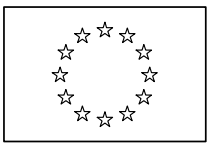

COMMISSION OF THE EUROPEAN COMMUNITIES

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COMMUNICATION FROM THE COMMISSION

Summary of the activities carried out during 2004 and 2005 in implementation of Title II, Chapters 3 to 10, of the Euratom Treaty

{SEC(2006) 942}

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1. INTRODUCTION

This Communication describes the activities carried out by the Directorate General for Energy and Transport (DG TREN), Directorate H (Nuclear Energy) and Directorate I (Nuclear Safeguards), as part of the Commission's activities under the Euratom Treaty (hereinafter "the Treaty"). DG TREN is responsible for the implementation of the majority of the provisions of the Euratom Treaty Title II, (Chapters 3 to 10), covering Nuclear Safety, Investment, Joint Undertakings, Safeguards and External Relations. This communication also includes a summary of the activities of the Euratom Supply Agency (ESA)[1]. Activities related to the promotion of research can be found in the annual activity reports[2] of DG RTD and JRC. The preparation and implementation of the TACIS programme falls under the responsibility of both DG RELEX and DG AIDCO[3], PHARE is managed by DG ELARG[4]. Euratom loans attribution is managed by DG ECFIN[5]. The work of two on-site laboratories (at La Hague and Sellafield) in reprocessing plants is supervised by JRC and financed by DG TREN.

2. REORGANISATION OF THE COMMISSION'S SERVICES

Since the creation of Directorates H and I in 2003, the reorganisation of the Commission's services in the nuclear domain continued to evolve. Competencies and staff dealing with legal and technical issues as well as international relations and trade in the nuclear field were regrouped at the Luxembourg site. As a result, only the services dealing with the Euratom Research Programme and the TACIS programme are based in Brussels. Directorate H deals mainly with negotiation of international agreements and conventions, implementation of the Treaty and its derived legislation, technical aspects of the nuclear fuel cycle, management and reporting of nuclear material accountancy and radiological protection. Directorate I plans and carries out safeguards inspection activities, including logistical support. The ESA is responsible for ensuring a regular and equitable supply of nuclear fuels for Community users by means of a common supply policy. It was also relocated in Luxembourg during 2004.

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1 Annual Report available on request or at http://europa.eu.int/comm/euratom/index_en.html

2 For DG Research (RTD): http://europa.eu.int/comm/research/; for the Joint Research Centre (JRC): http://www.jrc.cec.eu.int/

3 DG RELEX: External Relations, DG AIDCO: Europe Aid and Cooperation

4 DG ELARG: Enlargement

5 DG ECFIN: Economic and Financial Affairs

3. POLICY AND LEGAL DEVELOPMENTS

3.1. Status of Commission Legislative Proposals

3.1.1. Nuclear Package

The Commission participated actively to the discussions at the Council and the Parliament on its proposals for Council Directives on the safety of nuclear facilities and the safe management of spent fuel and radioactive waste, presented in 2003. Two revised proposals were adopted by the Commission on 08.09.2004[6], taking into account the Parliament's positions and discussions at the Council. Despite a favourable opinion of the European Parliament and a support of these proposals by a majority of the Council, the requested qualified majority is not reached and no further discussion on the revised proposals took place at the Council, neither in 2004 nor in 2005.

Instead, an "Action Plan on Nuclear Safety and the Safe Management of Spent Fuel and Radioactive Waste" was set out on the basis of the Council Conclusions of June 2004 to review the issues involved. A Working Party on Nuclear Safety, established for this purpose, is preparing a technical report (scheduled for the end of 2006). The Commission services participate to this process.

3.1.2. Shipments Directive

The Commission adopted a Proposal[7] for a Council Directive on the control of shipments of radioactive waste and spent fuel, intended to replace the existing Directive 92/3. The proposed Directive, which should also apply to spent fuel intended for reprocessing, simplifies procedures while ensuring consistency with the Basic Safety Standards (BSS) Directive and International Conventions. In November 2004, the proposal was transmitted to the EESC[8] for opinion[9]. A final proposal was adopted and transmitted to the Council in December 2005[10].

