VIII. APPLICATION OF THE ASSESSMENT MODEL EXPLAINED

The EBRD region comprises European Union (EU) Member States, Southeast Europe and Eastern Europe, Russia, the Caucasus, Central Asia and Mongolia. Given the geographic, natural resource, infrastructure, economic and political spectrum reflected in the Bank's countries of operations, the Assessment Model must be sufficiently flexible to accommodate regional differences. The Model therefore is designed to adapt to the differences in regions, to the extent possible. It offers a quantitative analysis that accommodates partial or developing frameworks.

The Assessment Model is based on a generally applicable list of criteria and principles that have reached international recognition. While no agreement mandates or otherwise binds the EBRD countries of operations, internationally experts have reached a high degree of consensus regarding the value and importance of adherence to best practices based on these principles in order to achieve successful liberalisation and competition in the energy sector. These principles address in particular market design, competition, transparency, clarity of rules, and predictability of rule-making and decision-taking, along with accountability of sector actors. In order to facilitate use of the Assessment as a high-level, preliminary guidance for investment, the Assessment Model is grounded in the market-oriented, liberalised perspective. It is designed for compliance with the principles that underlie best practices, with expectation that countries in the EU generally will adhere to these principles, while those beyond the EU borders will strive to adhere to these principles but may be in the formative or early implementation stages. The benchmarks used in this Assessment (discussed in part III) are formed from these principles; in turn, developed from these are the incorporated indicators. These are discussed below.

1. Indicators

In order to provide a fair measurement of the regulatory frameworks in the EBRD countries of operations, this Assessment develops eight indicators for electricity and gas from the core benchmarks of the Assessment Model. Each indicator has a score, and the composite score from all indicators is used to assess each participant country. Each score is developed in accordance with best practices, so that, the most fundamental criteria (such as regulatory independence, for instance) and the details underlying these (such as, in the case of independence, separation utility and government) receive the greatest weightings.

Though the indicators are the same for electricity and gas, several sub-components of the indicators do vary in order to accurately reflect the differences between the electricity and gas sectors. The differences are small and, where applicable, noted.

Each indicator is assigned a point value, with a total of 100 for all eight indicators (the maximum score that can be achieved). Subcomponents of the indicators are assigned a score between 0 and 1, with 1 indicating the optimal score, and weighed according their relevance for the Assessment Model. The subcomponents are described further in a separate section below.

a. Regulatory independence – 15 points

This indicator assesses the institutional framework to measure the degree of freedom from industry, government and political interests of a regulatory authority. Such freedom enables the regulatory authority to act in ways that develop and guide market competition and restrict market distortion (either existing or attempted). This category is the anchor for a regulatory framework with limited regulatory risk. In particular, it encompasses three related concepts:

- Separation from industry (ownership, control and operation functions) as a first priority, and separation from government (in particular, the policy maker, usually Ministry) in charge of energy issues, as a second-level priority; the weighting reflects this priority
- Financial independence, namely a budget for the regulator that is fixed, relies on fees from licensees and is not vulnerable to political pressure during the execution of regulatory responsibilities, receives the highest weighting, while regulatory budgets that are part of the central budget and dependent on ad hoc governmental approval receive the lowest ratings
- Professional security of positions and personnel. This criterion includes: a salary structure that gives a fair, competitive salary to regulators and high level staff so as to ensure qualified personnel and discourage corruption; and fixed term lengths with a fair appointment process and removal only for cause. The greater the security from political and industry interference, the greater the weighting

b. Regulatory authority – 15 points

A regulatory authority requires autonomy over certain subject matters in order to be able to do its job in an efficient and effective manner. It should, for instance, have decision-making authority, ability to set tariffs and define applicable methodologies without intervention, licensing authority that allows it to monitor the behaviour of licensees, and the like. The tariff making authority is critical because pricing is often the subject of intense political pressure from all sides. The more independent the regulatory authority, and the more autonomy it has to decide the framework tariffs, the more likely is a market economy that supports competition and cost-reflective prices.

