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Regional Balkans Infrastructure Study - Electricity (REBIS)

Review of legal and regulatory position against IME Directive and Athens Memoranda

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1. SCOPE OF REPORT

1.1 This report is a high-level benchmarking review assessing the primary legislation of each of the jurisdictions that are part of the REBIS study (Albania, Bosnia and Herzegovina, Croatia, Montenegro, UNMIK, FYR Macedonia and Serbia) against the requirements of Directive 2003/54/EC ("IME Directive") and the Athens Memoranda of Understanding 2002 and 2003 ("Athens MOU"). The assessment primarily considers whether national laws or proposed laws cover the areas required by the IME Directive; it does not consider in detail compliance of subsidiary documentation or the extent to which the jurisdictions are complying with the IME Directive in practice. Other benchmarking studies are considering detailed practical implementation of TSOs and regulatory bodies. This review is focused on formal compliance of legislation with the IME Directive. This review is not intended to be used as a definitive assessment of compliance, but rather as a guide to levels of formal consideration of key areas of the IME Directive in national statutory frameworks.

1.2 In preparing this report we have relied on documents provided by lawyers in each of the jurisdictions. In some situations the information provided by the lawyers consisted of analyses of the legislation in their jurisdiction; in some cases it consisted of translations, both official and unofficial, of legislation. To the extent that we have had to rely on unofficial translations due to the nature of the legislation and the limitations of the project, we cannot, of course, guarantee the accuracy of the information provided or the translation of the legislation itself. To the extent that the information is incomplete or based on an unofficial translation, we have attempted to clarify matters with local legal counsel, relevant Ministries with competence in the electricity sector, electricity regulatory bodies and utilities in the region.

1.3 This report considers the position in each of the jurisdictions in the following areas:

1.3.1 Transmission and distribution:

(a) Whether an independent transmission system operator is required to be designated by statute;

(b) Whether a distribution system operator (either independent or perhaps part of the transmission system operator) is required to be designated by statute;

(c) The statutory tasks that are entrusted to the transmission system operator;

(d) The statutory tasks that are entrusted to the distribution system operators;

(e) Any statutory arrangements relating to ensuring third party access to the transmission system; and

(f) Steps taken toward the establishment of technical rules for the transmission system (i.e. a Grid Code).

1.3.2 Unbundling:

(a) Legislative requirements for legal separation of a transmission system operator;

(b) Legislative requirements for legal separation of a distribution system operator; and

(c) Any statutory requirements for the keeping of separate accounts for the different activities undertaken by integrated electricity utilities.

1.3.3 Establishment of a market:

(a) Current designation of eligible customer thresholds; and

(b) Statutory requirement for preparation of a national plan or policy.

1.3.4 Establishment of a regulator:

(a) Legislative bases for the establishment of an independent regulatory authority;

(b) Statutory protection of the independence of members of the regulator; and

(c) Scope of the regulator’s statutory responsibilities.

1.3.5 Licensing:

(a) Activities that require a licence; and

(b) Whether there is an authorisation procedure for new generating capacity.

2. DESIGNATION OF TSO AND DSO

2.1 Requirements of IME Directive and Athens MOU

2.1.1 Designation of a TSO: The IME Directive and the Athens MOU both require designation of one or more transmission system operators for a period of time to be determined by each signatory jurisdiction, having regard to considerations of efficiency and economic balance.[1]

2.1.2 Designation of a DSO: The IME Directive and the Athens MOU both require establishment of one or more distribution system operators (DSO), having regard to considerations of efficiency and economic balance.[2] The Athens MOU requires such DSOs to be established by January 2005. In addition, the Athens MOU requires the DSO, if part of an integrated electricity undertaking and not already fully independent, to be independent at least in terms of its legal form, organisation and decision-making.[3]

2.2 Summary Table

	Designation of TSO	Designation of DSO
Albania: Statutory Requirement	**Yes**: The transmission system is required to be operated by a TSO having a transmission licence.[4]	**Yes**: The law requires the distribution network to be operated by distribution companies who hold licences for conducting a distribution business in a defined territory.[5]
Albania: Practical Implementation	A TSO was established in December 2003. This TSO is still part of KESH, the utility, although there are plans to make it fully independent.[6]	Distribution is currently still under the ownership of KESH although it is in the process of being established as a separate entity or entities (the number of DSOs are yet to be determined).
Bosnia and Herzegovina: Statutory Requirement	**Yes**: The recently enacted Law on Founding of the ISO 2004 provides for the establishment of an ISO.[7] The Law on Founding of the ISO provides for assets, obligations and employees relevant to its operations to be transferred to it.[8]	**Yes**: There is provision for DSOs to be appointed in FBiH and RS.[9]
Bosnia and Herzegovina: Practical Implementation	The operations of the Common Electrical Power Coordination Centre as well as all assets and obligations of the utilities necessary for ISO activities were automatically transferred to the new ISO. The ISO will be jointly owned by FBiH and RS and is expected to be fully operational by the end of 2005. A Transco is also to be set up by the end of 2005, and will be responsible for ownership, operation, maintenance and expansion planning.	

	Designation of TSO	Designation of DSO
Croatia: Statutory Requirement	**Yes**: The law provides for an independent system operator to co-ordinate electricity generation, transmission and distribution systems.[10] Under the draft new Electricity Market Act, the TSO may be part of the vertically integrated company, HEP, but is required to be legally independent and must be independent in terms of decision-making.[11]	**Partial**: The law provides for an energy undertaking carrying out distribution to be responsible for the operational development of the distribution network.[12] However, no requirement for the DSO to be independent.
Croatia: Practical Implementation	CROISMO, the Croatian Independent System and Market Operator, a subsidiary of HEP, is the TSO. Transmission assets are owned by HEP and leased to CROISMO. There are unofficial plans to make CROISMO fully independent of HEP in 2005.	HEP Distribution d.o.o., subsidiary of HEP, is in charge of distribution.
Montenegro: Statutory Requirement	**Yes**: Energy Law 2003 provides for the establishment of a TSO which must be functionally unbundled from the integrated electricity utility.[13]	**Yes**: A functionally unbundled DSO is provided for under the Energy Law 2003.[14]
Montenegro: Practical Implementation	The TSO has been issued with a temporary licence, valid until 30 December 2005. Functional unbundling is expected by the end of 2004, to be followed by legal unbundling by the end of 2005. A final decision on whether to adopt a TSO or ISO should be made in 2005. The current plan is for a TSO but flexibility is being maintained.	The DSO has been issued with a temporary licence which is valid until 30 December 2005 and the DSO is required to apply for a permanent licence.

	Designation of TSO	Designation of DSO
UNMIK: Statutory Requirement	**Yes**: Within specified period of promulgation of the Law on Electricity the Government of Kosovo is required to nominate a TSO and a DSO. These candidates must then apply to the regulator for their respective licences.[15] The TSO is required, where part of a vertically integrated enterprise, to be independent from activities not related to transmission in terms of legal form, organisation and decision-making.[16] The DSO is similarly required to be independent.[17]	
UNMIK: Practical Implementation	On 3 November 2004 the Government nominated the transmission division of KEK as the temporary TSO and the distribution division of KEK as the temporary DSO. It is probable that an independent TSO will be established in 2005, but the transmission division of KEK will undertake transmission system operations in the meantime.	
FYR Macedonia: Statutory Requirement	**Yes**: Law for Transformation of the Utility, passed in June 2004, provides for unbundling and eventual privatisation of ESM.	**No**: There is currently no separate DSO.
FYR Macedonia: Practical Implementation	ESM is undertaking establishment of two companies: MEPSO, which will be the TSO, and a separate company undertaking generation and distribution. The transmission system, along with the dispatch centre, are expected to be transferred to MEPSO by the end of 2004.	There are plans to separate generation and distribution from trading during 2005.
Serbia: Statutory Requirement	**Yes**. The recently enacted Energy Law 2004 provides for the establishment of a TSO and DSO by February 2005.[18]	
Serbia: Practical Implementation	Prior to the establishment of the separate TSO and DSO, the entities which currently perform transmission and distribution activities will continue to perform these activities in accordance with laws and regulations applicable before the Energy Law came into effect.[19] It is expected that legal establishment of the TSMO will occur by 1 February 2005 although practical establishment may take longer.	

2.3 Regional Analysis

2.3.1 Designation of TSO: All CARDS countries have provisions in legislation requiring the establishment of an independent TSO , in accordance with the requirements of the Athens MOU and the IME Directive. However, all jurisdictions have some way to go to establish an effective independent TSO in practice. In each case the TSO would, when established, be at least legally separate from generation and distribution functions in the electricity sector. Albania, Croatia, Montenegro and FYR Macedonia are intending to implement separate TSOs. Bosnia and Herzegovina has recently passed a law providing for the establishment of a state-wide ISO. Similarly, Serbia has recently passed a law providing for the establishment of a separate TSO and DSO. UNMIK has provided for the establishment of a separate TSO in the recent package of new energy laws.