3.1.3. The new Safeguards Regulation

The discussions on the new Safeguards Regulation[11] were finalised in April 2004. The Council of Ministers approved the Regulation on 30.04.2004. The procedure for its final adoption by the Commission was engaged immediately thereafter. Translation into all official languages delayed its publication until 28.02.2005. It entered into force on 20.03.2005.

The Commission adopted[12] – in the form of a recommendation – *Guidelines for the application of the new Euratom Safeguards Regulation,* summarising the explanations, understandings and agreements reached with the Member States, and providing nuclear plant operators with non-binding guidance.

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6 COM(2004) 526 of 8.9.2004
7 COM(2004) 716 of 12.11.2004
8 European Economic and Social Committee
9 COM(2004) 716 final – 2004/0249 (CNS)
10 COM(2005) 673 final of 21.12.2005
11 Regulation (Euratom) n°302/2005
12 C(2005) 5127 of 15.12.2005

3.2. Implementation of legislation – Infringements

3.2.1. Legal developments

Just before the end of 2003 two important pieces of legislation were finalised.

The Council Directive on the control of high-activity sealed sources (HASS) and orphan sources[13] was acknowledged internationally as an important achievement (G8, IAEA), meeting concerns for malevolent use of medical or industrial sources. A workshop organised in March 2005 dealt with the difficulties encountered by the Member States when transposing the Directive. By 31 December 2005, transposition deadline, 19 Member States had notified the draft national measures implementing the Directive, as provided for in Art. 33 of the Treaty; 5 of these Member States had further adopted and notified the final measures.

The Commission Recommendation[14] on standardised information on radioactive airborne and liquid discharges into the environment from nuclear power reactors and reprocessing plants in normal operation helped to define the specifications of a new database now being constructed.

3.2.2. Transposition of legislation and Infringements

The Commission made an extensive evaluation of the implementation of the Treaty and secondary legislation derived there from for both 2004 and 2005.

Under Treaty Art. 141-143, 13 new cases were opened. A total of 29 infringement procedures were treated regarding the lack of respect of provisions on health and safety (Title II, Chapter 3 of the Treaty), Safeguards (Title II, Chapter 7) and External Relations (Title II, Chapter 10).

Specific failures were addressed with the specific means provided for in Chapter 7. The Commission adopted a Directive under Art. 82 of the Treaty, asking the country concerned to guarantee the accounting of all nuclear materials and its accessibility to Euratom inspectors. The national authorities reply not being satisfactory, the Commission decided to refer the case to the Court of Justice.

In another case, the Commission adopted a Decision under Art. 83 of the Treaty to impose a sanction (under Art. 83(1)(a) on the operator of a nuclear installation that had failed to satisfactorily fulfil its obligations.

The information on other cases is in Annex (Listed in the Commission Staff Working Document).

4. ENLARGEMENT

During 2004 and the first half of 2005, special attention was given to prepare the implementation of Euratom safeguards in the new Member States. An informatics programme, designed to facilitate the reporting requirements for the new Member States was developed, taking into account the new Safeguards Regulation mentioned above. Deployment of the corresponding hardware and software started in the second half of 2004. It is expected

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[13] OJ L 346, 31.12.2003, p. 57

[14] OJ L 2, 6.1.2004, p. 36 - 46

that full implementation and routine use by new Member States' operators will take place as from early 2006.

Regular contacts with State authorities and nuclear operators were enhanced in order to ensure a smooth transition from Safeguards implementation reporting under bilateral Agreements with IAEA to Safeguards implementation under the Member States/ Euratom/ IAEA Agreement.

Special attention was also paid to future inspection activities in the new Member States. The nuclear industries of these States are mostly limited to power reactors and storage facilities. A programme of fact-finding and technical missions was undertaken.

The EU has repeatedly emphasised the importance of a high level of nuclear safety in both Bulgaria and Romania, in preparation to the forthcoming enlargement.

Bulgaria must ensure compliance with Euratom requirements and procedures. Following a Peer Review on nuclear safety in Kozloduy nuclear power plant (NPP) in 2003, a Status Report was issued. It reaffirmed the importance of Bulgaria's commitment on the definitive closure of Units 1 to 4 of the Kozloduy NPP at the earliest possible dates. This commitment is included in the Act of accession of Bulgaria, signed on 25.04.2005 in Luxembourg.