Part of this consideration is whether regulatory authorities are able to make decisions that retain integrity, and are not compromised by being overruled or subject to an unduly lengthy appeal process that puts the regulator's decision on hold pending appeal. This section looks at:

- Clear divisions of responsibility between policy-making, industry, and regulation, with full points provided where these responsibilities have minimal overlap
- At a minimum, the regulator requires authority in the area of tariffs, and the greater the ability to set these tariffs or the methodologies in a manner that protects against manipulation from government or industry, the higher the weighting
- For real effectiveness, the regulator also requires authority in other key areas, such as licensing and complaint resolution, but also in monitoring and investigatory functions of the regulatory authority; the greater the regulatory powers in these areas, as long as these powers do not cross the

line into policy-making or industry responsibilities, the greater the weighting

- The ability to penalise industry for violations of regulatory rules is critical; powers to penalise must be set forth in law and regulations, but also the regulator must be able to impose and enforce licensing provisions and procedural rules; in this subcategory, the highest weighting is given to those structures that allow penalties in actual fact rather than simply *pro forma* penalties, such as the withdrawal of a licence, which the regulator is usually unwilling or unable to use for sector security reasons
- Part of regulatory authority is the ability to make decisions that are adhered to and final, in a manner consistent with the rule of law. Therefore, an optimal regulatory environment includes a transparent and accessible appeal system that does not create undue delay and does not put on hold regulatory decisions for any notable duration. Frameworks that allow regulatory decisions to go into effect pending appeal but can also demonstrate a fair, open and efficient appeal process receive the highest weighting

c. Market framework – 14 points

Review of the market framework assesses the degree to which competition is possible as well as the nature that such competition must take. To this end, this indicator includes the following subcomponents:

- Type of market model; the more open to competition, the greater the weighting
- Eligibility thresholds; the existence of an aggressive but reasonable time table for market opening, beyond merely large customers, is given the higher weighting; significant limits on (or no) eligibility results receive a lower weighting
- Level of unbundling in industry; the more separation of industry, and particularly separation of the TSO from generation and supply, the higher the weighting, with the lowest weighting assigned to vertical integration and mid-range weighting where unbundling is confined to accounting but not extended to management and/or ownership
- Retail choice and the ability to switch suppliers is a sign of a truly competitive market; the more customer choice in actual fact, the higher the weighting, lower weighting is given when choice exists on paper but not in practice
- Lowest weighting is given to sectors in which choice is absent

Finally, the electricity and gas questionnaires used for the Assessment, and consequent data received, reveal considerable variance as to the type of market model (single buyer v. procurement competition), unbundling status (generation v. other activities) and the existence of an electricity spot market v. a gas hub or a notional balancing point. The more open to competition the model, the higher the weighting it receives.

d. Network Access – 12 points

This indicator is critical as it offers a sense of network options available to new market entrants. In other words, without access to the network and indeed a stable network able to handle increases in capacity, new producers cannot sell their product, within or without the country's borders, and new customers may be restricted. Thus, this indicator includes the following considerations:

- Third Party Access rules that are clear and non-discriminatory receive the highest weighting, with the caveat that limited priority is allowed under (carefully) targeted rules for new investment and renewable energy; discriminatory limits on Third Party Access that are not constrained by renewable energy or investment incentives result in a zero rating
- Any legal, regulatory or operational constraints on Third Party Access exist; these are weighted with a zero (0) unless justified by exceptions
- Clear and fair rules and obligations for network expansions are in place to accommodate new capacity and new customers; the more transparent, the higher the weighting

e. Tariff structure – 12 points

A liberalised market requires that energy enterprises are able to charge (and receive) a fair price for the energy produced, distributed and supplied. This indicator therefore assesses the tariff process, with higher weightings given to the following:

- Methodologies that are published in advance and subject to public consultation
- Regulated tariffs that are fixed *ex ante*, pursuant to clear rules, and published
- Regulated tariffs that are cost-reflective and cross-subsidies are eliminated
- The regulated tariffs include incentive components
- A separate tariff for Third Party Access is in place
- All or only some types of tariffs are regulated (in particular whether generation is subject to tariff regulation)

The data on gas specifies the different types of methodologies applicable to gas.

f. Public service obligations – 10 points

It is widely accepted that some energy services, most significantly transmission, are monopolies and thus require regulation that includes public service and public protection components. This indicator therefore looks at – and gives the higher points to – adequate and fair processes, though not overtly market distorting. In particular, the higher ratings are given when consumer protection provisions are in place that are proportional to the need, i.e., meet legitimate public service obligations while being the least restrictive possible for competition and trade between states. This section therefore gives weighting to frameworks that provide the appropriate balance, while also giving the regulatory authority appropriate monitoring powers to ensure the balance is sustained. For this section the specific areas of focus are provisions relating to:

- Supplier of Last Resort

- Quality of Service
- Network Maintenance
- Protection of Vulnerable Customers

g. Transparency and accountability – 12 points

Without transparency and accountability, any regulatory and policy framework can be subject to abuse, misinterpretation or disregard. It is therefore vital that regulatory and policy reforms are accompanied by rules that are publicly available and accessible and subject to public consultation and comment. The regulatory and policy frameworks must also make the responsible institutions accountable so as to inspire confidence and build the trust of the public and private sectors. The components of this category are the following:

- Periodic public reporting: the highest weighting is assigned when procedures are in place for the regulator to report its activity in a transparent and predictable manner that is also readily accessible to the public; in some regimes, reporting is made to government bodies but is not public and in these cases, the weighting is zero
- Publication of decisions and rules: publication should be predictable, clear and accessible
- Public consultations and hearing: the greatest weight is given to regulatory processes that integrate the public as much as reasonable, so, for instance, the public has an opportunity to be heard at tariff hearings that will affect the public interest, either through physical representation at a hearing or through the ability to send written comments, and a process is in place to respond to such comments
- Conflict of interest provisions: these are in place to restrict regulators and their staff from working at the regulatory authority if they have too close a connection to industry or government, such that the potential of conflict is raised. The goal here is to limit the potential for conflict so as to reduce the possibility of undue influence from industry and government and increase public confidence in the regulatory process. Rules that meet this goal are given the highest weighting

h. Private sector participation – 10 points

This section is most concerned with the viability of the existing framework for bringing in new investment, and gives the higher weighting to:

- Incentives for new investment
- Provisions that facilitate cross-border trade
- Third Party Access exemptions for new investment
- Framework to monitor market abuses that allows new entrants to the market and reduces incumbent priorities or manipulation of the market

Information gathered in response to the questionnaires was collected in a database designed by the Assessment Team and analysed in accordance with indicators stemming from the benchmarks that form the Assessment Model. These indicators are weighted and each country is measured using these weightings.

2. Weightings explanation

As noted, the weightings are from 0 to 1, with 1 being the highest score that can be provided and 0 the lowest. Fractional weighting are provided in order to recognise adequately the ongoing state of reforms in many of the EBRD countries of operations and the increasing steps taken by these countries to improve their regulatory frameworks.

The weightings are combined proportionate to the importance of each indicator, with some indicators, such as regulatory independence holding greater importance than others, such as public service obligations. Within each identified indicator are sub-categories (up to 16 per indicator), each of which has a separate weighting; the final weighting per indicator is an average of these weightings. A homogenised approach was used to measure each sub-component, indicator and overall score.[97]

Finally, based on these weightings, the countries are compared within their respective groupings to indicate relative conditions for regulatory development, put into the appropriate regional, geographic basis.

The spider graphs offered are based on weightings developed from the electricity and gas questionnaires. Some participants do not have an active gas system (i.e. Albania, Montenegro and Mongolia) or have a gas system that is not sufficiently developed to allow a full assessment (Bosnia and Herzegovina, FYR Macedonia, Tajikistan and the Kyrgyz Republic); as a consequence for them gas graphs are not provided. A similar pattern applies to the bar graphs offered in the Results section.

A comparative view of the participants by group is also offered. The bar graphs show, for the electricity and the gas sector, the total percentage score (to a maximum of 100%) assigned to each participant and its components. For graphical reasons, the eight indicators which make up the Assessment Model have been combined as follows: "institutional framework", which is made up of indicators 1 and 2 and comprises 30% of the point-scoring potential; "market structure and access", which is made up of indicators 3 and 4 and comprises 26%; "tariffs and public service obligations", which is made up of indicators 5 and 6 and comprises 22%; and "transparency and private sector participation", which is made up of indicators 7 and 8 and comprises 22%.

Finally, as noted above, renewable energy and energy efficiency are addressed separately from the identified eight indicators, with a section on renewable energy and energy efficiency provided in the Results Section, and analysed qualitatively only.

A glossary of main technical terms used in this report is contained in Annex 1.

[97] Detailed description of the weighting structure, including all indicator subcomponents, is provided in the Annex 1.