2.3.2 Designation of DSO: Although progress is being made in the region in establishing TSOs, the establishment of DSOs does not seem to have been the initial priority. The laws in Croatia, Albania, Montenegro, UNMIK and Serbia provide for the establishment of at least one separate distribution company, responsible for managing the distribution network or networks. These DSOs are often a separate subsidiary company within the national electricity utility; that is they are legally separate entities. However, for full compliance with the requirement of the Athens MOU the DSOs established would also need to be independent in terms of their decision making, which is currently not the case.

Bosnia and Herzegovina has no separate distribution company; distribution system operations are undertaken by the electricity utilities although there are provisions in the entity laws for DSOs to be appointed. In FYR Macedonia the national utility currently owns and operates the distribution system but there are plans to separate distribution and generation from trading activities during 2005. It remains to be seen whether this will mean a separate DSO will be established.

3. TASKS OF TRANSMISSION SYSTEM OPERATORS

3.1 Requirements of IME Directive and Athens MOU

3.1.1 The IME Directive and the Athens MOU require each TSO to be responsible for:[20]

(a) ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity;

(b) contributing to security of supply through adequate transmission capacity and system reliability;

(c) managing energy flows on the system, taking into account exchanges with other interconnected systems – to this end, the TSO should be responsible for ensuring a secure, reliable and efficient electricity system and ensure that necessary ancillary services are available;

(d) providing to the operator of any other interconnected system sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system;

(e) ensuring non-discrimination between system users or classes of system users; and

(f) providing system users with the information they need for efficient access to the system.

3.1.2 The IME Directive also requires the TSO to be responsible, where it has this function, for dispatching generators in its area and for determining the use of interconnectors with other systems.[21] However, the allocation of this responsibility to the TSO should not interfere with contractual rights and obligations related to the supply of electricity, including those deriving from tendering specifications. The dispatching of generators and the use of interconnectors must be based on objective, published criteria, which must be applied in a non-discriminatory manner, and must ensure the proper functioning of the internal market in electricity. The rules adopted by the TSO for balancing the electricity system shall be objective, transparent and non-discriminatory. The Athens MOU also commits the adhering states to adopt rules relating to the organisation and functioning of the electricity market, access to the networks and the operation of systems as laid down in the IME Directive.[22]

3.2 Summary Table

TASKS OF TRANSMISSION SYSTEM OPERATORS							
	Ensuring ability of system to meet demands	**Security of supply (through capacity and reliability)**	**Managing energy flows**	**Providing information to TSO of interconnected system**	**Ensuring non-discrimination between system users**	**Providing information to system users**	**TSO dispatch of generators / interconnector**
Albania: Statutory Requirement	**Yes**: TSO responsible for ensuring consistent functioning of transmission system and for the development and expansion of the system.[23]	**Yes**: TSO responsible for maintaining and developing transmission system and for integrated management and reliable operation of the system.[24]	**No**: Not provided for.	**Yes**: TSO responsible for maintaining and developing interconnections and managing the transit of electricity across the Albanian electricity network.[25]	**No**: Not provided for.	**No**: Not provided for.	**Partial**: The Grid Code will provide for the criteria to be applied by the TSO in dispatching generators.[26]

TASKS OF TRANSMISSION SYSTEM OPERATORS							
	Ensuring ability of system to meet demands	**Security of supply (through capacity and reliability)**	**Managing energy flows**	**Providing information to TSO of interconnected system**	**Ensuring non-discrimination between system users**	**Providing information to system users**	**TSO dispatch of generators / interconnector**
Bosnia and Herzegovina: Statutory Requirement	**Yes**: ISO will maintain balancing market and ensure reliable and constant flow of electricity.[27]	**Yes**: ISO responsible for managing and relieving congestion.[28] ISO also required to coordinate and approve outages and approve development plan.[29]	**Yes**: ISO responsible for management of electricity flows.[30] ISO also responsible for managing balanced market.[31]	**Yes**: ISO to coordinate with neighbouring control areas.[32]	**Yes**: ISO to act in accordance with principles of objectivity, transparency and non-discrimination.[33] ISO also required to act in a non-discriminatory manner toward system users.[34]	**Yes**: ISO to provide information on transmission capacity, ancillary services and prices to users.[35] ISO also required to prepare reports on transmission system activities and the electricity market.[36]	**Yes**: ISO will coordinate dispatch of generators to relieve and manage congestion.[37] ISO to issue dispatch guidelines to generators.[38]
Croatia: Statutory Requirement	**Yes**: TSO responsible for ensuring regular and reliable	**Yes**: TSO responsible for guaranteeing reliable	**Yes**: TSO responsible for balancing supply and demand.[43]	**Yes**: TSO responsible for ensuring coordination with	**Yes**: TSO responsible for ensuring access to third parties on a	**Yes**: TSO responsible for providing information to regulator and	**Yes**: TSO responsible for dispatching generators and balancing

TASKS OF TRANSMISSION SYSTEM OPERATORS							
	Ensuring ability of system to meet demands	**Security of supply (through capacity and reliability)**	**Managing energy flows**	**Providing information to TSO of interconnected system**	**Ensuring non-discrimination between system users**	**Providing information to system users**	**TSO dispatch of generators / interconnector**
	supply.[39] Under draft new Act, TSO to be responsible for securing long term capacity of system to meet reasonable requests for transmission.[40]	supply.[41] Under draft new Act, TSO to be responsible for contributing to security of supply through transmission capacity and reliability.[42]	Under draft new Act, TSO to be responsible for managing electricity flows taking into consideration exchanges with interconnected networks and securing availability of required ancillary services.[44]	neighbouring networks.[45] Under draft new Act, TSO to be responsible for providing information to interconnected system operators to ensure safe and efficient operation of interconnected systems.[46]	non-discriminatory basis.[47] Under draft new Act, TSO to be responsible for securing a non-discriminatory approach towards transmission system users.[48]	market operator.[49] Under draft new Act, TSO to be responsible for providing necessary information to system users for efficient access and use of system.[50]	supply and demand.[51] .Under draft new Act, TSO to be responsible for engaging generators and determining use of interconnectors on objective, published criteria applied on a non-discriminatory basis.[52]

TASKS OF TRANSMISSION SYSTEM OPERATORS							
	Ensuring ability of system to meet demands	**Security of supply (through capacity and reliability)**	**Managing energy flows**	**Providing information to TSO of interconnected system**	**Ensuring non-discrimination between system users**	**Providing information to system users**	**TSO dispatch of generators / interconnector**
Montenegro: Statutory Requirement	**Yes**: TSO responsible for operating and ensuring maintenance of system.[53]	**Yes**: TSO responsible for ancillary services, maintaining and operating system.[54]	**Yes**. TSO responsible for managing network energy flows.[55]	**Yes**: TSO responsible for determining use of interconnectors[56]	**Yes**: TSO prohibited from discriminating between network users.[57]	**Yes**: TSO responsible for providing information to users necessary to expedite delivery of services.[58]	**Yes**: TSO responsible for dispatching generators.[59]
UNMIK: Statutory Requirement	**Yes**: TSO responsible for preparing plans for expanding transmission network and preparing list of new capacity required to meet needs of UNMIK.[60]	**Yes**: TSO responsible for operating and maintaining network in order to guarantee security of supply.[61]	**Yes**: TSO responsible for managing energy flows on network.[62]	**Yes**: TSO responsible for providing information to operators of interconnected systems.[63]	**Yes**: TSO responsible for ensuring non-discrimination between system users.[64]	**Yes**: TSO responsible for providing system users with information they need for efficient access to the system.[65]	**Yes**: TSOto be responsible for dispatching generators and determining use of interconnectors.[66]

TASKS OF TRANSMISSION SYSTEM OPERATORS							
	Ensuring ability of system to meet demands	**Security of supply (through capacity and reliability)**	**Managing energy flows**	**Providing information to TSO of interconnected system**	**Ensuring non-discrimination between system users**	**Providing information to system users**	**TSO dispatch of generators / interconnector**
FYR Macedonia: Statutory Requirement	**No**: A new law is expected to be passed in early 2005 which will provide for the responsibilities of the TSO.	**No**: A new law is expected to be passed in early 2005 which will provide for the responsibilities of the TSO.	**No**: A new law is expected to be passed in early 2005 which will provide for the responsibilities of the TSO.	**No**: A new law is expected to be passed in early 2005 which will provide for the responsibilities of the TSO.	**No**: A new law is expected to be passed in early 2005 which will provide for the responsibilities of the TSO.	**No**: A new law is expected to be passed in early 2005 which will provide for the responsibilities of the TSO.	**No**: After 1 January 2005 when the dispatch centre is transferred to MEPSO, MEPSO will be responsible for dispatch of generators.

