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REPORT

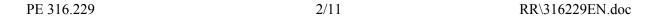
on the Commission report to the European Parliament and the Council: Operation of the Euratom Safeguards Office 1999-2000 (COM(2001) 436 – C5-0535/2001 – 2001/2214(COS))

Committee on Industry, External Trade, Research and Energy

Rapporteur: Paul Rübig

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CONTENTS

	Page
PROCEDURAL PAGE	4
MOTION FOR A RESOLUTION	5
EXPLANATORY STATEMENT	9

PROCEDURAL PAGE

By letter of 26 July 2001, the Commission forwarded to Parliament its report to the European Parliament and the Council: Operation of the Euratom Safeguards Office 1999-2000 (COM(2001) 436 – 2001/2214(COS)).

At the sitting of 12 November 2001 the President of Parliament announced that she had referred the report to the Committee on Industry, External Trade, Research and Energy as the committee responsible and the Committee on the Environment, Public Health and Consumer Policy for its opinion (C5-0535/2001).

The Committee on Industry, External Trade, Research and Energy had appointed Paul Rübig rapporteur at its meeting of 18 September 2001.

The committee considered the Commission report and the draft report at its meetings of 19 February, 26 March, 16 April and 22 May 2002.

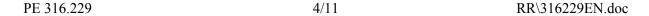
At the last meeting it adopted the motion for a resolution by 38 votes with 3 abstentions.

The following were present for the vote: Carlos Westendorp y Cabeza, chairman; Peter Michael Mombaur, Yves Piétrasanta, and Jaime Valdivielso de Cué, vice-chairmen; Paul Rübig, rapporteur; Nuala Ahern, Sir Robert Atkins, María del Pilar Ayuso González (for Umberto Scapagnini), Guido Bodrato, David Robert Bowe (for Luis Berenguer Fuster), Massimo Carraro, Gérard Caudron, Giles Bryan Chichester, Nicholas Clegg, Willy C.E.H. De Clercq, Concepció Ferrer, Francesco Fiori (for John Purvis), Christos Folias (for Christian Foldberg Rovsing), Michel Hansenne, Philippe A.R. Herzog (for Konstantinos Alyssandrakis), Hans Karlsson, Bashir Khanbhai, Bernd Lange (for Rolf Linkohr), Werner Langen, Caroline Lucas, Eryl Margaret McNally, Minerva Melpomeni Malliori (for Mechtild Rothe), Hans-Peter Martin (for Harlem Désir), Marjo Matikainen-Kallström, William Francis Newton Dunn (for Colette Flesch), Angelika Niebler, Reino Paasilinna, Paolo Pastorelli, Elly Plooij-van Gorsel, Godelieve Quisthoudt-Rowohl, Konrad K. Schwaiger, Gary Titley, W.G. van Velzen, Alejo Vidal-Quadras Roca, Dominique Vlasto, Myrsini Zorba, Olga Zrihen Zaari.

The Committee on the Environment, Public Health and Consumer Policy decided on 6 November 2001 not to deliver an opinion.

The report was tabled on 29 May 2002.

The deadline for tabling amendments will be indicated in the draft agenda for the relevant part-session.





MOTION FOR A RESOLUTION

European Parliament resolution on the Commission report to the European Parliament and the Council: Operation of the Euratom Safeguards Office 1999-2000 (COM(2001) 436 – C5-0535/2001 – 2001/2214(COS))

The European Parliament,

- having regard to the Commission report (COM(2001) 436 C5-0535/2001¹),
- having regard to Articles 30, 33, Chapter VII and 107 of the Euratom Treaty,
- having regard to the Commission Statement "Nuclear safety fifteen years after Chernobyl", during the plenary on 2 May 2001,
- having regard to the 1999 Cologne European Council which, in connection with the enlargement of the Union, stressed the urgent need to adopt high European safety standards in the nuclear field and called on the Commission to report on progress in this field,
- having regard to the Commission replies during the EP plenary of 5 February 2002²,
- having regard to the Commission replies during the EP plenary of 12 March 2002³,
- having regard to the Council decision on the sixth Euratom FP⁴,
- having regard to Rule 47(1) of its Rules of Procedure,
- having regard to the report of the Committee on Industry, External Trade, Research and Energy (A5–0196/2002),
- A. whereas the Euratom Treaty remarks the need for protection of the health of workers and the general public against the dangers arising from ionising radiations and entitle the Commission to make appropriate recommendations for harmonising the provisions applicable in the Member States in the field of nuclear safety,
- B. whereas in its 2000 Annual report, the European Court of Auditors deplored the lack of a definition of a European safety standard, and whereas the Council has still not yet taken any action on the matter.
- C. whereas the Euratom Treaty, in Article 107, entitle the European Parliament to submit any appropriate proposal concerning matters on which it considers that a Community act is required for the purpose of implementing the Treaty,
- D. whereas the European Community is supporting research on safety of nuclear reactors and nuclear material by means of the Energy Framework Programme and the Research

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¹ OJ C not yet published.

