

## Screening chapter 15 - Energy

### Non-exhaustive list of issues and questions to facilitate the preparation of the bilateral meeting of June 2006

#### HYDROCARBONS

##### 1. Oil stocks

What measures, if any, have been taken to ensure the maintenance of stocks in all of the three categories defined in the acquis ? What are the control measures and the applicable penalties ?

What measures, if any, have been taken to ensure the permanent availability and accessibility of the stocks, as well as, in case of difficulties in obtaining oil supplies, the control by the Government of the country of the use of stocks ?

What options, if any, have been followed to ensure fair and non-discriminatory conditions in the stockholding arrangements ? What are the current stocks requirements imposed on the different categories of operators in the oil products market (refiners, importers, wholesale distributors, etc...) ? In particular, what measures, if any, have been taken to ensure a fair treatment of all operators (refiners and non refiners) ? What transparent arrangements identify the cost burden resulting from the maintenance of the stocks ? Have any measures been adopted to obtain and publish information on the cost-burden of stockholding ?

Has a decision been taken to establish – or not – a stockholding body ?

What measures, if any, have been taken to produce statistical summaries as required under the acquis ? Are crude oil and intermediate products taken into account in the statistics ?

Have any stockholding bilateral (draft) agreements been agreed upon with EU countries ? Does any of these agreements fail to answer the strict conditions stipulated in the acquis ?

##### 2. Other emergency measures

What measures, if any, have already been taken to align the national legislation with Council Directive 73/238/EEC of 24 July 1973 on measures to mitigate the effects of difficulties in the supply of crude oil and petroleum products ?

##### 3. Licensing procedures

In relation with granting and using authorizations for the prospection, exploration and production of hydrocarbons, has a decision been taken as to which would be the “competent authorities” as referred to under article 10 of Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 ?

As the case may be, have all provisions which might reserve to a single entity the right to obtain authorizations in a specific geographical area within the national territory been abolished ?

Which measures, if any, have been taken to ensure that authorizations are granted following a procedure in compliance with the acquis ?

Which measures, if any, have been to be taken to establish criteria for the delimitation of the geographical areas in compliance with the acquis, as well as to limit the duration of the authorizations ?

Have the criteria for granting the authorizations as well as the conditions and requirements concerning the exercise or termination of the activities in question been drawn up ?

Has the Government of the country already decided which areas of the national territory, if any, would be available under article 3.3. of Directive 94/22/EC ?

Which measures, if any, have been taken to produce and publish an annual report which shall include information on the geographical areas which have been opened for prospecting, exploration and production, authorizations granted, entities holding authorisations and the composition thereof and the estimated reserves contained in its territory ?

#### **4. Registration for crude oil imports and deliveries**

What measures, if any, have been taken to produce statistical summaries as required under Council Regulation (EC) n° 2964/95 of 20 December 1995 ?

#### **5. Crude oil supply costs & consumer prices of petroleum products**

What measures, if any, have been taken to produce statistical summaries as required under Council Decision (EC) n° 280/99 of 22 April 1999 implemented by Commission (EC) n° 566/99 of 26 July 1999 ?

In particular, regarding the consumer prices of petroleum products, what would be the methodology used in order to calculate the most representative price levels charged to consumers in a given category of products (prices in force each Monday and on the 15<sup>th</sup> day of each month) ?

As regards crude oil supply costs, what is the percentage of the inland production in the total crude oil supply of the country (based on the annual quantities) ?

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#### NUCLEAR ENERGY

##### Part 1 - RADIATION PROTECTION (TITLE II, CHPT. 3 EURATOM)

#### **I. General Information:**

##### **Radiation protection profile of the country**

1. Number of employers/undertakings identified as being responsible for practices involving ionising radiation (grouped by sector)?
2. Number of work areas (facilities/establishments) involving exposure to ionising radiation declared or authorised (grouped by sectors)?
3. Estimated number of workers receiving an effective dose higher than 1 mSv a year (“exposed workers”),

##### **Organisation and tasks of the competent authority (ies)**

4. Is there an independent regulatory authority responsible for Radiation Protection? (new)
5. Is a planned and systematic inspection programme established? Please give details
6. Does the government or other national concerned organisations provide for
  - training and education
  - dosimetry
  - calibration
  - archiving of dose and medical examination records

##### **Article 35 and 36 of the Treaty (Environmental Monitoring)**

7. Is there an active network of measuring stations to monitor environmental radioactivity?
8. Have you identified contaminated areas or areas with a potential risk requiring a special environmental surveillance?

