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***“Measuring Regulatory Independence
– A Caribbean Perspective”***

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**MEASURING REGULATORY INDEPENDENCE
– A CARIBBEAN CONSIDERATION**

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Abstract

The aim of this paper is to provide a methodology and framework that can be used in the Caribbean for the measurement of regulatory independence among regulatory bodies. Drawing largely from the empirical work conducted in Europe, the proposed framework offers countries (policy makers and regulators themselves) the wherewithal to describe and compare fairly detailed information on the design of the actual regulatory authorities and compare similarities and variations between the various regional jurisdictions.

The primary data collection tool will be the survey, but the issues in the design of an appropriate and regionally relevant questionnaire, as well as the peculiarities of the region will be addressed. An appropriate index will be discussed that describes and compares four dimensions of regulatory independence. These are independence of the regulators from government, independence from stakeholders, independence in the decision-making of the regulator, and organisational autonomy.

The paper concludes with recommendations for regional regulators on implementing such studies.

Key words: Regulatory Independence; Caribbean; OOCUR; Claude Byer

¹ The views expressed in this paper are those of the author and does not necessarily represent the views of the Regulated Industries Commission.

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Introduction

The creation of independent regulators in the form of commissions or agencies is not a new phenomenon. For almost a century, independent regulatory agencies have existed and continue to play a key role in the regulation of network industries in the US. In Europe, independent regulators have been involved in such diverse areas as the media, competition policy, and the protection of civic rights. However, they have been less dominant in the regulation of network industries as public ownership has prevailed in these sectors. This has changed over the past two decades as liberation of network industries saw the emergence of numerous independent regulatory agencies. In some Caribbean jurisdictions, notably Trinidad and Tobago and Jamaica, the institution of independent regulatory bodies has, only in the last decade or so, moved from being rate hearing Public Utility Commissions to sector regulators. In some jurisdictions, sector specific independent regulators have been created. However, in our region, the public ownership of network industries retards to some extent the evolution of true independent regulators.

While the Caribbean strives to achieve liberalised markets, independent regulation acts as a surrogate for actualising many positive features of competition, such as achieving lower prices and increased efficiency, even though the regulated industries throughout the region are natural monopolies, save for the recent opening-up of market segments in the telecommunications sector.

Since we operate, for the most part, in monopoly markets, then the attainment of true regulatory independence becomes even more critical to the Caribbean. Accordingly, it is important that the region be able to measure its regulatory independence. It is to this end that the author hopes that this paper will be beneficial.

The paper begins by examining the work carried out by Johannsen (2003) in Europe where a survey was conducted in the European electricity sector to measure the degree of independence. In Section 2, an adopted framework will be discussed specifically for

Caribbean needs and suitability. The paper then concludes by summarising the benefits of carrying out similar work in the region.

Section 1

1.1 The European Experiment

In March 2001, OECD (Organisation for Economic Cooperation and Development)/IEA (International Energy Agency) published a survey of regulatory institutions in liberalised electricity markets in the IEA member countries. This survey found that while in many IEA countries independent regulators have been created in relation to the liberalised electricity markets, these independent regulators vary in terms of their powers and the status of their actual independence.

In order to shed light on the empirical question as to whether these regulators can be characterised as independent (according to the theoretical definition in the literature on the subject), a survey was conducted by Katja Johannsen (2003) to examine and measure this phenomenon. This exercise is worthy, if only to take into account the writing of Ragin (2000) who postulates that the empirical concept of regulatory independence may be quite far from the theoretical concept of regulatory independence.

There were three aims of the regulatory independence survey conducted in Europe:

1. The Empirical aim was to measure and compare the central dimension of the regulatory authorities in eight European countries in order to investigate the similarities and differences;
2. The Methodological aim was to make an attempt to measure the relative independence of the regulators by constructing an independence index; and
3. The Theoretical aim was to confront the theoretical concept of regulatory independence with the actual empirical results in order to discuss the empirical relevance of the theoretical discussion.

The delimitation of the survey population was the sixteen members of the Council of European Energy Regulators (CEER). This population was also defined as “regulators in

the field of electricity and natural gas who are involved in the implementation of the EU directive on the internal market for electricity (EC96/92) and call themselves independent". Hence, regulators from the following countries participated in answering the survey questionnaire: Austria, Denmark, Greece, Ireland, Italy, Luxembourg, Northern Ireland, and Spain.