The negotiations of the Energy chapter with Romania closed at the end of 2004. Romania has continued to develop its nuclear safety regulatory framework. However, it still needs to improve safety at the Cernavoda, Candu[15] technology, nuclear power plant, to continue the development of national programmes on safe management of spent fuel and radioactive waste and to strengthen the capability of the nuclear regulatory authorities.

Screening of the relevant legislation has been on-going for both Croatia and Turkey.

5. GENERAL DEVELOPMENTS IN THE NUCLEAR FIELD WITHIN THE EU

5.1. Decommissioning, Waste Management and Transport

5.1.1. Decommissioning

The Commission continued its work on the implementation of the Treaty of Accession Protocols for Ignalina and Bohunice. €138 million were allocated in 2004, while a further €139 million were attributed for 2005. The majority of this assistance was provided through International Decommissioning Support Funds, managed by the EBRD[16] and overseen by Assemblies of contributors chaired by a Commission representative. At the request of the beneficiary, the share of decommissioning assistance managed bilaterally by Lithuania and the Commission almost doubled – from €10 million in 2004 to €18 million in 2005. This latter assistance is provided using a PHARE-type approach and is used to address safety culture maintenance and social-related issues.

In response to the European Parliament concerns about the Directive on the common rules for the internal market in electricity, a report was published in 2004 on the use of financial

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15 "CANada Deuterium Uranium". Pressurized Heavy Water Reactor (PWHR) Canadian designed power reactor using heavy water (deuterium oxide) for moderator and coolant, and natural uranium for fuel.

16 European Bank for Reconstruction and Development

resources earmarked for the decommissioning of nuclear power plants.[17] The Commission stated the need to ensure that the four basic principles – the adequacy, the availability and the use of the funds as well as their transparent management – are respected. In 2005, a second report covering all types of commercial nuclear installations in the EU was prepared[18]. Consultations with Member States, the European Parliament and industry experts as well as replies to a specific country questionnaire were used as the basis of the report. A recommendation will be issued, asking Member States to take necessary measures on the above mentioned basic principles.

5.1.2. Radioactive waste

The availability of technologies aiming to reduce the volume and radio-toxicity of long-lived radio-nuclides, making safer and more acceptable the handling and disposal of such material, could contribute to foster national decisions on the issue of radioactive waste management.

The Commission's Work Programme for 2005 included the proposal to create a Joint Undertaking to focus research activities on radioactive waste management. Some preliminary steps are being undertaken in order to build a broad consensus towards this initiative. The Commission's services are studying how to set up a Technological Initiative as a means to consult and build consensus with industrial partners and define the most promising technologies to manage effectively radioactive waste. The final goal of the initiative will be to demonstrate the possibility to reduce the life of radioactive waste products and the feasibility of its underground disposal. Preparations will be carried out in the context of the 7th Euratom Research Framework Programme.

5.1.3. Transport of radioactive material

In 2004, the Standing Working Group (SWG) on the transport of radioactive materials finalised its 5th report. It proposes measures to improve the operation of the sector and increase the safety levels. This report is updated to cover the current situation following the last enlargement of the EU.

5.2. Nuclear Safeguards

5.2.1. Safeguards inspections

On 30.04.2004 the Commission adopted a Communication[19] establishing the principles of a new nuclear safeguards approach, focussing directly on the objectives of the Treaty and bearing in mind the evolution of international concerns, which outlined how the inspection tasks devolved to DG TREN will be carried out.

From October 2004, nuclear safeguards approaches have been regularly discussed in the Council. Bilateral consultations took place throughout 2005 with several Member States (Belgium, Finland, France, Germany, Italy, Spain, Sweden, UK) to present and debate the new safeguards policy. The UK presidency prepared a document on a new framework for Euratom Safeguards, which was noted by COREPER. This is a step in reaching a common understanding between Member States and the Commission on the way forward on

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17 Report on the use of financial resources earmarked for the decommissioning of nuclear power plants (COM(2004) 719 final)

18 The report should be adopted by the Commission in 2006

19 C(2004)1669, 30.04.2004

safeguards implementation while respecting the role of all parties involved as set by the Treaty. In parallel, meetings were held with large industrial operators to assess the impact of new methodologies such as auditing of the operator's nuclear material accounting and control systems, as well as the revised baseline periodicity of inspections.