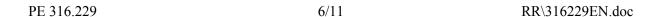
 $^{^2}$ Reply to H-0030/02, n° 39, 5.2.2002, not yet published.

³ Reply to H-0093/02, n° 41, 12.3.2002, not yet published.

⁴ Council decision 5609/02 of 1.2.2002.

Framework Programme,

- E. whereas the general pubblic is concerned about the risk of accidents with release of radioactivity in one of the very many nuclear installations in the Member States and in the applicant countries,
- F. whereas the risk of attack to nuclear installation by either criminal organisations or terroristic groups is greatly increased after the 11 September 2001 events,
- G. whereas there is no Euratom Directive establishing safety and security standards for the design, construction and operation of nuclear installations in the EU. This competence remains with the Member States.
- I. whereas it would be important to fix clear standards, requirements for uniform training, responsibilities and controls at Community level also in the field of nuclear safety and security, beside nuclear safeguards,
- K. whereas continuous training of inspectors and occupational groups working with radioactive material and carrying out nuclear safeguards is particularly important in view of the EU enlargement; whereas such training must be comprehensive and must provide information on the risks involved in the way such material is handled and how to act in the event of an incident or accident;
- L. whereas ESO is called to extend its high standards in nuclear safeguards to applicant countries and thus provisons to ESO must be increased to allow inspectors to carry out their activities on an increased number of nuclear installations with the same high quality of results as they did so far,
- M. whereas the fundamental standards laying down threshold values for exposure of workers and the general public, adopted by the IAEA and the European Union, must be regularly reviewed so that they are based on the most recent scientific findings,
- 1. Appreciates very much the quality and the results of ESO activities in the period 1999-2000;
- 2. Regards it as very positive that the ESO has found no indication that nuclear materials have been diverted from their peaceful use in the European Union during the period 1999-2000;
- 3. Considers it very positive that the ESO has not detected any serious case involving illicit trafficking in nuclear materials in the European Union during the period 1999-2000;
- 4. Considers it necessary that safeguards activity has to remain under direct responsibility of ESO also after the applicant countries of Central and Eastern Europe enter the Community;
- 5. Stresses the need to allocate sufficient budgetary resources to the ESO to enable it to give its inspectors adequate training in the light of the office's increased workload in the runup to the enlargement of the European Union;



- 6. Calls for an increase in the ESO's general budget in order to deal with the constant increase in the quantity and nature of nuclear material under the ESO's control, particularly with a view to the enlargement of the European Union;
- 7. Calls for an improved collaboration between ESO, JRC and IAEA, in the fields of data security, training of personnel, setting up of new instruments and techniques;
- 8. Calls for the Commission to define a regulatory framework in the fields of data security and secured data transmission;
- 9. Call for a reinforced protection of data at ESO headquarters against Cyber-crime. To this purpose it recommends to consider the possibility of keeping ESO data network physically isolated from the outside world, besides making use of software firewall;
- 10. Emphasises the need for the Commission to set key requirements for the physical protection of nuclear sites, nuclear materials, and transport intended for such materials;
- 11. Press for the Commission to propose a directive regulating, and guaranteeing a high level of, security during transport, including during loading and unloading, of nuclear materials, on the basis of the IAEA Convention on the Physical Protection of Nuclear Material;
- 12. Calls on the Commission to prepare a detailed report on existing legislation in force on nuclear safety, security and safeguard of nuclear materials;
- 13. Calls for greater clarification from the ESO of cases where there were discrepancies found during inspections or material balance evaluations. Furthermore calls for the ESO to give greater explanations and justifications for the margin of error built into the 'Material unaccounted for' MUF figures and calls for these margins to be significantly reduced over time to increase the accuracy of accounting for fissile material;
- 14. Encourages the Commission to propose a directive to fix a reference framework for all activities of auditing and certification in the field of nuclear Safety, Security and Safeguard;
- 15. Proposes to consider the creation within the commission of an independent Nuclear Safety and Security Office, which should directly supervise, in close collaboration with the IAEA, the operators in the member states, as ESO is doing in the field of nuclear safeguards.
- 16. Calls for the European Convention to modify the Euratom Treaty in order to bring Nuclear Safety and Security under the responsibility of a Community authority, as Nuclear Safeguards is under the responsibility of ESO.
- 17. Considers that the European Convention might give thought to the role of the Euratom Treaty in the context of the forthcoming reform of the Community institutions;
- 18. Instructs its President to forward this resolution to the Council, the Commission, the Committee of the Regions, the Economic and Social Committee, the Governments and Parliaments of the Members States and to the Governments and Parliaments of the candidate countries.