1.2 Methodological Issues

While there may be other methods to measure the independence of regulatory authorities, the use of the survey and indexing method is one of the best ways to standardise the exercise and systematically capture information that can be weighted for comparative purposes. Other exercises could include a comparative analysis of legislative frameworks among Caribbean regulators. However, if such analyses were to be conducted without the use of indexing, bias could be introduced as much weight is placed on the subjective interpretation of the investigator to judge the status of one framework against another.

In the European study, the questionnaire was the tool used to collect primary data from the regulators. In the questionnaire, emphasis was placed on independence in formal, legal/organisational terms rather than in behavioural terms. As such, the survey did not examine how the formal rules etc., operated in practice.

Johannsen (2003), points out that in designing the questionnaire, there were several questions that should be clarified, and consideration must be given to the possible dimensions of a typology of regulatory independence. For example, how can we measure regulatory independence? What is an arm's length relationship? And how do we measure organisational autonomy?

The design of the questionnaire for use in this type of survey must be based on the variables of regulatory independence the investigator wants to capture. In Johannsen's study, the author used Gilardi's (2001) work in the field to operationalise the concepts of regulatory independence. Once these key variables that operationalised the concepts are

determined, relevant questions could now be developed with appropriate responses to capture the data. It is this author's contention, therefore, that a similar approach could be adopted to derive a questionnaire for the purposes of measuring regulatory independence among Caribbean regulators. This will be discussed further in Section 2 of this paper.

1.3 The Independence Index

Constructing an independence index allows the researcher to weigh together different aspects of regulatory independence into a single measure. The main purpose of constructing the index is to establish an overview picture of the data as well as the diversity of the organisational and institutional designs of independent regulatory authorities. As Johannsen (2003) points out, the index is not constructed to show the ultimate truth about the degree of independence of each regulatory authority being surveyed, but rather the index can at best give an indication of this regulatory independence.

The countries in the survey were scored on an independence index that contained four dimensions and thus constituted four distinctive sections of the questionnaire:

1. independence of the regulators from government – Section A;
2. independence from stakeholders – Section B;
3. independence in the decision-making of the regulators – Section C; and
4. organisational autonomy – Section D.

Each one of these thematic sections was designed to shed light on a particular aspect of regulatory independence. The variables in each section were weighed together to construct the four key variables in the index.

Section A of the questionnaire revolved around questions and answers that dealt with the formal independence from government and legislature, and the questions were centred around the procedures for appointment and dismissal of the commissioners or the director heading the authority.

Section B involved questions addressing the independence of regulators from stakeholders, and the questions in this section were to provide information on how, and to what extent the relationship between the regulated parties and the regulator is subject to formal regulation.

Section C dealt with the possibilities of independent decision-making of the regulatory authorities. This was operationalised in the questions regarding their obligations regarding accountability, their competencies and the degree of irrefutability of the decisions made by the regulatory authorities.

Section D addressed the financial and organisational autonomy of the regulatory authorities.

Johannsen (2003) did take care to mention, however, that questions regarding the respondents' own assessment of the degree of independence of the respective regulatory authority have been excluded from the calculation of the index. In my own view, this could have introduced bias, however, such answers were important in informing the discussion of the relationship between the theoretical concept of independence and its measurement as well as the perceived independence of the regulatory authorities.

Johannsen's study started with a base of questions from Gilardi's study. These questions provide a sound platform upon which to develop questionnaires that seek to enquire into regulatory independence.

Regarding agency head status the base questions were:

1. What is the term of office of the agency head?
2. Who appoints the agency head?
3. What are the provisions regarding dismissal of the agency head?
4. May the agency head hold other offices in government?
5. Is the appointment of the agency head renewable?
6. Is independence a formal requirement for the appointment?

The base questions regarding management of board member status were:

1. What is the term of office of the management board members?
2. Who appoints the management board members?
3. What are the provisions regarding dismissal of the management board members?
4. May the management board members hold other offices in government?
5. Is the appointment of the management board members renewable?
6. Is the independence a formal requirement for the appointment?