The IAEA has been kept informed of the developments. A framework for future co-operation between Euratom and the Agency is under development.

Since 01.05.2004 Commission services have been performing safeguards inspections in the nuclear installations of the new Member States.

5.2.2. Additional Protocols

The Additional Protocols (AP) covering the EU 15 Member States entered into force on 30.04.2004. Compared with the traditional safeguards agreement, the AP gives the IAEA two new sets of powers. Firstly, countries should provide the IAEA with an expanded declaration of activities in the nuclear field and secondly the IAEA obtains the right to make short notice visits to locations related to the nuclear fuel cycle (complementary access).

The Commission reports to the IAEA nuclear material related information under the AP on its own behalf for all Member States. In addition, the Commission prepares reports to respond to the extended information requirements of the AP for 10 (known as side-letter states) of the 13 non-nuclear weapon States. While these States retain the responsibility for the accuracy of data provided, the Commission has accepted to collect the data and submit the reports for them. Austria, Sweden and Finland have chosen to report this part of information under state responsibility directly to the IAEA, with a copy to the Commission. The two nuclear-weapon states (France and UK) send declarations directly to the IAEA.

All deadlines for reporting by the Commission were met for the side-letter states despite the late receipt of many declarations.

In December 2005, Slovakia and Estonia have completed procedures to join the trilateral agreement (INFCIRC[20]/193). The remaining eight new Member States have each a bilateral Safeguards Agreement and AP in force. They are expected to accede to the common Agreement in 2006, after the national legislative procedures have been completed.

The IAEA made use of its powers to carry out verification activities (complementary access) once in 2004. Access took place on 21.12.2004 in Helsinki, Finland. A Commission inspector from DG TREN was present. A series of further Complementary Accesses were performed in 2005 in almost all Member States under the INFCIRC 193 Agreement. In general, the provisions of the AP relating to rights of access are complex. Commission officials present during complementary accesses are instructed to ensure respect for the rights of the IAEA, the Member State and the operator of the premises subject to short notice access.

[20] Information Circular

5.3. Radiation Protection

5.3.1. Activities under Article 31 Euratom Treaty

At the end of 2004, the Commission, with a view of a possible revision of the BSS, held a conference on the new Draft 2005 ICRP[21] Recommendations on radiation protection. On the basis of the conclusions of the Group of Scientific Experts the Commission prepared a position paper on the ICRP Recommendations and communicated it to the ICRP.

A new Group of Experts was established under Art. 31 of the Treaty to incorporate experts from the new Member States. The Group established a work programme for the revision of the BSS.

5.3.2. Implementation of Euratom requirements on environmental radioactivity

The Commission conducted five verifications under Art. 35[22] of the Treaty in 2004, three in the EU-15 (Sellafield reprocessing plant, Trillo NPP (E), the Dounreay site (UK)), and two in new Member States: Temelin (CZ) and Paks (HU). This number was increased to six verifications in 2005, essentially in the new Member States: Ignalina (LT), Temelin (CZ), Slovakia and Estonia. In addition Greece and the reprocessing plant at La Hague (FR) were subject to verifications for a second time.

A document describing the approach and standard arrangements for the implementation of Art. 35 verifications was updated and sent to the 10 new Member States for information. The draft was discussed with representatives of the Member States in December 2004. While with some of the new Member States this document was incorporated in an individual bilateral protocol, the Commission is proposing a Communication on the implementation of Art. 35 verifications, with the aim of harmonising the activities in all Member States. The Communication is scheduled for adoption in 2006.

A questionnaire was sent to Member States to collect information on national requirements and inspection activities in implementing Art. 35. A study to analyse the responses and make recommendations for the future implementation arrangements is under way.

Under Art. 36 of the Treaty, Member States transmit information on levels of radioactivity in the environment. A Commission Recommendation[23] describes the content, timing and means of data transmission. No more problems were reported in this area since the first reporting (June 2002).