TASKS OF TRANSMISSION SYSTEM OPERATORS							
	Ensuring ability of system to meet demands	**Security of supply (through capacity and reliability)**	**Managing energy flows**	**Providing information to TSO of interconnected system**	**Ensuring non-discrimination between system users**	**Providing information to system users**	**TSO dispatch of generators / interconnector**
Serbia: Statutory Requirement	**Yes**: TSO responsible for operating and providing security of energy system operations and for covering deviations between demand and supply.[67]	**Yes**: TSO responsible for taking security measures in the course of transmission system operation, providing security of the energy system operation and resolving issues of overloads.[68]	**Yes**: TSO responsible for maintenance of the interconnected transmission system and operation of the transmission system as a whole.[69]	**Yes**: TSO responsible for coordinating with operators of neighbouring energy systems.[70]	**Yes**: TSO prohibited from discriminating between users of system.[71]	**Partial**: TSO required to cooperate with market operator.[72]	**Yes**: TSO will dispatch generators.[73]

3.3 Regional Analysis

On the whole most jurisdictions appear to have crafted their legislation regarding the responsibilities of the TSO following specific consideration of the requirements of the IME Directive and the Athens MOU. For this reason, most jurisdictions have allocated responsibilities to the TSO that are consistent with the requirements of the IME Directive and the Athens MOU. In particular, the laws of Croatia, Montenegro, and UNMIK incorporate the relevant elements of the IME Directive and the Athens Memoranda: all have allocated responsibilities in their legislation to the TSO that mirror the requirements of the IME Directive and the Athens MOU. This is being reinforced in the draft new law in Croatia. FYR Macedonia has not clearly identified the responsibilities of the TSO in its legislation, although a new law is expected be passed in early 2005 which will provide for the responsibilities of the TSO. The responsibilities of the Albanian TSO mirror some of the requirements of the IME Directive and the Athens MOU, although not all.[74]

4. TASKS OF DISTRIBUTION SYSTEM OPERATORS

4.1 Requirements of IME Directive and Athens MOU

4.1.1 The Athens MOU requires the DSOs to be responsible for:

(a) ensuring the maintenance of, and, if necessary, developing the distribution system in a given area, and, where applicable, maintaining interconnections with other systems; and

(b) ensuring the long-term ability of the system to meet reasonable demands for the distribution of electricity.

The IME Directive provides for similar tasks for DSOs, including that the DSO shall maintain a secure, reliable and efficient electricity distribution system in its area with due regard to the environment, and that in any event the DSO must not discriminate between system users or classes of system users, particularly in favour of its related undertakings. The DSO is also required to provide system users with the information they need for efficient access to the system.

4.2 Summary Table

TASKS OF DISTRIBUTION SYSTEM OPERATORS			
	Maintenance of secure, reliable, efficient system	**Ensuring long-term ability of system to meet demands**	**Provision of info to system users**
Albania: Statutory Requirement	**Yes**: Once established, the DSO will be responsible for managing, maintaining and developing distribution network system.[75]	**Yes**: Once established, the DSO will be responsible for developing the distribution system in compliance with long term forecasts and electricity development plans.[76]	**Partial**: Once established, DSO will be responsible for providing other services that may be considered necessary for users.[77] This could potentially include provision of information.
Bosnia and Herzegovina: Statutory Requirement	**Yes**: DSOs guarantee reliability in network activities and maintenance of quality.[78]	**Yes**: DSOs required to prepare development plans and plans for construction of network.[79] In FBiH the Regulator approves these plans.[80]	**Yes**: DSOs are required to make public data on ability to use distribution network.[81]
Croatia: Statutory Requirement	**Yes**: DSO to guarantee reliability of network and to be responsible for development, construction, operation and maintenance of network.[82] Under draft new Act, DSO to be responsible for ensuring safe, reliable and efficient operation of the distribution system.[83]	**Yes**: DSO responsible for preparing plans for development and construction of network for a three-year period, subject to prior approval of Regulator.[84] Under draft new Act, DSO will be responsible for operation, maintenance, development and construction of distribution system.[85]	**Partial**: DSO to provide market operator and TSO with information about future electricity needs.[86] Under draft new Act, DSO to be responsible for providing information to system users required for efficient access and the use of system.[87]

TASKS OF DISTRIBUTION SYSTEM OPERATORS			
	Maintenance of secure, reliable, efficient system	**Ensuring long-term ability of system to meet demands**	**Provision of info to system users**
Montenegro: Statutory Requirement	**Yes**: DSO must maintain, improve and upgrade network, and apply best practices in operation and maintenance to ensure security of supply and reliability of system operation.[88]	**Yes**: DSO must maintain, improve, upgrade and develop network.[89]	**Yes**: DSO must measure and report to TSO, suppliers and MO as required by relevant codes and secondary legislation, as well as report to the regulator on supply and demand balances, maintenance outages, and information demonstrating the viability of the network.[90]
UNMIK: Statutory Requirement	**Yes**: DSO responsible for maintaining secure, reliable and efficient distribution system.[91]	**Yes**: DSO responsible for planning development of network.[92]	**Yes**: DSO responsible for providing system users with information needed for efficient access to distribution system.[93]
FYR Macedonia: Statutory Requirement	**No**: Not provided for in Energy Law. It is intended that the DSO will be regulated by the new Law on Energy Market planned for early 2005, which will provide for the responsibilities of the DSO.	**No**: Not provided for in Energy Law. It is intended that the DSO will be regulated by the new Law on Energy Market planned for early 2005, which will provide for the responsibilities of the DSO.	**No**: Not provided for in Energy Law. It is intended that the DSO will be regulated by the new Law on Energy Market planned for early 2005, which will provide for the responsibilities of the DSO.
Serbia: Statutory Requirement	**Yes**: DSO responsible for maintenance of facilities, equipment and network and for their undisturbed operation.[94]	**Yes**: DSO must prepare five year plans for development of network.[95]	**No**: Not provided for.

4.3 Regional Analysis

4.3.1 The majority of jurisdictions in the Balkans region have drafted their legislation in relation to allocation of responsibilities to the DSO following careful consideration of the requirements of the IME Directive and the Athens MOU. Bosnia and Herzegovina, Croatia, Montenegro and UNMIK have all complied with the requirements of the Athens MOU, and most have incorporated the information provision requirements of the IME Directive (Croatia only partially although draft new legislation provides for this). Serbia's Energy Law 2004 includes some provision for allocating responsibilities to the DSO consistent with the Athens MOU, although it does not specifically address the provision of information to system users. There are plans in FYR Macedonia to separate the distribution function from the vertically integrated electricity utility. A new law expected to be passed in early 2005 will include provisions regulating the DSO, including providing for its responsibilities. Although Albania has not established an independent DSO, the Energy Law 2003 does provide for the core responsibilities of the DSO, which will take effect once the DSO is established. At present the DSO is still under the ownership of KESH. The responsibilities of the DSO are largely consistent with the requirements of the IME Directive and the Athens MOU.[96]

5. ACCESS TO AND RULES OF TRANSMISSION SYSTEM

5.1 Requirements of IME Directive and Athens MOU

5.1.1 Third party access to the transmission system: Both the IME Directive and the Athens MOU require implementation of a system of third party access to the transmission and distribution systems based on published tariffs, applicable to eligible customers and applied objectively and without discrimination between system users.[97] The Athens MOU includes an additional requirement that access to networks must, in addition to being non-discriminatory and transparent, be fairly priced.[98] The Athens MOU also commits the adhering states to adopt rules relating to the organisation and functioning of the electricity market, access to the networks and the operation of systems as laid down in the IME Directive.[99]

Operators of transmission or distribution systems may refuse access where the operator lacks capacity. However, reasons must be given for refusal of access. Where access is refused the TSO or the DSO must provide relevant information on measures that would be necessary to reinforce the network.

5.1.2 Technical rules for the transmission system: The IME Directive requires that technical rules establishing the minimum technical design and operational requirements for connection to the system of generating installations, distribution systems, directly connected consumers' equipment, interconnector circuits and direct lines are developed and made public.[100] These technical rules are required to be objective and non-discriminatory. The Athens MOU requires that adhering states must implement Grid Codes by June 2004, and that these Grid Codes must have common elements across the region, allow basic operation of the grid and must not discriminate against regional trade.[101] The Grid Codes must allow trade on a non-preferential basis and be based on best practices within the European Union. The Athens MOU anticipates that these codes will facilitate and encourage regional trade with the objective of making use of regional resources and facilities.

5.2 Summary Table

	Third party access	Grid Code
Albania: Statutory Requirement	**Partial**: The law refers to rules for access being provided for in the Grid Code.[102] However, limited TPA rights are provided for in the law. Energy Law 2003 provides that suppliers and generators shall be entitled to access to the transmission and distribution networks.[103]	**Proposed**: ERE to develop network codes to be adopted by the end of 2004.[104]
Albania: Practical Implementation	No tariffs for access have been established, effectively providing a barrier to access.	In practice, while some technical rules are likely to be developed by the end of 2004, the full Grid Code will be developed subsequently. Albania is awaiting the results of EdF regional Grid Code work to see if this can be adopted.
Bosnia and Herzegovina: Statutory Requirement	**Yes**: ISO required to provide equal and fair access to transmission system.[105] DSOs to allow access to networks in objective, transparent and non-discriminatory manner,[106] except in situations of lack of capacity.[107]	**Proposed:** DSOs in each entity to prepare network rules for distribution network, which will be approved by the entity Regulators.[108] Grid Code to be implemented within 9 months after ISO established.
Bosnia and Herzegovina: Practical Implementation	No tariffs for transparent, objective and non-discriminatory access. State Regulator currently working on establishing tariff methodology, and other conditions for access to transmission system.	Grid Code being drafted by KEMA. To be submitted to State Regulator for approval.