##### **Article 37 of the Treaty**

9. Are discharges into the environment subject to prior authorization? Please give details.

##### **Radiation protection of workers and the population**

10. National legislation on radiation protection. Please give an overview of existing legislation together with relevant regulations or government decrees in the following areas:
- a) Health protection of the population;
  - b) Health protection of workers;
  - c) Medical applications of ionising radiation;
  - d) Emergency preparedness and information;
  - e) Contamination of foodstuffs and feeding stuffs;
  - f) Controls on shipments of radioactive waste and radioactive substances;
  - g) Management of high activity sealed sources and orphan sources
11. Is a system of notification / authorisation for practices involving ionising radiation in place? Are there clearly defined, established criteria within the authorisation procedures for any refusal, renewal, suspension or revocation?
12. Have the principles of justification, optimization and dose limitation been incorporated in your national legislation?
13. What are the dose limits for exposed workers and population?

### **Operational protection of workers**

14. How is the compliance with the dose limits ensured (dosimetric services, occupational health services; experts in radiation protection; measurement, assessment and recording of exposures, etc.)?
15. Are suitable radiation protection training programmes established and maintained for the training of the exposed workers? Is there a formal recognition (certificate)?
16. Did your competent authority define criteria for the classification of working areas?
17. How is the medical surveillance of exposed workers organised? Do occupational medical doctors receive specific training in radiation protection if they have to monitor exposed workers
18. Are there specific provisions for outside undertakings (contractors or operators) the outside workers?

### **Work activities**

19. Are work activities involving a significant increase of exposure to natural radiation (in the sense of Title VII of Directive 96/29/Euratom) covered by your radiation protection legislation? (a) If yes could you indicate in which sectors and (b) what are the main requirements?

## **Intervention**

20. Has a national plan been established?
21. (if relevant) Are local and national plans tested at regular intervals? Are these plans periodically validated by emergency exercises and if so with what frequency?
22. Are there national arrangements for rapidly informing neighbouring countries on bilateral basis about emergency situations and when such situations arise? Indicate those neighbouring countries with which there is a bilateral arrangement of emergency information exchange.
23. Is prior information delivered to the population groups in connection with the intervention plans? (in the sense of Directive 89/618/Euratom)?
24. Is there a requirement to provide immediate information to the public in the case of an accident and if so what channels of communication are needed?

## **Medical exposures**

25. Are there specific provisions for the radiation protection in the medical field?
26. Are diagnostic reference levels used to inform medical doctors on the doses they deliver during examinations?
27. Which category of professionals can take the clinical responsibility for the medical exposure to ionising radiation (prescriber, radiologist, nuclear medicine specialists, radiotherapist or another health professional)?
28. How many experts in medical physics are available in your country? What is their scientific background and which training did they receive? Are experts in medical physics involved in all fields (radiotherapy, nuclear medicine and radiodiagnostic)?
29. How is the radiation protection training of medical doctors, dentists, radiologists, technicians and radiographers organised? Does continuing training exist? If so, by whom is it organised?
30. Are there specific provisions on medical equipment?

## **Foodstuffs and feeding stuffs**

31. Is there any legislation establishing maximum levels of contamination of foodstuffs in case of radiological emergency?
32. Is there an official control mechanism (inspectorate) as well as laboratory monitoring facilities capable of checking the levels of radioactive contamination of foodstuffs and feeding stuffs placed on the market?
33. Are the points of entry into your territory and the production and trade sectors equipped with measurements devices?

## **Controls on shipments of radioactive waste and radioactive substances**

34. How are these kind of shipments supervised? Is there an administrative procedure in place?

### **Safe management of high-activity sealed radioactive sources and orphan sources**

35. How is the traceability of high activity sealed radioactive sources ensured in your country? Is there a register of sources / source holders?