Nine plans for the disposal of radioactive waste, submitted by Member States in accordance with Art. 37[24] of the Treaty, were evaluated in 2004. Thirteen plans were evaluated in 2005. The data submissions led to the adoption of the corresponding Commission Opinions. A

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21 International Commission on Radiological Protection

22 This article gives the right to the Commission to verify operation of facilities that carry out monitoring of the level of radioactivity in the air, water and soil.

23 Commission Recommendation of 8 June 2000 on the application of Article 36 of the Euratom Treaty concerning the monitoring of the levels of radioactivity in the environment for the purpose of assessing the exposure of the population as a whole (2000/473/Euratom).

24 This article requires the Commission to deliver its opinion (after consulting the group of experts) on all data sent by Member States concerning their plans on the disposal of radioactive waste if the implementation of such plans might result in the radioactive contamination of other Member States.

report to the European Parliament on the implementation of Art. 37, between July 1994 and December 2003, was adopted by the Commission on 14.03.2005.

5.3.3. Emergency preparedness

The Community arrangement for urgent information exchange (ECURIE[25]) was maintained on a 24-hour basis. All candidate countries signed a participation agreement long before May 2004. All the new Member States were involved in ECURIE before May 2004, hence the required contact points and competent authorities were established prior to accession (except Malta, in June) and most have now fully operational dedicated equipment. Romania and Bulgaria have signed up to the ECURIE arrangements; Turkey and Croatia have been involved in the system at service level. The operational status of the ECURIE arrangements was regularly tested. DG TREN took part in international emergency exercises, including the major exercise Convex-3, hosted by Romania in May 2005.

The Commission played an active role in the proposal of WHO-FAO[26] Codex Alimentarius to set Guidelines for maximum permitted levels of radio-nuclides in foods for international trade on a permanent basis. An alternative Commission proposal obtained a large degree of consensus in the Council. The Commission position was eventually endorsed by the Group of Experts established under Art. 31 of the Treaty, thus putting the Community in a strong position to pursue its views in the Codex Alimentarius Committee in April 2005. The Community's "common position" prompted the Codex Committee to entrust the Community with the redrafting of the Guidelines together with IAEA (author of the original proposal). The new draft, for possible adoption in 2006, entirely reflects the Community position on the scope of the Guidelines (only in case of an emergency) and on a separate consideration of infant food.

5.4. Supplies of nuclear materials

Canada has remained the largest supplier of natural uranium to the EU, while Russia is the largest overall supplier when re-enriched tails and high enriched uranium (HEU) feed are also taken into account.

Security of supply has become a more central issue than a few years ago when prices were lower and supplies more easily available. Almost half of global reactor requirements for nuclear fuel have been covered in recent years by secondary supplies from past inventories and from the down blending of highly enriched uranium from military sources. According to ESA, more primary production is required. Rising uranium prices since 2003 have led to increased exploration and mining activity, with global uranium production increased by 14% in 2004 and on track to increase further in 2005.

The main industry development in the EU was the approval by the Commission (under EC merger rules) in October 2004 of a technology joint venture between the two European uranium enrichment companies. This joint venture will allow one of them to acquire the centrifuge technology developed by the other and to construct a new centrifuge enrichment plant which is expected to start production in 2007.

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25 European Commission Urgent Radiological Information Exchange

26 World Health Organisation – Food and Agriculture Organisation

6. INTERNATIONAL COOPERATION

6.1. Agreements with Third Countries

6.1.1. Japan

During 2004 the Commission concluded negotiations, adopted and transmitted to the Council a recommendation[27] to approve the conclusion of two agreements with Japan on co-operation in the peaceful uses of nuclear energy and on nuclear research and development. Following interpretative requests by the Japanese counterpart, the Commission submitted to the Council drafting modifications, acceptable to Council. The Agreement was signed in February 2006.

6.1.2. Ukraine

In September 2004 the Council approved the conclusion by the Commission of an Agreement for the Co-operation in the Peaceful Uses of Nuclear Energy between Euratom and the Cabinet of Ministers of Ukraine[28]. The Commission signed the agreement on 28 April 2005.