	Third party access	Grid Code
Croatia: Statutory Requirement	**Yes**: CROISMO and DSO must allow access to networks on non-discriminatory basis, based on principles of regulated third party access.[109] Refusal may only be made on grounds of technical or operational constraints.[110] Under new draft Act, Regulator sets transmission prices at proposal of TSO.[111]	**Proposed**: Grid Code to be passed by the Ministry, after obtaining opinion of the regulator.[112] According to new draft Act, TSO is to draft Grid Code.[113]
Croatia: Practical Implementation	TPA is available through HEP but, in practice, there is a lack of transparency on the method by which HEP currently grants TPA.	Grid Code has been drafted by HEP. Grid Code awaiting approval of Ministry, may be delayed pending introduction of new laws.
Montenegro: Statutory Requirement	**Yes:** Producers and suppliers have the right to non-discriminatory, regulated access to the transmission and distribution networks in accordance with regulations established by Regulator.[114] Access may only be refused if there is lack of capacity and that lack of capacity is justified on grounds relating to security of supply or quality.	**Proposed**: TSO will be responsible, under the Energy Law 2003, for submitting a Grid Code to the Regulator for approval as part of its application for a licence to operate.[115]

	Third party access	Grid Code
Montenegro: Practical Implementation	In practice tariff methodologies for connection and use of system are yet to be set, providing an effective barrier to entry. It is expected that the methodologies will be prepared or approved (as applicable) by the Regulator by the end of 2004. Tariffs must then be approved by the Regulator and adopted by EPCG.	An interim Grid Code has been proposed and should be approved by the end of 2004. This will need to be aligned with the market rules, once prepared, and then finalised.
UNMIK: Statutory Requirement	**Yes**: TSO and DSOs must allow generators, suppliers and eligible customers who meet conditions for connection access to the networks . The price for use of the networks will be proposed by the relevant network operators every year and approved by the Regulator.[116] Refusal may only be made on the grounds of lack of capacity.[117]	**Proposed**: TSO will be required to prepare and submit to the Regulator a draft Grid Code, within 90 days after the date on which the TSO's licence is issued.[118]
UNMIK: Practical Implementation	Implementation of TPA awaiting establishment of Regulator (which will set prices), secondary legislation and TSO.	Regulator and temporary TSO (transmission division of KEK) commencing work on Grid Code.
FYR Macedonia: Statutory Requirement	**Partial**: The system is a form of regulated TPA, where the integrated utility contracts with entities for access to the system. The Regulator prescribes the conditions for connection.	**Proposed**: New proposed legislation expected to deal with this.

	Third party access	Grid Code
FYR Macedonia: Practical Implementation	At present there are no prescribed prices for access and no prescribed terms and conditions, so third party access is not available in practice. It is expected that terms and conditions of access will be included in the Grid Code which is currently being prepared and is expected to be approved by the Regulator in 2005.	ESM has begun work on the Grid Code based on the regional EdF proposals to date. The Grid Code is expected to be finalised and approved by the Regulator in 2005.
Serbia: Statutory Requirement	**Yes**: TSO and DSO must allow regulated access to third parties on principles of transparency and non-discrimination, in accordance with the capacity of the system.[119] The Regulator will have responsibility for determining methodologies for access charges as well as determining disputes over access. Practical terms and conditions for access will be provided for in the Grid Code.	**Yes**: TSO is charged with drafting connection, technical and safety rules for the network, including criteria for ensuring equal treatment of all transmission system users.[120] These rules must be approved by the Regulator. In addition, the DSO must draft distribution network operation rules, which are also subject to the approval of the Regulator.[121]
Serbia: Practical Implementation	At present tariff methodologies have yet to be established. When the Regulator is established it will prepare tariff methodologies and will approve the Grid Code, thus providing the practical terms for access to the transmission system.	Grid Code to be prepared by TSMO (with assistance of KEMA) and approved by Regulator.

5.3 Regional Analysis

5.3.1 Third party access: All of the jurisdictions recognise the importance of ensuring third party access to the transmission network for development of competitive markets. Croatia, Serbia, Montenegro, UNMIK, FYR Macedonia and Bosnia and Herzegovina have passed laws providing for third party access, requiring TSOs and DSOs (once established) to allow access to the system except in cases of lack of capacity, as required by the IME Directive and the Athens MOU. These countries also appear to have recognised the importance of regulation of prices of access, given the natural monopoly nature of the systems and the fact that prices may act as a practical barrier to access and thus entry to the market. Most jurisdictions have granted the regulator responsibility for overseeing access prices, to help ensure that the obligation to provide access to the system is put into practice. Actual transparent and non-discriminatory prices for access are not yet available.

The Albanian law is drafted slightly differently from other jurisdictions although it does provide for third party access rights for suppliers and generators. The practical aspects of third party access will be dealt with in the Grid Code, as in most jurisdictions.

In all jurisdictions considerable work is needed on the practical aspects of third party access to ensure that users can effectively exercise their rights. Grid Codes need to be established and tariff methodologies prepared.

5.3.2 Technical rules for transmission system: All CARDS jurisdictions are either in the process of developing a Grid Code or require the development of a Grid Code, usually by the TSO, within a short period of time. Albania, Croatia, Bosnia and Herzegovina, FYR Macedonia, UNMIK and Montenegro have commenced drafting a detailed Grid Code, although these are not yet adopted. All jurisdictions have expressed definite plans to prepare a Grid Code and accepted the need to ensure alignment with the regional Grid Code being prepared by EdF.

6. UNBUNDLING

6.1 Requirements of IME Directive and Athens MOU

6.1.1 Unbundling of TSO: The IME Directive and the Athens MOU both require, at the minimum, independence of the TSO at least in terms of its legal form, organisation and decision-making, from other activities not relating to transmission.[122] The Athens MOU requires that the TSO should be established by June 2003. The IME Directive and the Athens MOU set out minimum criteria for ensuring independence of the TSO, including: separation and independence of management of the TSO from the rest of the electricity undertaking; the requirement for effective decision-making rights to vest in the TSO, independent from the rest of the integrated electricity undertaking; and the requirement for the TSO to establish a compliance programme, setting out measures to be taken to ensure that discriminatory conduct is excluded.

The IME Directive provides for the possibility that there may be one combined system operator, operating both the distribution and the transmission systems, which is independent from other activities not relating to transmission or distribution system operations. In the case of a combined operator, separate accounts for transmission and distribution must be kept.[123] The key message of these provisions, according to the Note of Director General of Energy and Transport on Directives 2003/54/EC and 2003/55/EC is that transmission and distribution have to be performed by a separate "network" company. The network company must not necessarily own the network assets, but must have effective decision-making rights.

6.1.2 Unbundling of DSO: The IME Directive and the Athens MOU both require, at the minimum, independence of the DSO, at least in terms of its legal form, organisation and decision-making.[124] Again, there are minimum criteria that must be met to ensure independence of the DSO: the management of the DSO must not participate in company structures of the integrated electricity undertaking; the DSO shall have effective decision-making rights, independent from the integrated electricity undertaking; and the DSO shall establish a compliance programme, which sets out measures to be taken to ensure that discriminatory conduct is excluded. The IME Directive provides for an exception from the requirement for the DSO to be independent from the integrated electricity undertaking where the DSO serves less than 100,000 customers, or serves small isolated systems.[125] The similar exception in the Athens MOU applies where the number of customers served by the DSO is less than 20,000.[126]

6.1.3 Accounting requirements: The IME Directive requires that electricity undertakings, whatever their system of ownership or legal form, must prepare, submit to audit, and publish their annual accounts in accordance with the rules of national law concerning annual accounts of limited liability companies.[127] The IME Directive requires electricity undertakings to keep separate accounts for each of their transmission

and distribution activities. This must be done with a view to avoiding discrimination, cross-subsidisation and distortion of competition. The Athens MOU expands this requirement and requires integrated electricity undertakings to keep separate accounts for their transmission, distribution, generation and supply activities.[128] In addition, integrated electricity undertakings should keep separate accounts for supply activities for eligible customers and supply activities for non-eligible customers.

6.2 Summary Table

	Unbundling of TSO	Unbundling of DSO	Accounting requirements
Albania: Statutory Requirement	**Yes**: The transmission system is required to be operated by a transmission system operator holding a transmission licence.[129]	**Yes**: The law requires the distribution network to be operated by distribution companies who each hold a licence for conducting a distribution business in a defined territory.[130]	**Yes**. Companies carrying out generation, transmission and distribution must unbundle their financial accounts according to each activity.[131]
Albania: Practical Implementation	A TSO has been established, though still legally part of KESH, the electricity utility. The asset transfer process is expected to be completed in early 2005. The Managing Director of the TSO reports to KESH. Financial and accounting unbundling has yet to take place.[132]	DSO has been set up under ownership and control of KESH.	TSO and DSO currently developing an agreement to determine the impact of separate accounting, expected to be completed by end of first quarter of 2005.
Bosnia and Herzegovina: Statutory Requirement	**Yes**: Provided for in new ISO law.[133]	**Partial**: DSOs provided for,[134] but no legal requirement for DSOs to be separated from generation or supply.	**Partial**: Electricity entities in FBiH must keep separate accounts and prepare separate reports for each electricity activity and for non-electricity related activities in accordance with general accounting requirements.[135] There is no equivalent requirement in RS legislation.

	Unbundling of TSO	Unbundling of DSO	Accounting requirements
Bosnia and Herzegovina: Practical Implementation	Currently three integrated electricity utilities operate their own transmission systems. The transmission assets are to be transferred to the Transco and the operations of the transmission system are to be transferred to the recently established ISO pursuant to the new laws.[136]	Unbundling of DSOs in FBiH will not take place until after TSO has been unbundled, which should be complete by mid 2005. RS has five DSOs, legally unbundled, that are in the process of incorporation.	
Croatia: Statutory Requirement	**Yes**: Law requires system operator to be independent from companies undertaking power generation and supply.[137] The new draft Act requires the TSO, while still part of the vertically integrated company, to be legally independent and have independent decision-making powers.[138]	**Proposed:** New draft law provides for legally independent DSO, though still within the vertically integrated utility, HEP. DSO to have independence of decision-making.[139]:	**Yes**: Electricity entities must keep separate accounts and prepare separate reports for each electricity activity and for non-electricity related activities in accordance with accounting requirements.[140]
Croatia: Practical Implementation	HEP is legally unbundled. CROISMO, subsidiary of HEP, is current TSO. It is intended to establish new TSO upon further market opening and passage of new energy laws.	HEP Distribution d.o.o., subsidiary of HEP, is DSO.	

	Unbundling of TSO	Unbundling of DSO	Accounting requirements
Montenegro: Statutory Requirement	**Yes**: Under the Energy Law 2003 the TSO must be functionally unbundled from generation or trading and must be managed and operated pursuant to secondary legislation established by the Regulator.[141]	**Yes**: Under the Energy Law 2003 the DSOs must be functionally unbundled from the integrated electricity undertaking and must be managed and operated pursuant to secondary legislation established by the Regulator.[142]	**Yes**: Not later than 18 months after entry into force of the Energy Law 2003, integrated electricity entities must be functionally unbundled, including accounting separation.[143]
Montenegro: Practical Implementation	The Regulator has issued six temporary licences to EPCG dealing with production, transmission, transmission operation, market operation, distribution and supply, with the intention that these should provide the framework for moving towards functional unbundling. Under the Energy Law 2003, the Regulator is to produce rules relating to unbundling but is currently of the view that the law is sufficiently detailed to provide a framework. Functional unbundling is expected by the end of 2004, to be followed by legal unbundling in the second half of 2005.	Under the 2003 law, the Regulator is to produce rules relating to unbundling but is currently of the view that the law is sufficiently detailed to provide a framework.	

	Unbundling of TSO	Unbundling of DSO	Accounting requirements
UNMIK: Statutory Requirement	**Yes**: TWhere the TSO is part of a vertically integrated enterprise it must be independent from activities not related to transmission in terms of legal form, organisation and decision-making.[144]	**Yes**: TWhere the DSO is part of a vertically integrated utility, it must be independent from other activities not related to distribution, at least in terms of legal form, organisation and decision-making.[145]	**Yes**: All energy enterprises are required to separate their internal accounts for generation, transmission, distribution and supply activities. Utilities must also separate accounts for energy and non-energy related activities.[146]
UNMIK: Practical Implementation	The transmission functions of KEK are likely to be separated from KEK, commencing in early 2005.	The dispatch division of KEK is likely to be separated from the vertically integrated utility in 2005.	
FYR Macedonia: Statutory Requirement	**Yes**: Law on Transformation of the Utility 2004 provides for unbundling of the TSO. The transmission system functions are expected to be transferred to MEPSO, an independent company, on 1 January 2005.	**Proposed**: Law on Transformation of the Utility 2004, allows, but does not require, unbundling of distribution.	**Partial**: Not provided for in Energy Law. However, the Trade Companies Law requires that separate legal entities prepare separate reports. In addition, ESM as the shareholding company is required to engage auditors and prepare reports. The auditors control the financial operation of ESM and report to the Ministry of Economy.

	Unbundling of TSO	Unbundling of DSO	Accounting requirements
FYR Macedonia: Practical Implementation	MEPSO will own the assets and provide market facilitation and ancillary services. Legally separate companies expected to be registered by the end of 2004 when the transmission system and dispatch centre will be transferred to MEPSO.	Distribution functions are expected to be unbundled from the vertically integrated electricity utility. It is expected that accounting and management separation would occur first, with full legal separation in 2005.	
Serbia: Statutory Requirement	**Yes:** The Energy Law 2004 provides for an independent TSO to be appointed by the Government.[147] The TSO is required to act independently in managing the system.[148]	**Yes:** The Energy Law 2004 provides for a DSO to be established by the Government[149] to perform the activity of distribution network operator in accordance with principles of non-discrimination and objectivity.[150]	**Yes:** Under the Energy Law 2004, if an entity performs two or more energy-related activities or it performs other non-energy activities in addition to its energy activities, that entity must keep separate accounts for each activity and publish balance sheets and auditor's reports.[151]
Serbia: Practical Implementation	It is proposed to establish a TSMO in early 2005, which will be a completely separate company from EPS, and will have the transmission assets and liabilities transferred to it. EPS is currently working on preparing the list of assets and liabilities to be transferred to the TSMO.		

6.3 Regional Analysis

Unbundling of TSO: All of the jurisdictions have provided for the unbundling of the TSO. Croatia has a legally separateTSO, although functional, managerial and financial separation remains outstanding. A separate ISO is currently being established in Bosnia and Herzegovina pursuant to recently enacted legislation relating to the establishment of the ISO. In the other countries there are definite programmes for finalising the unbundling process.

6.3.1 Unbundling of DSO: As described above, establishment of a separate DSO appears to have been a secondary consideration for the CARDS countries, with the jurisdictions focusing on establishment of a separate TSO before turning attention to distribution functions.

6.3.2 Accounting requirements: Albania, Croatia, Montenegro, Serbia and UNMIK all require separate accounts to be prepared for each electricity activity and non-electricity related activities, consistent with the requirements of the Athens MOU and the IME Directive. In Bosnia and Herzegovina, the Federation of Bosnia and Herzegovina requires separate accounts and separate reports for each electricity activity and for non-electricity related activities, although there is no similar obligation imposed on electricity utilities in the Republic of Srpska. FYR Macedonia does not place an obligation on entities to keep separate accounts, although it is possible that this obligation is included in secondary legislation or will be introduced in the proposed package of legislation due to be passed in early 2005.

7. ESTABLISHMENT OF A MARKET / ACTION PLAN

7.1 Requirements of IME Directive and Athens MOU

7.1.1 Designation of eligible customers: The IME Directive requires that from 1 July 2004 all non-household customers should be eligible customers and that from 1 July 2007 all customers should be eligible customers.[152] The Athens MOU imposes a less stringent timetable, reflecting the level of development of electricity markets in the South East European countries. The Athens MOU requires the adhering parties to ensure that all non-household customers are free to purchase from the supplier of their choice by 2005.[153] There are proposals to push the market opening timetable further back to 2008 for non-household customers.

7.1.2 National action plan: The Athens MOU requires adhering parties to establish national electricity market action plans. These electricity market action plans, prepared by the state energy authority in consultation with the regulator, are required to focus on comprehensive tariff reform; tariff schemes to allow smooth transition from the existing market structure to an open market; approaches to ease the impact of reforms on vulnerable customers; reduction of non-technical losses; increase in energy efficiency necessary to abate demand; facilitation of sensible energy substitution by, for example, renewable energy sources, whilst maintaining a free market framework; ensure levels of diversity of supply in fuel mix and approximate to the EU average; and co-ordinate anti-corruption measures and an anti-corruption monitoring mechanism.[154]

7.2 Summary Table

	Eligible customers	National action plan
Albania: Statutory Requirement	**Yes**: The Energy Law 2003 provides that, upon adoption of electricity market rules by the Regulator, all customers with an annual consumption over 100 GWh per consumption site may apply to the Regulator for obtaining the status of eligible customer.[155]	**Yes**: Energy Policy Statement of Government 2002 sets out the objective of developing an electricity market that provides for a reliable, safe, adequate electricity supply at affordable prices.
Albania: Practical Implementation	Currently the largest customer only exceeds the 100 GWh threshold by combining electricity use across sites. The objective to reduce the threshold to 50 GWh would require a change in the law, and would make about 5% of the market eligible. This would be the limit for technical and operational purposes until the new dispatch centre is complete in 2007.	
Bosnia and Herzegovina: Statutory Requirement	**Proposed**: 10GWh threshold set in RS.[156] No threshold defined in FBiH; Regulator and system operator given authority to determine market opening timetable.[157]	**Yes**: FBiH Government and RS Government jointly adopted Electricity Policy Statements in 2000, providing for establishment of a system operator, early establishment of independent regulators and preparation of a detailed program of restructuring of state owned electricity utilities.
Bosnia and Herzegovina: Practical Implementation	The Regulators plan to harmonize thresholds for gaining status of eligible customer. Currently RS threshold captures no customers due to absence of large customers in RS.	

	Eligible customers	National action plan
Croatia: Statutory Requirement	**Yes**: Eligible customers may freely choose their electricity supplier, including imported electricity.[158] Eligible customers are currently those with annual consumption over 40GWh (10% of market). The Government may subsequently prescribe lower levels of annual consumption necessary to qualify as an eligible customer.[159] Under the new draft law, customers with annual consumption over 20 GWh will qualify as eligible.[160] The draft Act also sets out the timetable for market opening, with customers with consumption >9 GWh to be eligible from 1 July 2006, all non-households from 1 July 2007 and full market opening from 1 July 2008.	**Yes**: Energy Strategy published in 2002 by Croatian Parliament in accordance with Energy Law.[161] Objectives of energy policy include involvement of Croatia in international energy market; ensuring connections to international networks; development of internal networks; realistic and market-related prices; and development of energy market and privatisation processes. Draft amended Energy Law similarly requires a ten-year Energy Development Strategy to be prepared by the Croatian Parliament.[162]
Croatia: Practical Implementation	In practice, no eligible customers have elected to switch supplier ,possibly due to low tariffs from HEP.	
Montenegro: Statutory Requirement	**Yes**: The Energy Law 2003 provides for the Regulator to promulgate secondary legislation to facilitate the establishment of a market.[163] In theory customers who reach the eligibility level may freely purchase their electricity.	**Proposed**: No action plan at present. The Government will establish and implement the national energy policy and national energy strategy.[164]

	Eligible customers	National action plan
Montenegro: Practical Implementation	In practice, while the largest customer "self-supplies" a third of its needs through imports, it is not expected that the right to freely purchase electricity will be invoked by others as franchise electricity is comparatively cheap.	
UNMIK: Statutory Requirement	**Proposed**: There is currently no market and no market operator in UNMIK. Over time, the supply of electricity will become a competitive activity. The responsible Ministry is to prescribe the conditions for determining who is an eligible customer every year.[165] Draft secondary legislation has been prepared providing for market opening, with the first stage to be for customers at 35kV or higher in 2006. All non-household customers are expected to be eligible in 2010 with full market opening in 2012.	**Yes**: The Ministry responsible for energy shall prepare the Energy Strategy, a ten year policy paper outlining the energy policy and planning of UNMIK.[166]
UNMIK: Practical Implementation	There is currently no market in UNMIK, but it is expected that when it is first opened, to customers >35 kV, several large enterprises, such as mines, which are not currently operational due to war damage, will be eligible.	
FYR Macedonia: Statutory Requirement	**Proposed**: There is currently no market in Macedonia. It is expected that when market opening is undertaken, the first step will be to allow all customers over 20 GWh (25 – 27% of	**Yes**: Energy Strategy established in 1997 pursuant to the Energy Law[167] defines policy in relation to energy demands; available energy resources and power facilities; energy efficiency;

	Eligible customers	National action plan
	the market) to freely choose their supplier. The threshold will be defined in the new Electricity Market Law to be passed in early 2005.	requirements for construction of power projects; and funds required and resources to be provided. New medium-term and long-term Strategies are currently being prepared which amend the 1997 Strategy.
FYR Macedonia: Practical Implementation	The Energy Law currently permits customers to import, but at present none have chosen to do so.	
Serbia: Statutory Requirement	**Yes**: The Energy Law 2004 sets the minimum threshold for obtaining the status of eligible customer at an annual consumption of 25 GWh.[168]	**Yes**: Under the Energy Law 2004, a ten year Strategy will be adopted by the Parliament, at the proposal of the Government. The Strategy builds on the objectives for the energy sector and defines the conditions and principles for development of energy-related activities.[169] The Government also adopts a six year Strategy Implementation Programme which is updated every second year.[170]
Serbia: Practical Implementation	The effect of the Energy Law is that approximately 30 customers in Serbia are "eligible". However, half of these customers are under-performing state enterprises who cannot afford to pay their bills and the remainder are largely on special social tariffs which in effect means they are unlikely to become eligible customers in practice. The Regulator, when established, will prepare a "roadmap" for market opening.	

7.3 Regional Analysis

7.3.1 Eligible customers: Currently only Croatia, Serbia and the Republic of Srpska allow larger customers (in Croatia, those with annual consumption over 40GWh which will become 20GWh under the new draft law; in Serbia those with annual consumption over 25GWh; and in Republic of Srpska those with annual consumption over 10GWh) to purchase from the supplier of their choice. However, while in theory these customers are eligible to purchase from any supplier they choose, in practice there is no formal open transparent competition for eligible customers in the region. There is no market opening in the rest of the region, although market opening is envisaged. The legislation in UNMIK provides for the development of a market with a state-wide eligible customers over time, with either the regulator or the Government prescribing limits for qualification as an eligible customer, which will change over time. Draft secondary legislation has been prepared providing for a timetable for market opening. The passing of this secondary legislation is awaiting establishment of the Government after the recent elections. There are proposals to establish markets in Albania, Montenegro, and FYR Macedonia although these are at an earlier stage of development. The new draft Electricity Market Act in Croatia goes further than in other jurisdictions by setting out a fairly challenging timetable for market opening over the next three and a half years, with full market opening on 1 July 2008.

7.3.2 National action plan: All CARDS jurisdictions currently either have national plans which set out the objectives of the energy policy of the jurisdiction, or else national plans are required by their legislation, in accordance with the requirements of the Athens MOU. However, from an initial consideration of these action plans, they do not deal with all of the issues required by the Athens MOU.

8. ESTABLISHMENT OF A REGULATOR

8.1 Requirements of IME Directive and Athens MOU

8.1.1 Establishment of an independent regulatory authority: The IME Directive and the Athens MOU require the establishment of one or more competent bodies with the function of regulatory authorities.[171] The Athens MOU requires that the adhering states must have established a regulatory authority by June 2003. These regulatory authorities must be wholly independent from the interests of the electricity industry.

8.1.2 Independence of regulator: As described above, the IME Directive requires that the regulatory authorities must be wholly independent from the interests of the electricity industry.[172]

8.2 Summary Table

	Establishment of regulator	Independence of regulator
Albania: Statutory Requirement	**Yes**: Electricity Regulatory Authority ("ERE") established in 1996 in accordance with previous electricity law and strengthened and given an expanded role under the Energy Law 2003.[173]	**Yes**: Board of five appointed by Parliament upon recommendation of panel.[174] Members of ERE to be independent from electricity industry.[175] ERE funded by licence fees.[176]
Bosnia and Herzegovina: Statutory Requirement	**Yes:** Three regulators established: the State Electricity Regulatory Commission (SERC) has been in place since end-2003 although fully staffed only in August 2004;[177] Regulatory Agency for FBiH (FERC) and Regulatory Agency for RS (RSERC) have been fully operational since August 2004.[178] SERC regulates transmission, ISO, and international trade; entity regulators control remainder within their regions. Practicalities of having three regulators yet to be tested.	**Yes**: SERC's commissioners must be independent from industry.[179] Similar requirements apply for FERC and RSERC.[180] Budgets of the three regulators are met by licence fees.[181]
Croatia: Statutory Requirement	**Yes**: Croatian Energy Regulatory Council (CERC) established in 2001 pursuant to Regulation Law 2001, although only operational in 2002.[182] Draft Energy Activities Regulation Act provides for establishment of Energy Regulatory Agency (CERA).[183]	**Yes**: CERC comprised of five commissioners appointed by Parliament. Commissioners must be independent from industry.[184] Activities funded by a Government-approved levy on consumer bills.[185] In practical terms, sformal reliance on Energy Institute resources limits in-house operational capacity. Draft Energy Activities Regulation Act provides for new Agency to be independent[186] and for members of Agency to be independent from industry.[187]

	Establishment of regulator	Independence of regulator
Montenegro: Statutory Requirement	**Yes**: Energy Regulatory Agency (ERA) established on 22 January 2004 pursuant to the Energy Law 2003.[188]	**Yes**: ERA is an independent organisation,[189] comprised of three members chosen by a selection commission.[190] The members must be independent from industry or Government.[191] ERA's activities are funded by fees.[192]
UNMIK: Statutory Requirement	**Yes**: The Law on the Energy Regulator established the Energy Regulatory Office (ERO).[193] ERO was established on 30 June 2004. While some of the board members have been nominated, nominations by local government (PISG) has been delayed and appointment of all board members has been delayed due to elections.	**Yes**: The five initial members of ERO shall be proposed by the Government and the Special Representative of the Secretary-General (SRSG) and appointed by the SRSG. Subsequent members shall be appointed by the Assembly.[194] The members of ERO must be independent from the industry.[195] ERO is funded from fees and donations,[196] and receives funding from the Kosovo Consolidated Budget during its first year.
FYR Macedonia: Statutory Requirement	**Yes**: The Regulatory Commission for Energy of the Republic of Macedonia (ERC) was established by a decision of the Macedonian Parliament on 23 July 2003. ERC has been operational since January 2004.	**Yes**: ERC consists of five members, appointed by Parliament. Members are required to be independent from the industry. ERC is funded through licence fees and by way of a levy on income of energy companies, approved by Parliament.[197]

	Establishment of regulator	Independence of regulator
Serbia: Statutory Requirement	**Yes**: Energy Law provides for an independent agency for energy (AES) to be established shortly after the coming into force of the new Energy Law[198]. AES is not yet in place, but will be established by the start of 2005.	**Yes**: AES will be an independent agency, consisting of five members proposed by the Government and elected by Parliament. Members must not be associated in any way with energy undertakings and must be independent from state authorities.[199] AES will be funded through licence fees, revenues obtained through its activities, and by way of charges (excluding charges from energy entities). AES will be funded through CARDS funding for the first two years of its existence.[200]

8.3 Regional Analysis

8.3.1 Establishment of an independent regulatory authority: All CARDS jurisdictions have established a regulator (or, in the case of Serbia, have immediate plans to establish a regulator) with statutory independence in accordance with the requirements of both the IME Directive and the Athens MOU. The appointment of the board of the UNMIK Regulator has been delayed, due to delays in nominations by local government (PISG) and due to the recent elections. The extent to which the regulators are actively involved in the regulation of the electricity sector differs greatly.

8.3.2 Independence of regulator: In all jurisdictions the members of the regulatory authority are required, by legislation, to be independent from the industry. This is consistent with the requirement of the IME Directive. However, capacity building and developing a track record are key issues for all of the regulators.

9. ROLE OF REGULATOR

9.1 Requirements of IME Directive and Athens MOU

9.1.1 The IME Directive and the Athens MOU require the regulatory authorities to be responsible, at the minimum, for ensuring non-discrimination, effective competition and the efficient functioning of the market.[201] The Athens MOU provides that the electricity regulatory authorities must ensure that they achieve these objectives with respect to, in particular, the following aspects of the market:

(a) the level of competition;

(b) the rules on the management and allocation of interconnection capacity;

(c) any mechanisms to deal with congested capacity within the national electricity system;

(d) the time taken by transmission and distribution undertakings to make connections and repairs;

(e) the publication of appropriate information by transmission system operators concerning interconnectors, grid usage and capacity allocation to interested parties;

(f) the effective unbundling of accounts to ensure there are no cross-subsidies between generation, transmission, distribution and supply activities; and

(g) the terms, conditions and tariffs for connecting new producers of electricity to guarantee that these are objective, transparent and non-discriminatory, in particular taking full account of the benefits of the various renewable energy technologies, distributed generation and combined heat and power.

9.1.2 Regulatory authorities shall be responsible for fixing or approving at least the methodologies used to calculate or establish the terms and conditions for connection and access to national networks, including transmission and distribution tariffs, and the provision of balancing services. The regulatory authority must also monitor unbundling, and ensure that there is no cross-subsidisation between generation, transmission, distribution and supply activities. The Athens MOU provides that electricity regulatory authorities should have the authority to require transmission and distribution system operators, if necessary, to modify the terms and conditions, tariffs, rules, mechanisms and methodologies for connection and access to national networks to ensure that they are reasonable and applied in a non-discriminatory manner.

9.2 Summary Table

RESPONSIBILITIES OF REGULATOR								
	Competition	**Interconnector capacity management**	**Management of congested capacity**	**Connection and repair times by TSO and DSO**	**Publication of information by TSO**	**Unbundling of accounts**	**Terms of connection for generators**	**Establishing tariffs**
Albania: Statutory Requirement	**Yes**: ERE responsible for promoting competition in the electricity market.[202]	**Partial**: ERE responsible for drafting interconnection rules in compliance with international standards and the regional electricity market.[203]	**Partial**: ERE responsible for promoting electricity efficiency and improving the service quality in the electricity sector.[204] TSO responsible for congestion management.	**Yes**: ERE monitors and controls services offered by licensees.[205]	**Partial**: ERE publishes or announces terms for provision of electricity services in order to promote competition.[206]	**No**: Not provided for.	**Yes**: ERE approves rules and procedures for generation, distribution and transmission.[207]	**Yes**: ERE sets, regulates and reviews wholesale and retail tariffs.[208]
Bosnia and Herzegovina: Statutory	**Partial**: FBiH Regulator	**Yes**: State Regulator responsible	**Yes**: State Regulator approves	**Partial**: FBiH and RS Regulators	**Yes**: FBiH and RS Regulators	**Partial**: State Regulator	**Yes**: FBiH and RS Regulators	**Yes**: State Regulator approves

RESPONSIBILITIES OF REGULATOR								
	Competition	**Interconnector capacity management**	**Management of congested capacity**	**Connection and repair times by TSO and DSO**	**Publication of information by TSO**	**Unbundling of accounts**	**Terms of connection for generators**	**Establishing tariffs**
Requirement	must create conditions for competitiveness in generation and supply.[209] State Regulator must ensure competition and prevention of anti-competitive activity.[210]	for monitoring and enforcing conditions related to international trade.[211]	mechanisms to deal with congested capacity in transmission system.[212]	safeguard rights of buyers in distribution and oversee relations in electricity sector.[213] State Regulator is responsible for regulation of standards of service.[214]	may require information from any licensee.[215] State Regulator may request information from any energy entity.[216]	oversees unbundling of assets and formation of single company for transmission.[217]	supervise relations between generation, distribution and buyers of electricity.[218] StateRegulator establishes and monitors rules for access to network.[219]	and monitors tariffs for transmission.[220] FBiH and RS Regulators have power to set tariffs for distribution system users and for tariff purchasers.[221]
Croatia: Statutory Requirement	**Proposed:** Under proposed new law Regulator to be responsible	**Proposed:** Under proposed new law Regulator to monitor rules on managing	**Yes**: Regulator approves plans for development and construction	**Proposed:** Under proposed new law Regulator to monitor time period in	**Proposed:** Under proposed new law Regulator to monitor announceme	**Proposed:** Under proposed new law Regulator to monitor separation of	**Partial**: Government prescribes general conditions of energy supply,	**Partial**: Regulator sets transmission and distribution fees.[231]

RESPONSIBILITIES OF REGULATOR								
	Competition	**Interconnector capacity management**	**Management of congested capacity**	**Connection and repair times by TSO and DSO**	**Publication of information by TSO**	**Unbundling of accounts**	**Terms of connection for generators**	**Establishing tariffs**
	for securing efficient market competition and monitoring degree of market competition.[222]	and allocating interconnector capacity in co-operation with regulators in neighbouring countries.[223]	of transmission and distribution networks.[224] Under proposed new lawRegulator will monitor congestion management in transmission system.[225]	which TSO or DSO makes repairs and connections.[226]	nts of appropriate information by TSO or DSO to stakeholders, regarding connection and allocation of interconnector capacity and the system.[227]	accounts to prevent cross-subsidies.[228]	including connection conditions, based on opinion of regulator.[229] Under draft new law Regulator will monitor transparent and non-discriminatory conditions for connection of new producers.[230]	Regulator also sets prices for public service obligations.[232] Under draft new Act Regulator will set tariff methodologies for connection and use of system charges.[233]
Montenegro	**Yes**: Regulator required to issue rules to	**No**: Not provided for in Energy Law.	**No**: Not provided for in Energy Law.	**Yes**: Regulator has power to establish	**Yes**: Regulator has power to ensure that	**Yes**: Regulator has power to establish	**Yes**: Regulator has power to make rules	**Yes**: Regulator has power to set tariffs and

RESPONSIBILITIES OF REGULATOR								
	Competition	**Interconnector capacity management**	**Management of congested capacity**	**Connection and repair times by TSO and DSO**	**Publication of information by TSO**	**Unbundling of accounts**	**Terms of connection for generators**	**Establishing tariffs**
	promote competition and shall impose limitations necessary to prevent abuse of market power.[234]			rules for the rights and obligations of all energy entities and for monitoring energy entities.[235]	information relating to the energy sector is made publicly available.[236]	rules for unbundling of energy entities and requirements for keeping of accounts by energy entities.[237]	for terms and conditions of connection and access to networks.[238]	prices.[239]
UNMIK: Statutory Requirement	**Yes**: Regulator responsible for ensuring creation and maintenance of competitive markets and prevention and punishment	**Yes**: Regulator responsible for ensuring fair and non-discriminatory rules for management and allocation of interconnector capacity.[241]	**Yes**: Regulator responsible for ensuring establishment of mechanisms to deal with congested capacity.[242]	**Yes**: Regulator responsible for ensuring TSO and DSO fulfil their tasks.[243]	**Yes**: Regulator has power to approve rules and tariffs for provision of services by TSO,[244] and to require TSO to divulge	**Yes**: Regulator has power to monitor unbundling of legal form, organisation, decision-making and accounts of energy enterprises.	**Yes**: Regulator has power to control compliance with all technical rules, including rules of access, and to oversee	**Yes**: Regulator has power to fix and approve tariffs and methodologies for regulated energy services.[248]

RESPONSIBILITIES OF REGULATOR								
	Competition	**Interconnector capacity management**	**Management of congested capacity**	**Connection and repair times by TSO and DSO**	**Publication of information by TSO**	**Unbundling of accounts**	**Terms of connection for generators**	**Establishing tariffs**
	of anti-competitive conduct.[240]				confidential information if required.[245]	[246]	terms of connection.[247]	
FYR Macedonia: Statutory Requirement	**Yes**: Regulator required to promote competition in the energy market.[249]	**No**: Not provided for in Energy Law.	**Yes**: Regulator charged with ensuring safe, continuous and quality supply of energy.[250]	**Yes**: Regulator charged with monitoring performance of licensees performing certain activities in the energy sector.[251]	**No**: Not provided for in Energy Law.	**No**: Not provided for in Energy Law.	**Partial**: Regulator prescribes conditions of supply of certain energy types.[252]	**Yes**: Regulator prescribes tariff systems and methodologies.[253]
Serbia: Statutory Requirement	**Yes**: Regulator ensures development and improvement of the energy	**No**: Not provided for in Energy Law.	**Yes**: Regulator approves the rules established by TSO and DSO	**Yes**: Regulator required to resolve disputes in relation to access and	**Yes**: TSO must prepare and submit to Regulator information on availability of system,	**Yes**: Regulator shall monitor separation of accounts by energy entities.[258]	**Yes**: Regulator approves rules for generation, transmission and	**Yes**: Regulator will develop tariffs and set prices for access to and use of

RESPONSIBILITIES OF REGULATOR								
	Competition	**Interconnector capacity management**	**Management of congested capacity**	**Connection and repair times by TSO and DSO**	**Publication of information by TSO**	**Unbundling of accounts**	**Terms of connection for generators**	**Establishing tariffs**
	market, including by way of efficient competition.[254]		regulating the conditions for safe and secure operation of the system.[255]	connection to transmission, transport and distribution networks.[256]	reserves, and requirements of facilities.[257]		distribution.[259]	transmission and distribution networks, with approval of the Government.[260]

9.3 Regional Analysis

There is significant variation amongst the CARDS jurisdictions regarding the extent to which the legislative position is consistent with the requirements of the IME Directive and the Athens MOU in terms of the responsibilities of their regulators. For example, UNMIK's regulator has responsibility for performing all tasks required by the IME Directive and the Athens MOU; the Albanian, Serbian, Montenegrin and Bosnian regulators have several of the required responsibilities; the regulator of FYR Macedonia has some of the required responsibilities; while the Croatian regulator has very few of the required responsibilities although this is likely to change with the passage of the new set of draft energy laws.

10. LICENSING

10.1 Requirements of IME Directive and Athens MOU

10.1.1 Activities that require a licence: The Athens MOU requires establishment by December 2003 of a licensing system for all types of infrastructure facilities and for market participation that is transparent, non-discriminatory and in line with international best practice.[261] There is no reference to licensing of generation or supply in the IME Directive. It is, however, useful in establishing a properly functioning electricity market for generators and suppliers to be licensed, as well as TSOs and DSOs, particularly since such entities have the ability to affect the system.

10.1.2 Authorisation procedure for new generating capacity: Both the IME Directive and the Athens MOU require the establishment of an authorisation procedure for the construction of new generating capacity, and that such authorisation procedure should be conducted in accordance with objective, transparent and non-discriminatory criteria.[262]

10.2 Summary Table

	Licensed activities	Authorisation of new generating capacity
Albania: Statutory Requirement	**Yes**: Regulator given power to issue licences for building, installation and operation of generators; generation, transmission and distribution of electricity; supply and sale of electricity; export and import of electricity.[263]	**Yes**: Building and installation of generation capacity requires a licence.[264]
Bosnia and Herzegovina: Statutory Requirement	**Yes**: FBiH and RSRegulators issue licences for generation, distribution and trading.[265] State Regulator issues licences for system operator, transmission network owner and international trading.[266] Procedures for licence awards to be developed to ensure a transparent process for new entrants, based on technical, financial and economic grounds.	**Yes**: A licence is required for construction of generating facilities producing electricity other than for self-supply.[267] In addition, generation facilities producing electricity for tariff buyers may only be constructed in FBiH on the basis of competitive tender.[268] In RS, Regulator issues licences for generation construction.[269]
Croatia: Statutory Requirement	**Yes**: Licence required for generation, transmission, distribution, supply, and organisation of market.[270]	**Yes**: Construction of facilities for generation of electricity for tariff customers awarded in a regulator-approved tendering process. Regulator will issue a licence to the successful tenderer.[271] Entities may freely construct plants for supplying eligible customers, provided they have a generation licence.[272] Under draft new law, entities wishing to construct new generation capacity must comply with approval procedure.[273]
Montenegro: Statutory Requirement	**Yes**: Regulator issues licences for generation, transmission, distribution, supply, trade, operation of the	**Partial**: Licences for construction are envisaged by the Energy Law 2003.[275] The Energy Law specifically

	Licensed activities	Authorisation of new generating capacity
	market, and operation of the transmission or distribution networks.[274] There are transitional arrangements for existing electricity undertakings during initial period of Energy Law 2003.	provides that there shall be simplified procedures for obtaining a licence for construction of small hydro power plants and power plants on alternative sources.[276] The Energy Law also mentions a tendering procedure for new capacity, overseen by the Regulator.[277]
UNMIK: Statutory Requirement	**Yes**: Licences are required for generation (including co-generation of electricity and heat), transmission, distribution, supply, trade of electricity, and cross-border transmission.[278] Licence is not required for generation of electricity by plants with capacity less than 5MW or generation of electricity for self-supply.[279]	**Yes**: The construction of new generating capacity shall be based on either an authorising procedure or a tendering procedure. The authorisation procedure shall be conducted in accordance with objective, transparent, and non-discriminatory criteria.[280] The tendering procedure will only be used if the authorisation procedure has not resulted in the building of sufficient capacity to ensure security of supply or meet environmental targets.[281]
FYR Macedonia: Statutory Requirement	**Yes**: Licences issued for activities of electric power generation, transmission and distribution.[282]	**Proposed**: A new by-law is being prepared by the Regulator which will include the requirement to obtain a licence for the construction of new generating capacity. Entities will be required to obtain a concession from the government and to have a licence before undertaking construction.

	Licensed activities	Authorisation of new generating capacity
Serbia: Statutory Requirement	**Yes**: Regulator will issue licences for generation, transmission, distribution, operation and control of transmission system, operation and control of distribution system, trade, and organisation of electricity market.[283] A licence is not required for generation of electricity exclusively for own consumption or for generation by facilities up to 1MW.[284]	**Yes**: An energy permit will be required to construct power plants over 1MW, as well as for construction of direct power transmission lines, and transmission and distribution facilities over 35 kV.[285] A permit will not be required where the right to construct the facility is obtained through concession or public tender.

10.3 Regional Analysis

10.3.1 Activities that require a licence: In all jurisdictions a regime has been established by legislation which requires a licence to be obtained in order to undertake the activities of transmission, distribution, generation and supply of electricity. Most jurisdictions also require a licence for the trade of electricity. The system in Bosnia and Herzegovina is unusual in that the Entity Regulators, FERC and RSERC, issue licences for generation, distribution and trading of electricity, while the State Regulator, SERC, issues licences for the system operator, transmission network owner and for international trading. Licences are required in FYR Macedonia, only for the activities of generation, transmission and distribution. This appears sufficient to comply with the requirements of the Athens MOU.

10.3.2 Authorisation procedure for new generating capacity: Authorisation processes are in place for construction of generating facilities in Albania, Bosnia and Herzegovina, Croatia, Serbia and UNMIK, although it is unclear whether such procedures are objective, transparent and non-discriminatory, as required by the IME Directive and the Athens MOU. In UNMIK and Serbia the tendering procedure is only used if the authorisation procedure has not resulted in sufficient capacity to ensure security of supply.

In FYR Macedonia, there is at present no licensing procedure for construction of new capacity. However, the Regulator is preparing by-laws which will set out the requirement to have a licence in order to undertake construction of new capacity. It is expected that the right to construct new capacity will be granted by way of concession, rather than by use of a tendering procedure. An entity will then require both a concession and a licence in order to construct new generating capacity.

Endnotes

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[3] Article 1.1.4, Athens MOU.
[4] Article 41, Energy Law 2003.
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[7] Article 1, Law on Founding of Independent System Operator for Transmission System in Bosnia and Herzegovina 2004.
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