Relationship with government and parliament had these base questions:

1. Is the independence of the agency formally stated?
2. Which are the formal obligations of the agency vis-à-vis the government?
3. Which are the formal obligations of the agency vis-à-vis parliament?
4. Who other than a court can overturn the agency's decision where it has exclusive competency?

As regards financial and organisational autonomy, the following questions were asked:

1. Which is the source of the agency's budget?
2. How is the budget controlled?
3. Who decides on the agency's internal organisation?
4. Who is in charge of the agency's personnel policy?

According to Johannsen (2003), since Gilardi's study aimed to test the credibility thesis², the base questions had greater emphasis placed on the aspect of regulatory independence of 'independence from government and parliament'. Consequently, in Johannsen's study questions on the relationship between regulator and stakeholders were added since Gilardi's study lacked similar questions for reasons already alluded to. The questions in this regard were:

1. May commission members/the agency head have held a position in the electricity supply industry/industrial associations in the years preceding their appointment?

² The credibility thesis – states that the legislature chooses to delegate more competencies to more independent agencies, when they need to give their policies more credibility.

2. Are there provisions restricting the commission members'/the agency head's possibilities of accepting a job in the electricity supply industry after their term?
3. Are there provisions forbidding discussions of pending cases with stakeholders?
4. Are there any provisions forbidding that the agency head/commission members have any person or pecuniary interest in the electricity sector?

Of course, answers were provided for the majority of these questions and the full questionnaire used in the European study has been appended to this paper for ease of reference. Johannsen (2003) also criticised Gilardi's index for presuming that one particular institutional design prevailed. As such it may be difficult to distinguish between the agency head and the management board members since there may be many variations of institutional design. This is a useful point to bear in mind for the Caribbean context, since for example, Jamaica's Office of Utility Regulation (OUR) is headed by an agency head (the Director General), while Trinidad and Tobago's Regulated Industries Commission (RIC) is headed by a board of commissioners.

1.4 Calculation of the Index

In the European study, Johannsen calculated the independence index by valuing all answers between 0 and 1, with 0 being the answer indicating a low degree of independence and 1 indicating a higher degree. If there were three possible answers to a question, the answers were coded with the values 0, 0.5 and 1. However, where there were four possible answers, the accorded values were 0, 0.33, 0.67, and 1. In cases where according values to non-binary answers occurred, the ordinal scale was translated into numerical values with no consideration of the possible differences in the size of the steps between the answers. As Johannsen points out, this procedure can be criticised since in many instances a researcher could assign values based on qualitative judgements resulting in differences in values accorded to answers. However, she argues that the procedure was chosen in order to keep the index as simple and as transparent as possible.

The resulting independence index for the European study can be seen in Table 1 below.

Table 1
The Independence Index

Country	Key Variables				Index	Rank
	Independence from Government	Independence from Stakeholders	Independent Decision-making	Organisational Autonomy		
Austria	0.58	0.50	0.93	0.63	0.66	5
Denmark	0.44	0.33	0.87	0.63	0.57	8
Greece	0.78	0.33	0.92	0.75	0.69	4
Ireland	0.69	0.58	0.88	1.00	0.79	2
Italy	1.00	0.75	0.89	1.00	0.91	1
Luxembourg	0.42	0.63	0.58	0.75	0.59	6
Northern Ireland	0.44	1.00	0.88	0.63	0.74	3
Spain	0.61	0.58	0.36	0.75	0.58	7
Mean	0.62	0.59	0.79	0.77	0.69	-

Source: Johannsen (2003)

Section 2

2.1 Caribbean Considerations

In designing a questionnaire for capturing data that will be used to measure regulatory independence, it is paramount that the investigator is clear on the definition of regulatory independence to be adopted. This is important because regulatory institutions in different jurisdictions may have experienced different circumstances (be it economic, political, historical, ethical, legal, etc.) that will have influenced the form of regulatory framework. Accordingly, Caribbean regulatory authorities may have focused on different aspects of independence. An exercise such as the one being purported in this paper, may afford an opportunity for regional regulators to develop a common position on the meaning of Caribbean Regulatory Independence.

While there are many definitions of regulatory independence, Johannsen (2003) suggests that Fesler's definition captures what most authors seem to understand by regulatory independence in the field of utility regulation. This definition states that regulatory independence means independence from control by the government and legislature, independence from control by utility companies, and independence in the sense of integrity and impartiality. Smith's (1997) definition embodies not only formal independence in terms of regulators having arm's-length relations with both political authorities and stakeholders but also includes regulators having attributes of organisational autonomy. Perhaps a definition that embodies both Fesler's and Smith's definitions may provide a suitable starting point for Caribbean regulators.