This agreement covers nuclear safety, controlled nuclear fusion, nuclear research and development, international transfers, including trade in nuclear materials and provision of nuclear fuel cycle services, as well as measures aiming at the prevention of illicit trafficking of nuclear material.

6.1.3. Kazakhstan

The negotiations on a bilateral agreement for Cooperation in the Peaceful Uses of Nuclear Energy continued in 2004. An amended proposal of the agreement was submitted to Kazakhstan in February 2005.

6.1.4. Uzbekistan

On 01.08.2004, the bilateral Agreement for Cooperation in the Peaceful Uses of Nuclear Energy entered into force.

6.2. International Conventions

6.2.1. Nuclear Safety Convention

The Commission amended its Decision 1999/819/Euratom of 16.11.1999 on the accession to the 1994 Convention on Nuclear Safety by Euratom with regard to the Declaration attached thereto[29]. A new Declaration of competencies was transmitted to the Secretariat General of the IAEA as a result of a Court ruling[30].

In the 3rd Review Meeting of the Nuclear Safety Convention (April 2005), Euratom participated for the second time as a contracting party, but for the first time after the having

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27 SEC(2004) 524 final, 26.11.2004

28 COM(2003) 129 final

29 Decision 2004/491/Euratom

30 Commission v Council, Case C-29/99, ECR 2002 Page I-11221.The Court partially annulled the declaration made by the European Atomic Energy Community when acceding to the Convention on Nuclear Safety

made the extended declaration of competencies. A report covering all main aspects of the Convention was presented by the Commission.

6.2.2. Joint Convention

The "Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management", negotiated under the auspices of the IAEA, came into force on 18.06.2001. In October 2001 the Commission submitted to the Council a proposal to accede to the convention. In January 2005 the Council adopted a Decision[31] approving the accession of Euratom to the convention as well as a declaration on its field of competencies.

On 14.06.2005, the Commission adopted the necessary Decision[32], approving Euratom accession to the Joint Convention. Accession is effective as from January 2006.

6.2.3. Convention on the Physical Protection of Nuclear Material (CPPNM)

Proposal for amendments to the CPPNM was distributed by the IAEA in 2004. Following a preparatory meeting in April 2005, the Amendment Conference adopted on 8 July the Amendment to the CPPNM.

The Council by its Decision[33] of 28.06.2005 had authorized the Commission to negotiate the amendments to the CPPNM with regard to matters covered by Community competence. Euratom participated therefore fully in the Amendment Conference.

6.2.4. Convention on Early Notification of a Nuclear Accident and Convention on Assistance in the case of a Nuclear Accident or Radiological Emergency

The Commission adopted two proposals for Council Decisions[34] approving the conclusion of the IAEA Conventions on Early Notification of a Nuclear Accident and to the Convention on Assistance in the case of a Nuclear Accident or Radiological Emergency, allowing a greater involvement of the Community in the mechanisms in place on the basis of these Conventions and complementarities with similar provisions agreed at EU level. Accession of Euratom to these two Conventions is on-going.

6.3. Cooperation with IAEA and other international organisations

The IAEA is responsible for world-wide safeguards under the Non-proliferation Treaty. The Commission functions in the role of "Community System of Accountancy and Control" for IAEA purposes. Accordingly, under tripartite safeguards agreements, the Commission's inspection activities may be observed by IAEA inspectors. Where the IAEA considers that the need exists, it performs activities additional to those performed by the Community. The Commission has supported the IAEA in performing its duties through the use of its equipment.

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31 2005/84/Euratom, OJ L 30, 3.2.2005, p. 10
32 C(2005)1729
33 COM(2005) 199
34 COM(2004) 560, 16.8.2004

Co-operation with the IAEA in the areas of Nuclear Material Accountancy and Additional Protocols was satisfactory. Discussions about formal arrangements for the accession of the New Member States to the Community's Safeguards Agreement[35] were concluded.

Participation in the work of a number of international organisations and their committees (like the IAEA, the OECD/NEA, and ICRP) was enhanced. The work on safety requirements for the geological disposal of radioactive waste was of particular importance. Specific EU safety standards are unfortunately still to be defined and agreed upon.

[35] INFCIRC 193