36. Are there specific provisions dealing with the safe recovery of orphan sources?

### **Final consideration**

37. What is the estimated timetable for compliance with the Euratom Treaty and derived legislation provisions on radiation protection? Please provide any draft amendments or draft new legislation under consideration for the future.

## **Part 2 - SUPPLIES (TITLE II, CHAPTER 6)**

1. Are there any nuclear materials within the territory of the candidate countries? (For the purposes of this question, the term “nuclear materials” includes any of the ores, source materials and special fissile materials as defined in Article 197 of the EURATOM Treaty, irrespective of the quantity of the nuclear materials.)
2. Are there persons, undertakings or other entities within the territory of the candidate countries who/which may be concerned, directly or indirectly, in transactions relating to nuclear materials? (The Agency is not aware of any nuclear power plants operating within the territory of the candidate countries; please confirm whether or not it is so. Please indicate also any research reactors or commercial companies, which may act as intermediaries, if any.)
  - (a) If yes, have such persons/undertakings/entities concluded any contract which may possibly fall under the scope of Chapter VI of the Treaty?
  - (b) If not, are there any resident in the candidate countries who intends to engage in transactions with nuclear materials or any plans relating to the establishment of nuclear installations (such as nuclear power plants, research reactors, other installations within the front-end nuclear fuel cycle or intermediary companies)?

## **Part 3 - SAFEGUARDS (TITLE II, CHAPTER 7 EURATOM)**

Do any locations in your country have the status of Facility or LOF under IAEA Safeguards? Please provide co-ordinates of the State System of Accountancy and Control (SSAC) (name of the Head of the service, contact details, identify the ministry responsible).

Is there a national system of Safeguards Inspections? If yes, is it integrated into the SSAC?

Do national inspectors accompany IAEA inspectors on Safeguards inspections or on Complementary accesses under the Additional Protocol?

Is reporting to the IAEA under the Additional Protocol carried out by the SSAC? If not please provide co-ordinates as above of the reporting organisation (s)?

Are there any SITES as defined in the Additional Protocol?

Please provide information on the number of locations holding U or Pu exempted from IAEA Safeguards according to Articles 36 or 37 of the Comprehensive Safeguards Agreement?  
Please provide a list of any international agreement - in particular with US, Canada or Australia - covering the supply of nuclear materials which impose requirements on tracking of nuclear materials or physical protection of nuclear materials or special safeguarding measures.  
If yes has any material or equipment been transferred under the agreement in question?

#### **Part 4 –**

### **EXTERNAL RELATIONS (TITLE II, CHAPTER 10 EURATOM)**

What bilateral agreements has your country concluded in the field of nuclear energy?

Is it presently negotiating such agreements?

Is your country a party to multilateral agreements in the nuclear sector?

More particularly, what is your country's position concerning the following conventions:

- (1) Convention on Nuclear Safety (signed in 1994);
- (2) Convention on the Physical Protection of Nuclear Material (signed in 1980) and its amendment (signed on July 8<sup>th</sup>, 2005);
- (3) Convention on Early Notification of a Nuclear Accident (adopted in 1986);
- (4) Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency (signed in 1986);
- (5) Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (adopted in 1997)?

Is your country actually preparing its accession to multilateral agreements?

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#### ENERGY EFFICIENCY AND DEMAND MANAGEMENT

##### Energy Star sector

- What are the actions being taken by Turkey/Croatia in energy efficiency of office equipment?
- Is there national legislation in force?
- If yes: what are the characteristics, what has to be done to be in line with community legislation?
- Who are the competent bodies (e.g. ministry of economics, or ministry of environment, or ...)
- Who is supporting competent bodies (national energy agency ...)?

##### Intelligent Energy Europe

- Do Turkey / Croatia have a programme similar to IEE to support non-technical measures in the area of energy of energy efficiency, renewable energy sources and use of energy in the transport sector?
- Does Turkey intend to ask for participation in the next Intelligent Energy Europe Programme by concluding a Memorandum of Understanding with the EU?