Through early determination of these theoretical conceptualisations of regulatory independence, an investigator would be in a better position to develop the key variables under which appropriate questions for the survey questionnaire may be categorised and so placed. Issues that can be seen as risks to regulatory independence in the Caribbean can be summarised as, but are not limited to the following:

Political Independence

- Legislative frameworks that allow shared autonomy and Ministerial intrusiveness.
- Government appointment of commissioners.
- Government/Parliamentary approval of regulatory authority's budgets.

Independence from key Stakeholders

- Industry capture – because of low salaries offered as a result of public service salary restrictions on regulators.
- Misinformation and more so delay in providing information in an attempt to manipulate regulatory decisions.
- Imbalance in decision making that may be perceived to be weighted too heavily in favour of consumers and may be unduly punitive to service providers.

Regulatory Integrity

- The need for formalised transparency in consultation before final regulatory determinations and decisions.
- Making provisions for the exclusive competencies of regulators to make certain decisions and avoiding discretionary powers of Ministers to make decisions and grant certain approvals.

Organisation Independence

- Including financial independence (with accountability).
- Regulators ability to design their own organisational structure and make key organisational decisions, such as human resource and salary cap decisions.
- Regulatory authorities not having maximum powers to control all resources.

The above highlights at least four possible areas of focus for a questionnaire to be used to conduct an exercise to measure regulatory independence in the Caribbean. These can be further delineated to form the eight attributes outlined in Atwal and Padmore (2004, pg. 10) measures of regulatory independence.

2.2 Confidence of the Index

It can be argued that the independence index constructed above appears to be a simple exercise that lacks robustness. According to Bohrnstedt and Knoke ((1994), social scientists often use indexes constructed from other variables to reflect some underlying latent unobservable variable. An index, therefore, is defined as a variable that is a summed composite of other variables that are assumed to reflect some underlying construct³. In this case, the unobserved theoretical construct is regulatory independence and there were four observed variables in the European study chosen to measure this phenomenon. In other words, the indicators⁴ (or observed variables) are presumed to reflect a single underlying variable and accordingly, it would be expected that these variables would be positively correlated with each other. The higher the correlation the more confident one can be that the variables are measuring the same construct.

For a given level of correlation among the measures, the greater the number of indicators, the greater the level of confidence in the index constructed. Thus the quality of an index can be judged by the average intercorrelation among the indicators and the number of indicators that comprise it. A statistic that summarises the reliability of an index is the Cronbach's alpha, which is a measure of the internal consistency of a set of items, and it ranges from 0 (no internal consistency) to 1 (perfect internal consistency).

This statistic will be used to test the reliability of the independence index constructed in the European study and it is this author's hope that credibility will be added to the methodology being purported for use in the Caribbean.

The Cronbach's formula is as follows:

$$a = \frac{k\bar{r}}{1+(k-1)\bar{r}}$$

where:

k = The number of indicators in the index; and

\bar{r} = The average intercorrelation among the k items comprising the index.

³ A construct is an unobservable concept used by social scientists to explain observations.

⁴ An indicator is an observable measure of underlying unobservable theoretical construct.

A calculation of alpha using SPSS software package revealed the following result (see Table 2).

Table 2
Result for Cronbach's Alpha of the Independent Index

Reliability	
R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)	
Reliability Coefficients	
N of Cases =	8.0
N of Items =	4
Alpha =	.4147

An alpha statistic of 0.75 to 0.80 or higher is considered acceptable in most social science applications. However, the reliability of the four key variables being used on the same scale to measure a single construct is low using all four variables combined. In other words, the key variables used in the European study do not appear to be sufficiently intercorrelated to measure a construct when combined on the same scale.

Further, reliability analyses were carried out on subsets of the variables to see which key variables correlate well to measure the same construct. Unfortunately, the results were just as daunting as seen in Table 3 below.

