framework for further cooperation between Member States. However, the diverse market circumstances are still present, which preclude to treat the whole area as single energy market. The fragmentation elements involve the heterogenous policy preferences, the market maturity and economic developments of CEEC region, the diverse relations towards Russia, as well as the differences in the infrastructure networks (Austvik, 2016: 378-80).

The risk regulation and assessment became integral part of the gas supply regulation in form of regular stress testing. This was the area, where the shift of new powers clearly occurred in relation to ENTSO-G (and to the Commission), however the fact-finding nature of such tests remained less problematic in light of agencification's power model requirements, even if such test results, nevertheless methodologies might have substantial impact on future policy choices taken by other actors. This situation makes it obvious that the agencies (just like TGNs) would require proper (sector-neutral) primary legal basis on the most basic elements of the creation and functioning of such bodies.

The crisis-related cooperation between the Member States is also much more encouraged and even expected in form of the solidarity clause. This could be considered as one of the main

achievements of the new Regulation, even if the future interpretation of this clause is still unclear in practice. The EU legislator could also avoid the dilemma of conferring powers on new EU bodies, which are restricted to take own policy choices by keeping most of the prerogatives on national level or by the Commission on EU-level. However, this clause can be considered as a major step as Union legislator started to prioritise the protection of general EU interests, especially of individual citizens over mere market-based approach.

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