##### Renewable energy sources

1. General situation regarding transposition, target setting and support mechanisms
  - What is the status of the alignment with the Directive 2001/77/EC, what legislation has been adopted and what is still missing?
  - Has an ambitious target for the share of renewable electricity of total electricity consumption been set, if not what target is being considered and when will such a target be set?
  - What support mechanisms are in place to promote renewable electricity, and what is the envisaged pace and scope of further development of support mechanisms for promoting renewable electricity?
  - Are there any possible economic, political or legal difficulties in adopting specific parts of the directive 2001/77/EC?
2. Authorization procedures



- Please describe in detail the authorization procedures applied for giving license to build and operate plants producing electricity from renewable, what actions have been taken to simplify authorisation procedures?

### 3. Grid access

- Is electricity from renewable energy sources guaranteed access to the transmission and distribution grid? If the electricity system permits, is renewable electricity given priority access? If not, why?
- Have objective, transparent and non-discriminatory rules on how grid connection and other grid investment costs, such as reinforcement and extensions, shall be covered been published. Please describe in detail how such costs are shared? If this is not in place, what is the timeframe for putting publishing these rules?
- In the case that the producer has to pay all or part of the connection cost, are they provided with detailed estimates of costs?

### 4. Guarantee of origin

- Has a system of guaranteeing the origin for electricity from renewable energy sources been put in place, if not, what is the timeframe for putting in place such a system?

## **Transposition of the Ecodesign Directive (2005/32/EC) and Implementing Directives**

- Do you have any existing legislation (or voluntary schemes etc.) for ecodesign requirements for energy using products, and in particular for the products covered by the implementing directives?
- What legislative measures have you taken or are you planning to take to transpose the directive and the implementing directives into your national law? What is your timetable for this? Do you have any (draft) legislation?
- Have you (or do you have plans to) undertaken any promotional activity to explain ecodesign to the SMEs and to other manufacturers in your country?
- How do you intend to organize proper enforcement of the directive and its existing and future implementing directives? What administrative or organisational measures have you taken or are you planning to take? Which organization(s) will be in charge?

## **Transposition of the Energy Labelling Directives (1992/75/EEC) and Implementing Directives**

- Do you have any existing legislation (or voluntary schemes etc.) giving the public energy consumption (or other product information) for household appliances, and in particular for the products covered by implementing directives?
- What legislative measures have you taken or are you planning to take to transpose the directive and the implementing directives into your national law? What is your timetable for this? Do you have any (draft) legislation.
- Have your standardization bodies adopted the harmonized EN standards as national standards?

- Have you (or do you have plans to) undertaken any promotional activity to explain energy labelling to the public?
- Have you (or do you have plans to) educate or train stakeholders (in particular sales staff) on how best to make use of energy labelling?
- How do you intend to organize proper enforcement of the directive and its existing and future implementing directives? What administrative or organisational measures have you taken or are you planning to take? Which organization(s) will be in charge? Please distinguish between measures to ensure that :
  - (a) products are labelled, and that fiches and ‘distance selling’ information is supplied; and
  - (b) the information supplied is correct.

## **Energy efficiency and demand management**

### 38. Energy efficiency and demand management in general

- Please complete the annexed table on energy efficiency and demand management.
- What kind of supporting mechanisms are available or planned (legislative, financial, organisational, educational)?
- By whom are they managed (ministries, agencies, independent bodies)?
- At what level do they exist (national, regional, local)?
- How are these activities co-ordinated, monitored and evaluated?
- Is there international cooperation in the field of energy efficiency and demand management policy?
- Is there cooperation with financial institutions (World Bank, EIB, EBRD, private banks) in the field of energy efficiency and demand management?

### 39. Promotion of cogeneration

- Please provide details on the trends and current size and position of cogeneration in general and high efficiency cogeneration in particular within the energy sector (including fuel use, share in electricity generation capacity, position of the utilities, role of autoproducers, kind of applications agricultural/heating and cooling/industrial).
- Please provide data on the efficiency of the cogeneration sector, the primary energy savings being reached and the way of establishing these (including the use of efficiency reference values and calculation methodology and possible differences with the approach in the cogeneration Directive and the outcome of the cogeneration committee).
- What kind of definitions is currently being used for cogeneration and high efficiency cogeneration in legislation and by statistical agencies?
- Is there a system in place to support (high efficiency) cogeneration and if so, please provide details, especially if market forces are used (guarantee of origin, certificate

trading schemes, feed-in tariffs, priority grid access, ...). Are these systems managed by the government or independent bodies? Are changes planned in the context of the acquis, especially the cogeneration Directive?

- If such a support system is in place, please provide details on the effects and cost-effectiveness for the promotion of cogeneration. Is there special consideration for micro and small scale cogeneration, or will there be?
- What is the opinion on participating in the common model on CHP guarantees of origin being developed by the Commission and the Association of Issuing Bodies?
- What is the current situation on grid access for electricity from cogeneration? Is size of the CHP unit relevant? What steps are planned for grid access for small scale and micro cogeneration units and is the grid being prepared for this?
- There are many reporting obligations in the acquis on cogeneration (statistical data, analysis of the national potential, administrative barriers and procedures, evaluation of support schemes, progress in cogeneration). Which institutions or bodies will be involved and how will the reporting be coordinated?
- How is the role and potential of cogeneration and the necessity for its promotion taken into account in related energy policy fields like the promotion of the use of biomass for heating and cooling, the energy performance of buildings, the promotion of energy services and energy service companies and in related environmental acquis (including allocations for emission trading and acquis on emissions) ?

#### 40. Energy end-use and energy services

- Please provide information on the dimension of the sector, including global figures on the number of energy service companies (including district heating and cooling) and their position in the total energy market.
- Which authority will probably be given responsibility for ensuring that Article 4.4 of the Directive is complied with?
- Have you considered which 2 or more public sector obligations will be chosen from the Annex? How do you plan to implement them?
- Have you considered how to place the obligations in Article 6, on the energy distribution companies or the retailers?
- Do you fully understand the way to calculate the target and energy savings?
- Will you use a co-efficient for electricity, e.g. 2.5?
- How do you intend to implement the requirement on metering and billing?
- Is your expectation there will be a fund for energy efficiency?
- Will there be enough capacity to ensure the wide availability of independent high quality energy audits?

#### 41. Energy performance of buildings

- At which level/how are you informed about the EPBD implementation actions and implementation procedures in the MS (e.g. "Buildings Platform" and related

newsletters, working groups for CEN standards used as basis for the EPBD certificate) in order to benefit from their experiences?

- At which level/how are you informed about the EPBD related "SAVE" promotion projects? Are the experiences of those practical projects already used for the EPBD implementation process? Are there any contacts to the IEEA (coordinator of the SAVE projects)?
- What is the situation concerning the experts who shall accomplish the certification of buildings according to EPBD? How many experts do you need, how many are there already and which training do they have? Who is/will be responsible for the accreditation of the experts? How is the independency of the experts guaranteed?
- What is the schedule for the implementation of the several articles of the EPBD?
- Who (of the government/ministries) will be responsible for the enforcement of the certification of buildings? Who will check the implementation of certification when a building is sold, newly rented out or refurbished?
- Are there statistical data about the stock and the average energy performance condition of existing buildings for the whole country? If so, please provide global figures.
- Have you been able to study the 31 CEN standards that have been developed to facilitate the integrated calculation methodology?
- Which alternative will you use for inspecting boilers?
- Will you use asset values or metered values for measuring performance?

ANNEX

INFORMATION RELATED TO ENERGY EFFICIENCY AND DEMAND MANAGEMENT

<b>Main fields EU acquis</b>	<b>Turkish relevant legislation or existing support schemes<sup>1</sup></b>	<b>Responsible services within Turkish administration (legislation, enforcement)</b>	<b>Main differences between Turkey and EU acquis</b>
<b>Promotion of high efficiency cogeneration</b>			
<b>Energy services, including ESCOs and district heating</b>			
<b>Energy end-use efficiency in buildings (system approach; including energy efficiency aspects in building regulations and in legislation on construction materials)</b>			
<b>Energy end-use efficiency in appliances : minimum efficiency requirements (including lifecycle approaches)</b>			
<b>Energy end-use efficiency in appliances : labelling</b>			
<b>Energy end-use efficiency at the consumer level (including households and transport)</b>			

<sup>1</sup> Please include name legislation and reference to Turkish OJ + 1 page explanatory fiche per measure