Table 3
Reliability Analysis of Subset Variables

Components Combined	Alpha
A & B	-0.0861
C & D	0.0864

These reliability analyses, however, suggest that the key variables in Section C and D of the questionnaire were better at being combined to measure the phenomenon of regulatory independence. It is important to understand that the data used to perform these analyses are limited since $k = 8$ only and this small number does not auger well for

improving the reliability of the variables. Since there were only eight countries in the European study, a Caribbean study, with similar amount of countries to be studied, may show similar results in using this test to demonstrate the reliability of the index. This does not mean that the chosen variables were not significant in themselves to measure the construct. A factor analysis of variance has demonstrated that the data were seen not to be unidimensional but in fact they were multidimensional. That is, Sections A and B do not seemingly measure the same latent construct as Section C and D, although the reliability estimate in the later case was similarly low. Thus, since the data are not unidimensional, then perhaps these four key variables should not be combined to create one single scale. Instead, indexes should be created for each key variable in order to measure the comparative independence among Caribbean countries.

Atwal and Padmore (2004) have identified eight possible attributes that could be used when investigating regulatory independence in the Caribbean. These attributes will be used to reconstruct an Independence Index, like the one in Table 1. Since an actual questionnaire has not yet been developed and issued to regional regulators, hypothetical data will be used in the index purely to simulate the exercise to test the hypothesis that if the number of variables were to increase, then it is likely that the quality of the index may be improved when using reliability measures. The simulated index is presented in Table 4 below.

Table 4
Simulated Caribbean Independence Index

Country	Independence	Transparency	Accountability	Selection Process for the Board	Tenure	Financial Autonomy	Decision-making process	Staff Salary	Index
Bahamas	0.73	0.70	0.67	0.58	0.62	0.92	0.85	0.95	0.75
Barbados	0.62	0.73	0.68	0.55	0.68	0.75	0.87	0.89	0.72
Guyana	0.78	0.68	0.72	0.58	0.72	0.71	0.90	0.75	0.73
Jamaica	0.75	0.65	0.79	0.50	0.70	0.80	0.95	0.90	0.76
OECS	0.80	0.75	0.82	0.60	0.68	0.89	0.85	0.85	0.78
Trinidad	0.70	0.78	0.80	0.52	0.72	0.85	0.83	0.70	0.74
Mean	0.63	0.61	0.64	0.48	0.59	0.70	0.75	0.72	0.64

From the above simulation the results of the Cronbach's test is as follows:

Table 5
Results of Cronbach's Alpha on Simulated Case

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)	
Reliability Coefficients	
N of Cases =	6.0
N of Items =	8
Alpha =	-.1161

Once again the alpha statistic is very low, suggesting that the attributes in the index are not sufficiently intercorrelated and as such may not be best to weigh together on the same index. Perhaps the introduction of additional variables into the index could have caused multicollinearity to arise particularly where these attributes are strongly correlated with one another. One of the first symptoms of multicollinearity is usually a reduction in correlation measures.

Notwithstanding, the independence index still can allow meaningful comparative analyses to be made about the degree of regulatory independence in the Caribbean. For example, as a region we would be able to see common areas exhibiting low degrees of independence, as well as, from an individual country's perspective we are able to identify areas for improvement. Such a study might even provide the necessary support to persuade political authorities to successfully negotiate for legislative changes to effect higher degrees of regulatory independence among Caribbean jurisdictions.

Conclusion

Theoretical and hypothetical discussions of regulatory independence contribute to the understanding of the significance of this concept. However, it is equally important that these conceptualisations be viewed practically if their true meaning and importance are to be taken seriously by politicians and decision/policy makers.

The measurement of regulatory independence provides a means by which Caribbean regulators may be able to benchmark their individual jurisdiction's independence status and juxtapose such status quos against other jurisdictions. Such comparative analyses can assist the region at arriving at true regulatory independence as regional regulators are now in a position to at least qualitatively assess their advancements and or shortcomings as regards regulatory independence.

Despite some obvious shortcomings when using this method to measure regulatory independence, the strength of the method lies in its simplicity. An examination of Table 1 (Section 1.3 above), demonstrates that from this simple index one can draw meaningful comparative analyses of the degree of independence among regulators in the liberalised electricity supply sector across Europe. The index allowed for a comparison of regulatory independence across countries and enabled respective countries to self examine its own independence status as regards the key variables chosen and included in the index itself. Since the same variables would be applied to all countries involved in the survey, then the index provides a systematic method for ranking the independence of the different jurisdiction. As such, recommendations could be put forward to improve the degree of independence where revelations are made of those jurisdictions that lag behind in those specific aspects of regulatory independence that were identified.