EXPLANATORY STATEMENT

1. Introduction

Chapter 7 of the Euratom Treaty fixes the concepts, the procedures and the instruments for Nuclear Safeguards, as a system of controls put in place by the Commission to prevent or detect the diversion of civil fissile materials (i.e. Plutonium-239 and Uranium-235) from their 'intended uses as declared by the users'. This means that in the domain of safeguards the Member States agreed to submit nuclear material in their civil activities to the control of an independent, supranational authority, namely the Euratom Safeguards Directorate, which should have direct contact with their nuclear operators. Chapter 7 provides specific means to enable the Commission to fulfil the task of nuclear safeguards and the right for ESO to make inspections at any time in any installation (with some exceptions for the two nuclear weapon Member States) and to impose sanctions.

In parallel with the Euratom safeguards system, a safeguards system is set by the International Atomic Energy Agency (IAEA) for non-nuclear weapon member states. The two systems are quite similar and a protocol of partnership have been signed in 1992 to optimise the use of resources. While the IAEA only carries out some limited inspections in France and the UK, ESO is fully entitled to make inspections in these two nuclear weapon Member States, to which it is now devoting over 60% of its resources

Chapter 3 of the Euratom Treaty deals with Health and Safety. In particular, Article 30 reads as follows: Basic standards shall be laid down within the Community for the protection of the health of workers and the general public against the dangers arising from ionising radiations'. But, according to Article 33, all actions to ensure compliance with the basic standards are taken by Member States, while "the Commission shall make appropriate recommendations for harmonising the provisions applicable in this field in the Member States".

Thus, while ESO has the right to directly inspect individual nuclear operators in the Member States, there is no Community authority, which can do the same as far as nuclear Safety is concerned. Nuclear Safety, as well as nuclear Security, are under responsibility of Member States

2. Commission communication

The Commission communication describes the role and the legal basis of ESO and reports on its operation for the period 1999-2000. It is worthwhile noting that in this period of the total of 17000 person days spent during inspections more than 60 % were performed in the two large plutonium processing installations located in Sellafield, UK and La Hague, France. The remaining inspection effort was spent in safeguarding installations for the enrichment of uranium (almost 20 % of the inspection time), nuclear power reactors (more than 15 %), installations for the dry storage of spent fuel, research centres, research reactors and small installations. The communication also reports on improvements achieved in logistics, including electronic surveillance systems and the construction of two on-site laboratories (Sellafield and La Hague) and on collaborations and relations with other institutions, including European Parliament, Member States, applicant countries and IAEA. Concerning applicant countries a screening has been carried out in 1998 and 1999 which revealed that technical assistance might

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be required to prepare nuclear plant operators in order to implement the ESO accountancy system.

As a result of its activities in 1999 and 2000, and subsequent evaluations, the Euratom Safeguards Office did not find any indication that nuclear material had been diverted from its intended peaceful use. Small discrepancies found during inspections or the material balance evaluation were rectified or are still being investigated with the operators concerned.

3. Rapporteur's position concerning ESO activity

The rapporteur appreciates very much the quality and the results of ESO activity in the period 1999-2000 and the effort the office is making in order to extend its high standards in nuclear safeguards to applicant countries. Nevertheless, he has some concerns regarding both nuclear safety and nuclear security issues. In preparation of this report, the rapporteur tried to collect the opinions of as many as possible European or international institutions, research institutes, independent organisations, somehow involved in nuclear Safeguards, Safety and Security. Thus he visited ESO, the JRC-IRMM Institute in Geel, the JRC-ITU Institute in Karlsruhe, the IAEA Agency in Vienna. Moreover he received the opinion of other research institutes, such as JRC-ISIS, in Ispra and independent organisations in the field of quality certification, such as TÜV, in Germany.

It is widely recognised that ESO activity does not present critical aspects, as far as routine inspections are concerned. However few somehow open questions still remain and some improvement can be still achieved.

ESO has been carrying out safeguards of nuclear material since the signature of the Euratom treaty. Although in this long period its methods, equipment and systems have been constantly improved, no evaluation of ESO activity was carried out by independent third. In order to review the mission of the ESO, and, with a view to examine a potential need for change in ESO's working methods, the Commission established in 2001 a High Level Expert Group with a mandate to that effect. The rapporteur believes that such evaluation would be useful, in order to prevent a one-sided technically/methodical development and to be able to discover technical and organisational erroneous trends in time.

An open question is how to manage nuclear safeguards after the accession of Central and Eastern European candidate countries to the Community. If the Commission has to replace their own systems of accountancy and control, as it is recommendable, is ESO staff adequate in number and training to this purpose?

For the present objective and tasks ESO staff is in general considered to be adequate. With the EU enlargement, the number of nuclear facilities and research centres will increase substantially and new challenges will be faced by ESO. In order to maintain the present high standards in nuclear safeguards, either ESO personnel should be increased or, if it is to be the same, there is a major requirement for training and tools to support the inspection of plants. Training of inspectors is presently continuously performed in JRC-PERLA, as it is the unique European installation where ESO and IAEA inspectors, as well as when appropriate operators, are trained, to the purpose of nuclear safeguards. The restructuring of ESO, which the Commission has already undertaken, is likely to imply a strengthening of relations between JRC and ESO.

Other questions are related to cyber-crime. According to the Commission communication,

electronic remote monitoring of nuclear site is being implemented and some data are already being transmitted from sites to ESO headquarters. Remote monitoring systems are very promising, but will the technology be reliable and politically acceptable? Will then confidentiality of the data transmitted on line remain properly secured against cyber-crime? How are data presently secured?

Presently the critical points are remote transmission (in particular image transfers) from nuclear facilities to ESO headquarters and protection of all the data available in the headquarters. In order to optimise resources, ESO is considering also the transmission of data, encrypted with a very high degree of security, from nuclear facilities to its Luxembourg headquarters. To do this the individual member states authorities, responsible for data security, need to approve the applied data protection system. As individual national systems differ in technical approach and level of security classification, a harmonised regulatory framework is necessary in this area at Community level.

The ESO data network is at present physically isolated from the outside world. It is recommendable to maintain such separation, more than making use of software firewall.

Also in this area collaboration between JRC and ESO has been established which is likely to be improved.

Other questions concern security measures taken to prevent the risk of terrorist attack, especially after 11 September 2001 events.

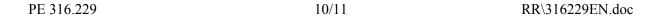
Security and Safety of nuclear installations are under responsibility of national authorities. The IAEA Convention on the Physical Protection of Nuclear Material (CPPNM) fixes minimum standard requirements for physical protection of civil nuclear materials. The application of protection measures is exclusive competence of the member states on the basis of national legislation.

After 11 September 2001 access measures were strongly reinforced, however also in the area of physical protection of nuclear sites EU should become active to establish a harmonised policy for key requirements. Concerning security measures taken during ground and sea transport of radioactive and nuclear materials, it is regretful that no Community legislation exists in this field. The main international instrument is again the CPPNM, but implementation of the Convention varies widely among Member States. Thus there is certainly a need for harmonisation, including establishment of common rules for transport through international waters and international airspace.

4. Safety and Security of EU nuclear plant

Beside Safeguards, also Safety and Security of nuclear plant and nuclear material in general are crucial issues. During the EP sitting on 2 May 2001, commissioner Wallstrom, while reporting on "Nuclear safety fifteen years after Chernobyl", stated that "Nuclear safety is a priority for the European Union". But, how are Safety and Security of nuclear plants presently managed in the EU? Is any Community authority responsible for these aspects?

The answer is that while there is extensive talk of 'international safety standards' and 'Western standards' in many EU documents dealing with nuclear safety issues, there is no Euratom Directive establishing the basic safety standards of nuclear installations in the EU. This



competence remains with the Member States.

It would be necessary to examine on Community level, whether the current existing national legislation in individual member states is still appropriate and conform to latest requirements.

This is specially needed in view of the accession of applicant countries to the Community. In those countries crucial issues appear to be the lower standards of radiation protection and physical protection and a certain lack of a safety culture. A first step towards the definition of common requirements has been made by WENRA and then by the Council's Working Party on Nuclear Safety, both of which have a number of reports assessing the safety of nuclear installations in the applicant countries, and trying to establish guidelines as to best safety practice.

During the EP sitting on 5 February 2002, the rapporteur asked Commissioner Verheugen whether there are technical norms and standards at Community level on the basis of which the Commission can assess the safety of a nuclear installation and eventually decide that it has to be closed down. The answer was that the Commission couldn't take any decision in this sense, first of all because these technical norms and standards are not defined.

Moreover, during the EP sitting on 12 March 2002, the rapporteur asked Commissioner Wallström on the basis of which norms and technical directives radiations are evaluated in the EU. The answer was that the Commission has obligations under international conventions and has the role to establish basic safety standards; than expert committees on the basis of the best available scientific knowledge make the evaluation.

It appears urgent the need for a legislation at EU level in this field.

Moreover the possibility of creating an independent Agency at Community level should be considered, in charge to directly supervise and carry out all nuclear Safety and Security controls in the member states, in close collaboration with IAEA.

The rapporteur encourages the Commission to provide as soon as possible a green book on nuclear Safety Security and Safeguards.