Critical to the success of conducting this type of exercise is establishing our own Caribbean definition of regulatory independence and identifying key variables to be used for comparison. Hopefully, these would be specified in such a way that they would intercorrelate well when combined together on the same index. This research could be

used as a start to conducting further research, where we can begin to examine the relationships between regulatory independence and say the performance of the regulated companies or the movement in utility prices. Such studies must, out of necessity, incorporate econometric techniques and the results properly interpreted. This type of work would provide useful insights into the empirical impact of regulatory independence and how the degree of independence influences other factors. It is this author's hope that, perhaps, OOCUR may soon undertake such an exercise in the Caribbean as a logical continuum of this second annual conference. Perhaps this could be done by OOCUR bringing together some of the region's experienced regulators in a committee forum to spearhead this exercise.

***** End of Paper *****

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Appendix

QUESTIONNAIRE USED IN EUROPEAN STUDY

The respondent

What is your position with the regulatory authority? (please type)

Formal status, mission and responsibility

1) Which are the regulatory objectives of the regulatory authority (explicitly stated in the legislation or in a mission statement)? The regulatory authority works to promote (mark the right answers with an X):

- a) consumer protection
- b) economic efficiency in the supply industry
- c) competition
- d) market transparency
- e) an environmentally friendly electricity supply
- f) socially responsible price policies
- g) security of supply
- h) other issues/objectives:

2) Is the independence of the regulatory authority formally stated either in legislation or in the statute of the regulatory authority? (mark the right answer with an X)

- a) yes
- b) no

3) Who is responsible for the regulatory authority's decisions?

- a) a board of commissioners (full time)
- b) a board of commissioners (part time)
- c) an agency head/a director
- d) other:

4) What is the professional background of the current agency head/the commissioners?

A. Formal independence from government and legislature: Status of the regulatory authority

In the following I will ask a number of questions regarding the status of the person or the commission responsible for the regulatory authority's decisions. When you answer, please give the answer which is relevant for the *responsible* person(s).

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5) What is the term of the agency head or the commissioners?

- a) more than 7 years
- b) 4 to 6 years
- c) 1 to 3 years
- d) no fixed term or at the appointer's discretion

6) Who appoints the agency head or the commissioners?

- a) a mix of the legislature and the executive
- b) the legislature
- c) the executive collectively
- d) one or two ministers

7) What are the provisions regarding dismissal of the agency head or commissioners?

- a) dismissal is impossible
- b) dismissal is only possible for reasons not related to policy
- c) there are no specific provisions for dismissal
- d) dismissal is possible at the appointer's discretion

8) May the agency head or the commissioners hold other offices in government?

- a) no
- b) only with the permission of the executive
- c) there are no specific provisions
- d) yes

9) Is the appointment renewable?

- a) no
- b) yes, once
- c) yes, more than once

10) Is independence a formal requirement for the appointment?

- a) no
- b) yes

11) On a scale from 1 to 10, how independent would you say that the head/board of the regulatory authority is by appointment and formal status? (1 being not independent and 10 being fully independent)

On which criteria do you base this judgement?

B. Independence from stakeholders

12) May commissioners/the agency head have held a position in the (public or private) electricity supply industry/industrial associations *in the years preceding* their/her appointment?

- a) no
- b) yes, but not within the last two or more years prior to the appointment
- c) yes
- d) yes, and they can hold a position in industry during their term of office.

13) Are there provisions restricting the commissioners'/the agency head's possibilities of accepting a job in the electricity supply industry after their term?

- a) yes, regulators are not allowed to take positions in the regulated industry for several years after finishing their term
- b) yes, regulators are not allowed to take positions in the regulated industry for up to a year after finishing their term
- c) no

14) Are there provisions forbidding discussions of pending cases with stakeholders?

- a) yes, in the specific legislation regarding the regulator/the specific statute for the regulator
- b) yes, in the general legislation regarding good governance
- c) no

15) Are there any provisions forbidding that the agency head/commission members have any personal or pecuniary interest in the electricity sector?

- a) yes, both in relation to the appointment and in relation to the individual cases
- b) yes, in relation to individual cases
- c) no

16) On a scale from 1 to 10, how independent would you say that the regulatory authority is from stakeholder interests? (1 being not independent, 10 being fully independent)

On which criteria do you base your judgement?

C. Substantial independence from government and legislature: Competencies and independent decision-making

Questions 17 and 18 regard the competencies and tasks of the regulatory authority in relation to the electricity sector. These questions can be difficult to answer, as there are often exemptions to the rules, unresolved questions concerning overlapping competencies, differences between *de jure* competencies and *de facto* influences and tasks etc. However, I invite you to answer the questions to the best of your ability and, if required, add your comments about the premises and exemptions to the answer below.

17) Which competencies does the regulatory authority exercise in relation to the following tasks in relation to the *electricity sector*?

=> Approval or determination of the tariffs of monopolistic companies (ex ante or ex post)

- a) the regulatory authority is fully competent
- b) the regulatory authority shares decision-making power with another institution
- c) the regulatory authority plays a consultative role
- d) the regulatory authority has no competencies

Comments:

=> Network access

- a) the regulatory authority is fully competent
- b) the regulatory authority shares decision-making power with another institution
- c) the regulatory authority plays a consultative role
- d) the regulatory authority has no competencies

Comments:

=> Licensing and modification of licenses

- a) the regulatory authority is fully competent
- b) the regulatory authority shares decision-making power with another institution
- c) the regulatory authority plays a consultative role
- d) the regulatory authority has no competencies

Comments:

=> Laying down rules regarding terms of delivery (within the limits of the existent legislation)

- a) the regulatory authority is fully competent
- b) the regulatory authority shares decision-making power with another institution
- c) the regulatory authority plays a consultative role
- d) the regulatory authority has no competencies

Comments:

=> Dispute settlement (between companies and between companies and their customers)

- a) the regulatory authority is fully competent
- b) the regulatory authority shares decision-making power with another institution
- c) the regulatory authority plays a consultative role
- d) the regulatory authority has no competencies

Comments:

=> Enforcement

- a) the regulatory authority is fully competent
- b) the regulatory authority shares decision-making power with another institution
- c) the regulatory authority plays a consultative role
- d) the regulatory authority has no competencies

Comments:

18) Which of the following tasks does the regulatory authority perform?

(mark the relevant tasks with an X)

- a) giving policy advice to the government
- b) provision of market information to consumers (transparency)
- c) participation in international co-operation and policy-making
- d) monitoring of the market behaviour and performance

19) Which are the formal obligations of accountability of the regulatory authority vis-à-vis the government?

- a) none
- b) presentation of an annual report for information only
- c) presentation of an annual report for approval
- d) the agency is fully accountable

20) Which are the formal obligations of accountability of the regulatory authority vis-à-vis the legislature?

- a) none
- b) presentation of an annual report for information only
- c) presentation of an annual report for approval
- d) the agency is fully accountable

21) Who, other than a court, can overturn the regulatory authority's decision where it has exclusive competency?

- a) nobody
- b) a specialised body (e.g. a legal tribunal)
- c) the government, with qualifications
- d) the government, unconditionally

22) On a scale from 1 to 10, how independent would you say that the regulatory authority is in actual decision-making? (1 being not independent, 10 being fully independent)

On which criteria do you base your judgement?

D. Financial and organisational autonomy

23) Which is the source of the regulatory authority's budget?

- a) external funding (e.g. fee levied on regulated firms)
- b) government and external funding (e.g. fee levied on regulated firms)
- c) the government

24) When budget has been appropriated, who controls the budget?

- a) the regulatory authority
- b) government and the regulatory authority in co-operation
- c) the government

25) Who decides the regulatory authority's internal organisation (internal procedures, allocation of responsibility, tasks etc)?

- a) the regulatory authority
- b) the regulatory authority and the government in co-operation
- c) the government

26) Who is in charge of the regulatory authority's personnel policy (recruitment, promotion, salaries)?

- a) the regulatory authority
- b) the regulatory authority and the government in co-operation
- c) the government

27) On a scale from 1 to 10, how independent would you say that the regulatory authority is in terms of organisational and financial autonomy? (1 being not independent, 10 being fully independent)

On which criteria do you base your judgement?

If you have more specific comments or general remarks to the questions, please write them here: