

Royal Decree 1546/2004, of June 25th, approving the Basic Nuclear Emergency Plan

In certain cases and circumstances, the accidents that might occur at nuclear power plants could give rise to situations of serious collective risk, catastrophe or public calamity, as referred to by the Civil Defence Act, Law 2/1985, of January 21st, as a result of which the licensees of such facilities and the public authorities are obliged to have emergency plans to respond to such situations.

Royal Decree 407/1992, of April 24th, which approves the basic Standard on civil defence, establishes directives for the drawing up of territorial and special emergency plans, pointing out the risks to be addressed in the case of the latter.

Included among the special plans are the basic plans, the application of which is required in all cases in the national interest. Consequently, the realm of competence and the responsibility of the State cover all the phases of planning, including those relating to prevention and to the implementation and management of response activities, with the participation of the different public Administrations and private bodies.

The planning of the response to nuclear emergencies is established at two levels. On the one hand are the activities to be performed inside the nuclear power plant, corresponding to the site emergency plan, which are specifically regulated by Royal Decree 1836/1999, of December 3rd, which approves the Regulation on nuclear and radioactive facilities, these corresponding conceptually to the corporate self-protection obligations generally established in Law 2/1985, of January 21st. On the other hand are the activities to be performed outside the nuclear power plant, corresponding to the exterior response level nuclear emergency plans, regulated by the specific civil defence standards.

The basis and criteria for planning and efficient management by the public Authorities of those emergencies that might result from accidents at nuclear power

plants and have repercussions off site are included in the Basic Nuclear Emergency Plan (PLABEN).

As a governing document the Basic Nuclear Emergency Plan is, therefore, the guideline that contains the essential standards and criteria for the drawing up, effective material implementation and continued efficiency of the civil defence nuclear emergency plans, competence for which corresponds to the General State Administration, with the participation of the other public Authorities.

The Basic Nuclear Emergency Plan currently in force was approved through an Agreement reached by the Cabinet on March 3rd 1989, this Agreement contemplating the revision of the Plan whenever the assumptions set out in its section four might occur.

Revision of the Basic Nuclear Emergency Plan currently in force is justified for the following circumstances:

- a) The increasing consolidation of the National Civil Defence System, through the progressive process of assumption of areas of competence by the autonomous communities.
- b) Publication of Council Directive 89/618/EURATOM, of November 27th 1989, in relation to public information on applicable health measures and the way to proceed in the event of a radiological emergency, incorporated into the Spanish legal system through the corresponding Agreement by the Cabinet on October 1st 1999.
- c) Publication of Council Directive 96/29/EURATOM, of May 13th 1996, establishing the basic standards for the protection of the workers and the general public against the risks inherent to ionising radiations, incorporated into the Spanish legal framework through Royal Decree 1836/1999, of December 3rd, approving the Regulation on nuclear and radioactive facilities, and Royal Decree 783/2001, of July 6th, approving the Regulation on protection against ionising radiations.

d) The experience acquired from the activities to implement and maintain the efficiency of the nuclear emergency plans currently in force.

The new Basic Nuclear Emergency Plan now approved is structured around five titles with the following contents:

a) Title I, "General provisions", which contains the legal and regulatory basis of the Plan, its scope, objectives and levels of planning, types of nuclear emergency plans, the competent authorities and public Administration organisations concerned and the basis for off-site planning for nuclear emergencies.

b) Title II, "Radiological criteria", which contains the criteria of this type to be applied in responding to emergencies, in accordance with the national standards governing the protection of health against ionising radiations. In addition to the aforementioned directive, this is based on recommendations and criteria emanating from the European Union and the International Atomic Energy Agency.

c) Title III, "Organisation, structure and functions for the off-site response level plans", which establishes the basic organisational and hierarchical structure for these plans, allowing for and facilitating orderly interventions and the efficient application of measures to protect the general public. This title also establishes the responsibilities and functions of each individual included in the structure of these plans and defines the operations coordination centres.

d) Title IV, "Preparation for nuclear emergency response: Effective material implementation of the off-site response level plans and maintenance of their efficiency", which establishes the criteria and responsibilities required to achieve an adequate level of preparedness for nuclear emergency response.

e) Title V, "Operational action procedures for off-site response level nuclear emergency plans", which contains a list of the minimum operational action procedures

that have to be developed in the aforementioned plans in order to improve the efficiency of the emergency response.

The new Basic Nuclear Emergency Plan has been reported on favourably by the Nuclear Safety Council, during its meeting of December 3rd 2003, and by the National Commission for Civil Defence, during its meeting of December 16th 2003.

By virtue of the above, in response to a proposal by the Ministry of the Interior and following deliberations by the Cabinet during its meeting of June 25th 2004,

I HEREBY PROVIDE AS FOLLOWS:

Article 1. Approval of the Basic Nuclear Emergency Plan.

The Basic Nuclear Emergency Plan (PLABEN) laid out below is hereby approved.

Article 2. Naming of the off-site response level nuclear emergency plans.

The off-site response level nuclear emergency plans to be derived from development of this Basic Plan shall be known by the following names:

a) PENBU: off-site nuclear emergency plan for the Santa María de Garoña nuclear power plant (Burgos).

b) PENCA: off-site nuclear emergency plan for the Almaraz nuclear power plant (Cáceres).

c) PENGUA: off-site nuclear emergency plan for the José Cabrera and Trillo nuclear power plants (Guadalajara).

d) PENTA: off-site nuclear emergency plan for the Ascó and Vandellós nuclear power plants (Tarragona).

e) PENVA: off-site nuclear emergency plan for the Cofrentes nuclear power plant (Valencia).

f) PENCRA: central response and support level nuclear emergency plan.

Article 3. Modification of the Basic Nuclear Emergency Plan.

In response to a proposal by the Minister of the Interior and following reports from the Nuclear Safety Council and the National Commission for Civil Defence, this Basic Plan may be modified whenever any of the following circumstances occur:

- a) Substantial modifications to the standards published in the "Official State Gazette" and whose contents affect the Basic Nuclear Emergency Plan.
- b) It is considered necessary due to modifications established by the Nuclear Safety Council regarding criteria of a nuclear or radiological nature contained therein.
- c) It is considered necessary, in response to proposals by the competent authorities and public Administration organisations concerned, as identified in the Basic Plan, in view of the experience acquired in application of the off-site nuclear emergency plans.

First additional provision. Revision and approval of the nuclear power plant off-site nuclear emergency plans

The nuclear emergency plans in force should be revised for adaptation to the Basic Nuclear Emergency Plan within one year as from the date of publication of this royal decree.

The aforementioned revision and adaptation having been carried out, the off-site nuclear emergency plan master plans referred to in title IV of the PLABEN will be approved by the Cabinet in response to a proposal by the Minister of the Interior and on the initiative of their respective directors, following a favourable report by the Nuclear Safety Council and the national Commission for Civil Defence.

Second additional provision. Drawing up and approval of the central response and support level nuclear emergency plan

The central response and support level nuclear emergency plan will be drawn up by the Directorate General for Civil Defence and Emergencies within six months as from the date of publication of this royal decree, and will be approved by the Minister of the Interior following a favourable report by the Nuclear Safety Council and the national Commission for Civil Defence.

Third additional provision. Approval of directives for the drawing up of programmes for the effective material implementation and continued efficiency of the nuclear power plant off-site nuclear emergency plans

The directives that are to govern the programmes for previous public information, the training and preparation of those required to intervene and drills referred to in title IV of this Basic Plan will be approved through resolution by the Deputy Secretary of the Interior following a favourable report by the Nuclear Safety Council and the national Commission for Civil Defence within six months as from the date of publication of this royal decree.

Single transitory provision. Period of validity of current off-site response level nuclear emergency plans

The nuclear emergency plans currently in force will continue to be applied until such time as they are replaced by those to be drawn up and approved in accordance with the Basic Nuclear Emergency Plan approved by this royal decree.

Single derogatory provision. Annulment of standards

The Agreement reached by the Cabinet on March 3rd 1989, approving the Basic Nuclear Emergency Plan, is hereby annulled.

Single final provision. Empowerment for application

The competent authorities and organisations concerned identified in the

Basic Nuclear Emergency Plan may issue appropriate provisions for its application.

Given in Madrid on June 25th 2004.

JUAN CARLOS REX

The Minister of the Interior
JOSÉ ANTONIO ALONSO SUÁREZ

Basic Nuclear Emergency Plan (PLABEN)

Title I

General provisions

1. Concept and objectives

The Basic Nuclear Emergency Plan (PLABEN) is the guideline serving as a directive and containing the essential standards and criteria for the preparation, effective material implementation and continued efficiency of the civil defence nuclear emergency plans, responsibility for which lies with the General State Administration, with the participation of the other public Authorities.

2. Legal basis

The legal and regulatory framework on which the PLABEN is based is as follows:

- a) Civil Defence Act, Law 2/1985, of January 21st.
- b) Sentence 133/1990, of July 19th, of the Constitutional Tribunal.
- c) Royal Decree 407/1992, of April 24th, approving the basic civil defence standards.
- d) Royal Decree 1194/2004, of May 14th, determining the composition of the Government Delegate Commissions.
- e) The Resolution of October 20th 1999, providing for the publication of the Agreement reached by the Cabinet on October 1st 1999 in relation to public information on applicable health protection measures and the way to proceed in the event of a radiological emergency.
- f) Law 15/1980, of April 22nd, creating the Nuclear Safety Council.
- g) Law 14/1999, of May 4th, on public fees and prices for services rendered by the Nuclear Safety Council.
- h) The Nuclear Energy Act, Law 25/1964, of April 29th.

i) The Regulation on nuclear and radioactive facilities, approved by Royal Decree 1836/1999, of December 3rd.

j) The Regulation on protection against ionising radiations, approved by Royal Decree 783/2001, of July 6th.

k) Royal Decree 413/1997, of March 21st, on the operational protection of off-site workers running the risk of exposure to ionising radiations as a result of their intervening in the controlled zone.

A part of this legal framework includes certain technical bases contained in the standards and recommendations on nuclear emergencies issued by the International Atomic Energy Agency (IAEA) and the European Union.

3. Scope

The essential standards and criteria established in the PLABEN refer to the off-site response level nuclear emergency plans that are to be drawn up and materially implemented and whose degree of efficiency is to be maintained in order to be able to address whatever situations of serious collective risk, catastrophe or public calamity might arise as a result of accidents at operating nuclear power plants or plants that are shut down and at which spent fuel is being stored.

A distinction is made between two different time periods for the purpose of emergency response planning: emergency phase and recovery phase:

a) Emergency phase: period from the declaration of a situation of emergency, resulting from an accident actually or potentially implying the release of significant quantities of radioactive material off site, and the declaration of the end of this emergency with the situation under control, either because the original cause has disappeared or because no further off-site releases of radioactive material are foreseen and all the necessary urgent protection measures have been applied.

b) Recovery phase: this phase begins when the end of the emergency phase has been

declared and includes all the actions aimed at recovering normal living conditions in the affected areas.

These standards and criteria refer to all the planning, preparation and response actions required for the emergency phase. However, the PLABEN also includes certain criteria for actions to be taken during the recovery phase, since it is considered that during the emergency phase decisions may be taken or actions may be initiated that condition the response during the recovery phase.

4. Objectives and levels for planning

The general objectives of planning for nuclear emergencies are as follows:

a) To reduce the risk or mitigate the consequences of accidents at the point of origin.

b) To prevent, or at least reduce to the extent possible, the adverse effects of ionising radiations on the population and on property.

In accordance with the legislation, the first of these objectives is the responsibility of the nuclear power plant licensee, while the second is the joint responsibility of the said licensee and of the public bodies and organisations whose realm of competence and functions include protection for the public against nuclear and radiological risks.

Consequently, the planning for emergencies at nuclear power plants will be organised at two different and complementary levels:

a) On-site or corporate self-protection level.

The activities relating to preparation for and response to emergency situations at this level are contained in the site emergency plan (SEP) for each nuclear power plant, regulated specifically by the Regulation on nuclear and radioactive facilities approved by Royal Decree 1836/1999, of December 3rd, which is drawn up and put into practice under the regulatory control of the Nuclear Safety Council.

Conceptually, this level responds to the obligations regarding corporate self-protection generally established in articles 5 and 6 of the Civil Defence Act, Law 2/1985, of January 21st.

b) Off-site response level.

The activities relating to preparation for and response to emergency situations at this level are contained in the following:

1. The off-site nuclear emergency plans (PEN's), which in turn will include the operating group action plans and municipal nuclear emergency action plans (PAMEN).
2. The centralised nuclear emergency plan (PENCRA) for response and support for the above, which will include requests for international assistance.

These nuclear emergency plans will establish the specific objectives and scope, their organisation, structure and functions, the necessary human and material resources, the operational action procedures for their orderly and efficient mobilisation and intervention and the system for coordination between the different public Administrations required to intervene.

The connection and coordination between the actions at the two levels will be established through the correspondence between the type of accident, defined on the basis of its seriousness and the quantity and nature of the radioactive material that might be released off site, and the emergency situation, defined on the basis of the urgent protection measures to be adopted.

In order to guarantee the aforementioned connection, the emergency plans on both levels will contain common procedures on notifications and joint activities.

5. Types of off-site response level nuclear emergency plans

The PLABEN, as the master plan, and the plans deriving from it are special civil defence platforms whose application is in all cases required in national interest, in

accordance with article 7.1 of the basic civil defence standard.

In these plans, the realm of competence and responsibility of the General State Administration covers all the phases involved: planning, preparation of the emergency response through the effective material implementation of the plans and the maintenance of their efficiency and emergency action, as well as directing all interventions. The above is without prejudice to the necessary participation of the services, means and resources of the other public Administrations and the collaboration to be provided by the licensees of the nuclear power plants.

The PLABEN is applied through the plans deriving from it, the off-site nuclear emergency plans and the centralised response and support nuclear emergency plan.

6. Competent authorities and public Administration organisations concerned

The Competent authorities and public Administration organisations concerned are as follows:

6.1 General State Administration

6.1.1. Competent authorities

Ministry of the Interior: the competent authority for civil defence matters, the Directorate General of the Guardia Civil and the Directorate General of the Police.

Delegations and Sub-delegations of the Government in those territorial areas in which there are nuclear power plants.

Nuclear Safety Council (CSN).

6.1.2. Organisations concerned.

The organisation responsible for energy regulation.

The organisation responsible for meteorological information.

The organisation responsible for public health.

The organisation responsible for defence policy.

The organisation responsible for infrastructures and tracking in crisis situations.

6.2 Autonomous Administration

The organisations of the Autonomous Communities affected by the nuclear emergency plans (PEN's) and having competence in the areas of civil defence, public security, health, civil works, transport and communications, supply and housing, social welfare and education and road safety.

6.3 Local Administration

The town councils included in the PEN's and corresponding provincial councils.

6.4 Other organisations concerned

The public organisations and entities having competence in matters relating to radioactive waste management, management of public water resources and sea, land and air spaces, security of food supply and consumption, land planning and radio and television broadcasting.

7. Planning bases

The bases for the planning of nuclear emergencies shall be as follows:

a) Principle of precaution: the decisions and measures adopted within the framework of the nuclear emergency plans shall in all cases err on the side of safety, taking into account the basic criteria of the optimisation of radiological protection.

b) Radiological principles: the protective measures and other actions undertaken to address nuclear emergencies are considered "interventions" for the effects of title VI of the Regulation on protection against ionising radiations. Consequently, the general principles regarding interventions included in article 58 are applicable, as are those referring to emergency exposures and included in article 60 of the said Regulation.

c) Technical evaluation of events and estimation of their consequences: adoption of the protective measures and other emergency actions determined shall require a preliminary technical evaluation of the events and an estimate of their foreseeable evolution, long with an estimate of the radiological effects for the population and the environment. Such evaluations and estimates shall be carried out in accordance with the procedures approved by the CSN.

The licensees of the nuclear power plants shall be responsible for reporting to the director of the PEN and the CSN on the initial evaluation of the circumstances and the possible consequences of the accident.

d) Prompt notification and early warning: the director of the PEI shall, as soon as possible, notify the director of the PEN of accidents requiring the activation of this last plan. The director of the PEN shall in turn immediately warn the mayors of those municipal areas that might be affected, the authority responsible for civil defence in the autonomous communities concerned and the director of the PENCRA.

e) Protective measures: in order to avoid, or at least to reduce to the extent possible, the adverse effects of ionising radiations for the general public and the intervening personnel, the application of those protective measures that might need to be adopted in the event of a nuclear emergency shall be planned. The protective measures are classified as "urgent protective measures" and "long-term protective measures".

f) Emergency situations: in order to plan the application of protective measures and other emergency actions such that a rapid and efficient response is guaranteed, different "emergency situations" shall be established. The emergency situations, which will be related to the levels of risk for the population, shall be defined depending on the urgent protective measures to be adopted and shall be declared for a given zone.

g) Planning zones: the planning of the application of protective measures and other emergency actions guaranteeing an efficient response is geographical in its scope and is limited to certain areas external to the nuclear power plant, known as “planning zones”.

The CSN shall be responsible for determining the extent of the planning zones, depending on the potential radiological consequences of the foreseeable accidents, in accordance with the safety analysis of the nuclear plants.

During an emergency, and depending on the actual conditions of the accident, the areas in which the protective measures are to be applied may not coincide entirely with the planning zones, either being limited to just one part of these zones or extending beyond them. In this last case, the application of the protective measures and other emergency actions shall be undertaken in accordance with the standards and criteria established in the PLABEN.

h) Single command and operating structure: The director of the PEN shall be the sole person in command for the management and coordination of the different public and private entities and organisations that will be called upon to respond to emergency situations.

The plans deriving from the PLABEN will establish a hierarchical structure, to which functions will be assigned, allowing for the efficient implementation of the protective measures and other emergency response actions foreseen in them.

i) Activation of nuclear emergency plans: the activation of a nuclear emergency plan (PEN) shall be carried out by its director, who shall formally declare the corresponding emergency situations and the protective measures to be adopted in each zone, in accordance with the recommendations of the CSN.

The activation of a PEN shall also imply the activation of its integrated plans and of the PENCRA.

j) Inter-administrative co-responsibility: the competent authorities and the organisations involved of the different public Administrations shall ensure the necessary collaboration and participation in the off-site response nuclear emergency plans.

k) Collaboration with the licensees of the nuclear power plants: the licensees of the nuclear power plants will collaborate with the competent authorities and the public Administration organisations involved in the implementation and continued efficiency of the nuclear emergency plans, as well as in the implementation of protective measures and other emergency response actions.

l) Coordinated actuation: all the actions undertaken by the organisations and entities involved in the nuclear emergency plans shall be carried out in a coordinated manner and in accordance with the operational action procedures, in order to achieve maximum efficiency in the execution of measures for the protection of the population and property.

m) Guarantee of information in emergencies: the nuclear emergency plans shall establish the procedures and courses of action required to guarantee rapid and appropriate information for the population affected, the public Administrations involved and the rest of the general public.

n) Sufficient means and resources: the determination of the resources that may be mobilised in the event of an emergency will include the personnel and the material means and resources and technical assistance that they may require, these depending on the public Administrations, on private entities and on private individuals, and shall be sufficient for the adoption of protective measures and other emergency response actions.

o) Material implementation and maintenance of effectiveness: the emergency plans deriving from the PLABEN will be materially implemented

such that an adequate threshold of operability is achieved and maintained. For these purposes programmes will be set up to provide previous information to the public, training and preparation for those required to intervene, the cataloguing and provision of means and resources and appropriate financial instruments allowing these programmes to be developed.

8. Definitions

The fundamental concepts and terms of the PLABEN and the abbreviations used are defined in annex I.

Title II

Radiological criteria

The Spanish standards governing radiological protection establish the principles that are to be used as a basis for the interventions made to resolve nuclear or radiological emergencies. The radiological principles established in title I of the PLABEN are applicable to all activities included in the nuclear emergency plans and have the following dual objective:

- a) To avoid to the extent possible and reduce the direct effects of radiations on the health of persons (deterministic effects).
- b) To reduce the probability of indirect effects on the health of persons (stochastic effects).

In order to achieve these objectives, it is necessary to establish qualitative and quantitative radiological criteria, in this case based on directly measurable or easily assessable physical magnitudes facilitating the efficient application of the protective measures. The radiological criteria refer to the nature and magnitude of accidents, to the radiological consequences that they might generate and to the protective measures to be adopted.

1. Levels of intervention for protective measures

The levels of intervention are reference values for given radiological magnitudes as from which the application of protective measures is considered adequate.

The decision to apply a protective measure will be based on comparison between the result of assessment of the foreseeable evolution of the accident or the radiological consequences generated by it in each of the affected areas and the levels of intervention established.

In keeping with international recommendations, the CSN has established generic intervention levels for the application of the following urgent protective measures: confinement, prophylaxis and evacuation, and for the following long-term measures: temporary transfer and permanent transfer. These levels are generic and have been calculated using conservative hypotheses. The levels of intervention established by the CSN are detailed in annex II.

No levels of intervention have been established for certain other protective measures. This is the case for access control, which is always justified by the principle of precaution, or for the complementary measures adopted jointly with the measures indicated above.

However, during the development of an emergency the CSN may establish levels of intervention different from the generic levels, based on detailed and realistic knowledge of the nature, evolution and consequences of the accident, when it considers that this will imply the greater efficiency of the protective measures.

2. Emergency dose levels for off-site response intervention personnel

The emergency dose levels are indicators established to ensure the radiological protection of the intervening personnel and facilitate their radiological control depending on the tasks assigned to them.

All the personnel intervening in the area affected by an emergency shall be subjected to dosimetric control and to special medical surveillance. The dosimetric control will be applied as from the moment in which the intervention begins and the special medical surveillance will take place following this intervention. These actions will be carried out in accordance with specific criteria

established respectively by the CSN and the medical authorities.

These members of the personnel should have adequate training and be informed of the risks involved in their intervention.

The intervening personnel will be classified, depending on the activities to be performed, in the following groups:

a) *Group 1.*

Group 1 will be made up of those members of the personnel who are to carry out urgent actions to save lives or prevent serious injury or prevent the consequences of the accident from becoming worse, thus possibly causing considerable doses for the public, in places where they may be significantly irradiated or contaminated.

The director of the PEN, aided and advised by the CSN and the head of the radiological group, shall make all possible efforts to keep the doses received by such personnel below the threshold at which there are deterministic effects seriously affecting health, as included in the table "Deterministic effect manifestation thresholds for acute exposure" in annex II. Exceptionally, and in order to save human lives, these values may be exceeded.

These persons may receive dose higher than the individual dose limits for professionally exposed workers established in the Regulation of protection against ionising radiations, for which reason they should be volunteers and may not be pregnant women.

b) *Group 2.*

Group 2 will be made up of members of the personnel involved in the application of urgent protective measures and other emergency response activities.

The director of the PEN, aided and advised by the CSN and the head of the radiological group, shall make all reasonable efforts to keep the doses received by such personnel below the maximum annual dose limit for exposure in a single year, established by the

Regulation on protection against ionising radiations at an effective dose of 50 mSv.

c) *Group 3*

Group 3 will be made up of members of the personnel that perform recover operations once the situation has been fully controlled following the accident and essential services have been restored to the affected area.

The radiological protection system associated with the practices will be applied to protect this personnel and doses should be kept below the dose limits for professionally exposed workers established in the Regulation on protection against ionising radiations.

3. Accident categories, protective measures and emergency situations

The accidents that may foreseeably occur at nuclear power plants are classified in four categories depending on the seriousness of the event and the nature and quantity of radioactive material that may be released off site. The accident categories are numbered from I to IV in increasing order of severity. The PEI of each nuclear plant classifies foreseeable accidents in one of the aforementioned categories, in accordance with the safety analysis of the installation.

When notifying the authorities of an accident requiring activation of the PEN, the director of the PEI shall explicitly point out in which category it has been classified, including an initial assessment of the consequences of the accident and its foreseeable evolution. The notification format is included in annex III and in the PEI.

Protective measures are actions aimed at avoiding, or at least reducing to the extent possible, the adverse effects for persons of ionising radiations. They are classified as urgent protective measures or long-term protective measures depending on the urgency with which they are to be implemented and the time that their application is to last. These protective measures are described in annex IV.

Category I accidents do not give rise to the release of radioactive material, as a result of which there is no need for protective measures to be applied off site and the emergency actions will focus on permanent communication between the nuclear power plant, the CSN and the director of the PEN.

Category II and III accidents may give rise to the release of radioactive material in quantities such that the application of measures to protect the population is not considered necessary. However, in application of the principle of precaution, it is advisable in these cases to establish access controls and consider preparing the application of other protective measures.

Category IV accidents may give rise to the release of radioactive material in quantities such that the measures need to be applied to protect the population. In certain very rapidly evolving accident sequences in which the release of large quantities of radioactive material outside the nuclear power plant may be foreseen, it may be necessary to apply urgent protective measures before having available a detailed assessment of the radiological consequences that may derive from the accident.

In order to be able to apply the protective measures in such a way as to guarantee a rapid and efficient response, four types of emergency situations are established, classified from 0 to 3 depending on the type and scope of the protective measures to be adopted, as shown in table I. The declaration of any of these situations implies activation of the PEN.

Table I. *Relationship between protective measures and emergency situations*

Protective measures	Situation
None	0
Control of accesses	1
Control of accesses Main urgent measures: Confinement Radiological prophylaxis Complementary urgent measures: Self-protection of the public and the intervening personnel. Restrictions on foodstuff and water consumption. Stabling of animals.	2
Control of accesses Main urgent measures: Confinement Radiological prophylaxis Evacuation Complementary urgent measures: Self-protection of the public and the intervening personnel. Restrictions on foodstuff and water consumption. Stabling of animals. Decontamination of personnel.	3

The table lists the measures considered to be applicable to protect the population in view of the emergency situation declared.

In situation 0 there is no need to adopt measures to protect the population and the emergency actions focus on declaration of the alert and activation of the response organisation.

The CSN will propose the protective measures to be adopted in each case to the director of the PEN, who will declare the emergency situation and decide on what protective measures are to be applied, taking into account the aforementioned proposal and the other circumstances arising during the emergency. The declaration of an emergency situation does not require the declaration of previous situations.

During the initial moments of an emergency, when there may be a high degree of uncertainty, it is possible to establish a direct relationship between accident categories and emergency situations facilitating and speeding up decision-making for the application of urgent protective measures, in accordance with table II:

Table II

Category	Situation
I	0
II, III	1
IV	2
	3

When the evolution of an accident implies the reduction of its category, the modification of the emergency situation will depend on the degree and convenience of maintaining the application of whatever protective measures have been adopted.

4. Planning zones

The following zones are defined in accordance with the bases for planning established in title I:

a) Operator control zone

Zone 0 or the zone under the control of the operator is the area in which the plant is located and includes the surrounding land freely available to the owner, either for reasons of ownership or in view of agreements with the owners. The dimensions of this zone are established in the licensing conditions of each nuclear power plant and are directly related to the results of the accident analysis included in the safety study of the facility.

The protective measures and other emergency response actions to be adopted in this zone are specified in the plant PEI.

b) Zone I or urgent protective measures zone.

Zone I or the urgent protective measures zone is the area included within a 10 kilometre radius of the nuclear power plant

and includes zone 0. This zone corresponds to the geographical area in which the main routes of exposure are associated with the passing of the radioactive cloud, which implies direct exposure to the radiation from contamination of the atmosphere and the soil, and internal contamination due to inhalation of the radioactive material released during the accident. Urgent protective measures should be planned in this zone aimed at reducing the risk of deterministic effects among the population.

Furthermore, the planning for this zone should also include protective measures aimed at reducing the long-term doses due to the radioactive substances deposited and the ingestion of contaminated foodstuffs and water.

Zone I is divided into three sub-zones, IA, IB and IC, depending on the level of risk expected in each.

1. Sub-zone IA is the area included within a three-kilometre radius of the nuclear power plant.
2. Sub-zone IB is the area included between the three and five-kilometre radii of the nuclear power plant.
3. Sub-zone IC is the area included between the five and ten-kilometre radii of the nuclear power plant.

c) Zone II or long-term protective measures zone.

Zone II or the long-term protective measures zone is the ring-shaped area located between the radii at 10 and 30 kilometres from the nuclear power plant, in which the radiation exposure routes are associated fundamentally with the radioactive material deposited on the ground following the accident. In this zone protective measures should be planned to reduce the long-term doses from the radioactive substances deposited and from the ingestion of contaminated foodstuffs and water.

In the event of a real accident, and depending on its seriousness and the atmospheric circumstances, the application of protective measures may be limited to part of the planning zones or may be extended beyond these zones. As a result, and in order to ensure efficiency in the application of the urgent protective measures, the preferential attention sector and zone are established:

1. Preferential attention sector.

The preferential attention sector is the circular sector of the wind rose of amplitude $\pi/8$ radians, concentric around the nuclear power plant, in which is found the prevailing direction of the wind, along with the two adjacent sectors of the same amplitude.

1. Preferential attention zone.

The preferential attention zone is the geographical area including sub-zone IA and the preferential attention zone of sub-zone IB. In the event of a category IV accident, the urgent protective measures associated with situation 3 shall be applied immediately. In the rest of zone I the urgent protective measures associated with situation 2 shall be applied.

In plotting the circles of the different zones and sub-zones for planning, the centre used shall be the coordinates of the axis of the reactor of the nuclear power plant and, in the case of two reactors at the same site, the coordinates of the centre point on the segment linking the axes of the two reactors.

Figures 1 and 2 in annex V show respectively the planning zones and the preferential attention sector and zone.

Title III

Organisation, structure and functions for off-site response level plans

The objective of this title is to establish a basic hierarchical and organisational structure for the off-site response level plans allowing for orderly intervention and the efficient application of measures to protect the population and other emergency

response actions in the event of a nuclear emergency.

The organisation for off-site level response will be made up of two different, complementary and interdependent organisations, the off-site nuclear emergency plans organisation (PEN) and the central level response and support nuclear emergency plan (PENCRA).

The off-site emergency response will be directed, coordinated and executed by the PEN organisation. Extraordinary support at national level and international assistance, where appropriate, will be coordinated and made available to the director of the PEN by the PENCRA organisation.

This basic hierarchical and organisational structure should integrate all the public Administrations that are to intervene, under a single management, acting in accordance with the principles of administrative coordination and co-responsibility.

This title also determines the main responsibilities and functions of the parties and elements of both off-site response level organisations and establishes the operational coordination centres that should be available.

1. Organisation, structure and functions of the off-site nuclear emergency plan (PEN)

The basic hierarchical and organisational structure for the PEN is shown in figure 1.

Figure 1. Organisation of PEN

**Information and communications office
PEN MANAGEMENT
Advisory committee**

EXECUTIVE BODY

**Radiological group
Public security and order group
Technical assistance and coordination group
Medical group
Logistical support group**

Municipal nuclear emergency action organisations

This structure should allow for the performance of the following basic functions:

- a) Determination, management and coordination of the measures to protect the population and other emergency response actions.
- b) Implementation of protective measures and application of other actions in the affected areas.
- c) Information for the affected population, the public Administration organisations concerned and the media during an emergency.
- d) Advice for the director of the PEN for decision-making purposes.
- e) The management of the extraordinary means and resources made available to the PEN by the PENCRA, where appropriate.
- f) Tracking and control of flows of information between the different operational coordination centres.

The director of the PEN will have an executive body within his organisational structure. This executive body will be responsible for determining and proposing the protective measures to be applied and other actions to be taken in the affected areas, in coordination with the heads of the municipal nuclear emergency action plans and with support from the technical assistance and coordination group.

The protective measures and other emergency response actions will be executed by the operating groups and municipal response organisations via their operating services. In order to optimise the response, the development of this basic hierarchical and organisational structure, from the operating services level, shall take into account the specific circumstances in the area of each PEN.

In order to undertake all the activities relating to the information to be provided to the population actually affected by the emergency, the public Administration organisations concerned and the media, the director of the PEN will be assisted by an information and communications office, which will be the core for information within the PEN.

As regards decision-making, the Nuclear Safety Council shall be responsible for providing advice on nuclear and radiological matters. Specifically, this organisation shall advise the director of the PEN on all matters relating directly to the operational status of the nuclear power plant that has experienced the accident and the radiological consequences off site, and will propose to him the protective measures and other emergency response actions to be adopted in each case, along with the zones in which they should be applied and the emergency situations to be declared, depending on the radiological risk existing and the results of its assessments.

In general, the director of the PEN will at all times receive advice from the executive body of the PEN and the PENCRA State Coordination Committee (CECO). In addition, he will be assisted by an advisory committee for the resolution of whatever specific scientific-technical problems might arise during the emergency.

The extraordinary means and resources requested where necessary by the director of the PEN will be managed and made available via the PENCRA organisation. These means should be integrated in the event of an emergency in the organisational structure for response of the PEN.

The tracking and control of flows of coordination between the different operational coordination centres will be undertaken by the technical assistance and coordination group, which will also be the core for management of the PEN.

1.1 Management of the PEN

The director of the PEN will be Delegate of the Government in the autonomous

community in which the nuclear power plant is located. He may delegate his functions to the Sub-delegate of the Government in the province housing the nuclear power plant.

The director of the PEN will set up a management body to guarantee coordination between the different public Administrations concerned in the event of an emergency and ensure that all the necessary means and resources available in the territory are made available to him, as required.

The management body, which will be presided over by the director of the PEN, will be made up of a representative of the authority responsible for civil defence in each of the autonomous communities involved in the PEN, appointed by their respective Cabinets.

Responsibilities of the director of the PEN.

1. Management and coordination of the PEN.
2. Activation of the PEN with declaration of the corresponding emergency situation or situations, in accordance with the proposals of the Nuclear Safety Council, the characteristics of the accident and the existing conditions.
3. Deciding on and ordering the application of the measures to protect the population and other actions to be carried out in each of the affected areas.
4. Providing information for the population actually affected by the emergency, the competent authorities and the organisations concerned in the different public Administrations.
5. Guaranteeing adequate coordination with the director of the site emergency plan and the director of the centralised response and support plan.

6. Requesting the extraordinary means and resources required from the director of the centralised response and support plan.
7. Declaring the conclusion of the emergency phase in view of the results on the evolution of the accident.

1.2 Executive body

The executive body will be made up of the following:

1. Head of the technical assistance and coordination group.
2. Head of the radiological group.
3. Head of the public security and order group.
4. Head of the medical group.
5. Head of the logistical support group.

In the event of an emergency, the executive body will also incorporate a representative of the Ministry of Defence and the Chief Commissioner of the National Police Force for the province in which the nuclear power plant is located, the aim being to guarantee the support to be provided by the Armed Forces and the National Police Force within their respective realms of competence.

The coordinator of the executive body will be the head of the technical assistance and coordination group.

Functions of the executive body.

1. Advising the director of the PEN for decision-making purposes through the determination and proposal of the protective measures to be adopted and other emergency response actions to be carried out.
2. Proposing to the director of the PEN the contents of the information to be provided to the population actually affected by the emergency.

3. Guaranteeing the coordinated and efficient intervention of the operating groups in the affected areas.
4. Proposing to the director of the PEN requests for extraordinary means and resources.
5. Keeping the director of the PEN continuously informed of the evolution of the emergency and of the activities of the operating groups and municipal response organisations.

1.3 Information and communications office

The head of the information and communications office shall be the press chief of the organisation whose head is the director of the PEN. The head of the information and communications office shall also be the sole spokesperson for the management of the PEN during the emergency.

The director of the PEN shall appoint a substitute.

The information and communications office of the PEN shall be located at the headquarters of the Delegation or Sub-delegation of the Government of the province in which the nuclear power plant is located.

It will be made up of personnel belonging to the said Delegation or Sub-delegation of the Government and, where appropriate, by personnel belonging to other Delegations or Sub-delegations of the Government affected by the PEN. Likewise, personnel specialising in information and communications and belonging to the autonomous communities covered by the PEN may join this information and communications office.

Functions of the information and communications office.

- a) To put together and distribute the information and recommendations to be

transmitted to the population by the director of the PEN.

- b) To centralise and coordinate general information on the emergency to be provided to the population actually affected and make this information available to the media.

- c) To provide all information relating to family contacts, the location of persons and data on persons possibly evacuated and transferred to medical centres.

1.4 Advisory committee.

This is a body providing scientific and technical advice to the director of the PEN with regard to specific problems that might occur and require resolution during the emergency.

The Delegate of the Government in the autonomous community, on his own initiative or in response to proposals from the Cabinet and other institutions, shall appoint advisors in specialist areas included in the PEN.

The heads of the functional areas of the Delegation or Sub-delegation of the Government hosting the PEN may be members of the advisory committee.

1.5 Operating groups

1.5.1 Technical assistance and coordination group

The technical assistance and coordination group shall be made up of the Civil Defence Unit of the Delegation of the Government in the autonomous community or the Government Sub-delegation of the province in which the nuclear power plant is located and by personnel from the Government Delegations and Sub-delegations affected by the PEN. The group may be joined by personnel appointed by the organisation responsible for civil defence in the autonomous communities affected by the plan, previously accredited by the director of the PEN.

Functions of the technical assistance and coordination group.

- a) To facilitate the coordinated response of the operating groups at the operational coordination centre (CECOP).
- b) To provide technical assistance and operating support for the personnel joining the CECOP as a result of the emergency.
- c) To carry out the necessary activities for coordination the municipal areas affected by the emergency.
- d) To provide technical and operational assistance for whatever municipal areas so require.
- e) To acquire from the activated CECOP's whatever information on the emergency is required by the director of the PEN.
- f) To transmit, receive and record communications during the emergency.
- g) To ensure the correct operation of the systems and equipment of the CECOP during the emergency.

The technical assistance and coordination group shall have at its disposal the human and material resources required for performance of the functions assigned to it. In the event of an emergency it shall be assisted by an administrative office manned by personnel from different areas of the Delegation or Sub-delegation of the Government.

For the performance of its functions the technical assistance and coordination group may be structured around the following services:

- a) Technical assistance.
- b) Municipal coordination.
- c) Communications.

Figure 2. *Organisational flowchart of the technical assistance and coordination group*

Head of the technical assistance and coordination group

**Technical assistance service
Municipal coordination service
Communications service**

Head of the technical assistance and coordination group.

The head of the technical assistance and coordination group is the Head of the Civil Defence Unit of the Delegation or Sub-delegation of the Government in the province in which the nuclear power plant is located.

The deputy head of the group will be appointed by the director of the PEN from among the personnel of the aforementioned Government Delegation or Sub-delegation.

Responsibilities of the head of the technical assistance and coordination group.

- a) To execute the orders given by the director of the PEN, directing and coordinating the activities of the group.
- b) To ensure the correct operation of the CECOP as the instrumental body of the PEN, making available all the necessary personnel and material resources.
- c) To apply the PEN activation and deactivation procedure.
- d) To ensure links between the CECOP and the state, autonomous and local coordination centres, as well as the sector-specific coordination centres activated during the emergency.
- e) To coordinate with the other heads of the operating groups the application of the protective measures and other emergency response actions ordered by the director of the PEN.
- f) To transmit the orders of the director of the PEN to the local authorities of the

municipal areas included in zones I and II and of the municipal areas housing classification and decontamination stations (CDS's) and social reception base area (SRBA).

g) To ensure coordination with the directors of the municipal nuclear emergency action plans (PAMEN).

h) To coordinate technical and operational assistance to the municipal areas affected by the emergency.

i) To control the transmission and reception via the CECOP of information and data on the emergency.

j) To transfer to the director of the PEN, to the directors of the municipal action plans for nuclear emergencies (PAMEN) and to the director of the central level response and support plan (PENCRA) the information available at the CECOP in order to allow for adequate tracking of the emergency.

1.5.2 Radiological group

The radiological group will be made up of specialists in nuclear safety or radiological protection from the CSN or from whatever public or private entities the CSN considers to be adequate for the performance of the group's functions.

Functions of the radiological group

a) To track the evolution of the accident and its possible radiological consequences for the population up to completion of the emergency phase.

b) To characterise the radiological situation of the area affected by the accident.

c) Dosimetry control of the personnel intervening in the emergency, along with control of other radiological protection measures for the intervening personnel.

d) To collaborate with the medical group in identification of the personnel and population groups that, in view of their possible exposure to radiation, should be

subjected to medical control and surveillance.

e) To measure and evaluate the external and internal contamination of the potentially contaminated population and intervening personnel.

f) To measure and evaluate the contamination on vehicles, other emergency material resources and, where appropriate, property.

g) To perform the radioactive waste management activities to be carried out during the emergency phase.

h) To transfer to the head of the group of any information on the emergency and on emerging needs for means and resources.

The radiological group will operate in permanent collaboration with the CSN emergency response organisation (ERO), the functions of which are as follows:

1. Estimation, on the basis of the available information, of the possible radiological consequences of the accident outside the nuclear power plant site.

2. Recommendations to the director of the PEN, via the head of the radiological group, regarding protective measures and other emergency actions, as well as the areas in which they are to be applied and the emergency situations that are to be declared.

3. Detailed tracking of the status of the nuclear power plant as a result of the accident.

4. Evaluation of the radiological consequences of the accident outside the nuclear power plant site on the basis of the information available from the plant and on the off-site radiological conditions.

5. Collaboration with the radiological group of the PEN and support for it in the performance of its functions,

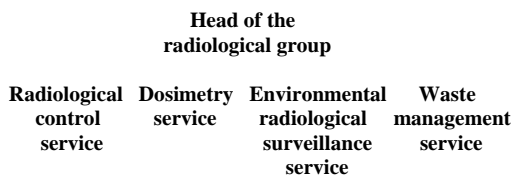
using the necessary human and material resources.

The radiological group shall have available human and material resources suitable for compliance with the functions assigned to it.

For the performance of its functions the radiological group may be structured around the following services:

- a) Radiological control.
- b) Dosimetry.
- c) Environmental radiological surveillance.
- d) Waste management.

Figure 3. *Organisational flowchart of the radiological group*



Head of the radiological group

The head of the radiological group will be appointed by the director of the PEN, with proposals by the Nuclear Safety Council, with preference given to members of the technical staff of this organisation living in the province in which the nuclear power plant is located. A deputy will be appointed on the basis of this same procedure.

Responsibilities of the head of the radiological group

- a) Providing advice to the director of the PEN on the measures to be adopted to protect the population and the areas in which they should be applied, as well as on measures to protect the intervening personnel.
- b) Execution of the orders given by the director of the PEN, directing and coordinating the activities of the group.
- c) Gathering of nuclear and radiological information in relation to the accident, in

permanent contact with the Nuclear Safety Council and the nuclear power plant affected by the accident.

d) Transfer to the director of the PEN of the recommendations of the Nuclear Safety Council on the emergency situations to be declared, the measures to be adopted to protect the population and the areas in which they are to be applied, and the measures to be adopted to protect the intervening personnel.

e) Establishment and assurance of dosimetry control and, where appropriate, other radiological protection measures for the intervening personnel.

f) Selection and proposal, in accordance with the recommendations of the CSN, of the classification and decontamination stations (CDS) and basic social reception areas (BSRA) to be activated.

g) Transfer to the director of the PEN of the recommendations of the CSN when it is necessary to apply a protective measure or an emergency action that implies exceeding the emergency dose level for the intervening personnel.

h) Directing radiological control actions.

i) Proposals, in agreement with the Nuclear Safety Council, regarding the specific contents of the information to be provided to the effectively affected population.

j) Definition, in agreement with the head of the medical service, of the information to be provided to the intervening personnel.

k) Request and coordinate the means and resources required for performance of the radioactive waste management activities to be carried out during the emergency phase.

l) Gather and transmit information on the emergency and on emerging needs for extraordinary means and resources.

1.5.3 Public security and order group

This group will be made up of personnel from the State Security and Police Forces,

in their respective geographical areas of competence, and, where appropriate, by personnel from the autonomous community and local police forces.

Functions of the public security and order group.

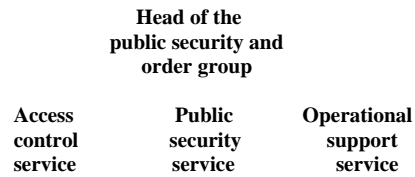
- a) Regulation and control of entries, exits and transit of persons and vehicles in the affected areas.
- b) Facilitating traffic along evacuation and warning routes and at the access to classification and decontamination stations and basic social reception areas.
- c) Where necessary, control of the orderly evacuation of the population and collaboration in performance of the evacuation.
- d) Facilitate traffic along other routes in the affected areas
- e) Maintenance of public security and law and order in the affected areas.
- f) Custody of the belongings of the evacuated population.
- g) Collaboration with other operating groups and organisations in the municipal response in application of measures to protect the public.
- h) Transfer to the head of the group of any information on the emergency and on emerging needs for means and resources

The public security and order group shall have available human and material resources adequate for the performance of the functions assigned to it.

For the performance of its functions the public security and order group may be structured around the following services:

- a) Control of accesses.
- b) Public security.
- c) Operational support.

Figure 4. *Organisational flowchart of the public security and order group*



Head of the public security and order group

The head of the public security and order group shall be the Commanding Officer of the Headquarters of the Guardia Civil in the province in which the nuclear power plant is located. The director of the PEN will appoint a deputy, in response to a proposal by the head of the group.

Responsibilities of the head of the public security and order group

- a) To execute the orders of the director of the PEN, directing and coordinating the activities of the group.
- b) To select and propose the location of the access controls, the evacuation routes and the access routes to the CDS's and BSRA's.
- c) To guarantee public security and law and order in the municipal areas affected by the emergency.
- d) To guarantee the orderly evacuation of the population.
- e) To guarantee the transit of emergency vehicles along the evacuation and warning routes.
- f) To guarantee the custody of the property of the evacuated population.
- g) To coordinate with the National Police Force and Armed Forces and, where appropriate, with the autonomous community and local police, in implementing the necessary actions.
- h) To gather and transmit information on the emergency and on emerging needs for extraordinary means and resources.

1.5.4 Medical group

The medical group will be made up of healthcare personnel specifically appointed and previously accredited by the organisation responsible for health in the autonomous community in which the nuclear power plant is located, as well as of healthcare personnel specifically appointed and previously accredited by the organisation responsible for health in each of the other autonomous communities affected by the PEN.

Functions of the medical group.

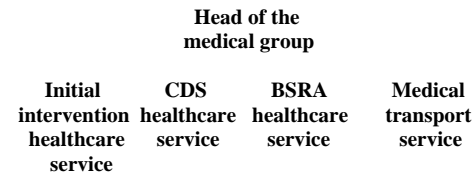
- a) Application of health protection measures, fundamentally radiological prophylaxis and the external and internal decontamination of persons.
- b) Classification of population risk groups.
- c) Urgent medical assistance for irradiated and/or contaminated persons.
- d) Identification, in accordance with the radiological group, of the personnel required to intervene and the population groups that, in view of the possibility of their being exposed to radiation, should be kept under medical control and surveillance.
- e) Rendering of medical assistance in municipal areas affected by the emergency, at the classification and decontamination stations (CDS's) and basic social reception areas (BSRA's).
- f) Performance of medical transport.
- g) Rendering of psychological assistance.
- h) Transmitting to the head of the medical group any information on the emergency and on emerging needs for extraordinary means and resources.

The medical group shall have human and material resources suitable for the performance of the functions assigned to it.

In performing its functions the medical group may be structured around the following services:

- a) Initial intervention healthcare service.
- b) CDS healthcare service.
- c) BSRA healthcare service.
- d) Medical transport service.

Figure 5. *Organisational flowchart of the medical group*



Head of the medical service

The head of the medical service will be appointed by the director of the PEN from among people living in the province in response to a proposal by the Counsellor for Health of the autonomous community in which the nuclear power plant is located. A deputy shall be appointed using this same procedure.

Responsibilities of the head of the medical group.

- a) To execute the orders of the director of the PEN, directing and coordinating the activities of the group.
- b) To propose the radiological prophylaxis and decontamination medical measures to be adopted and, where appropriate, priority selection of the population groups to be evacuated, in collaboration with the head of the radiological group.
- c) To ensure, in accordance with the head of the logistical support group, the distribution to the population and to the intervening personnel of substances for radiological prophylaxis.
- d) To propose specific contents for the emergency information to be provided to the population affected.

- e) To define, in agreement with the head of the radiological group, the information to be provided to the intervening personnel.
- f) To direct the medical activities of the CDS's and BSRA's.
- g) To provide resources for urgent medical transport.
- h) To provide urgent medical assistance for irradiated or contaminated persons.
- i) To provide psychological assistance for persons so requiring.
- j) To gather and transmit information on the emergency and on emerging needs for extraordinary means and resources.

1.5.5 Logistical support group

The logistical support group will be made up of personnel from the organisation responsible for civil defence in the autonomous community in which the nuclear power plant is located and of personnel from the sector organisations and services involved by the territorial emergency plan and the special emergency plans applicable to it. The group will also include, where applicable, personnel from the organisations responsible for civil defence in other autonomous communities included under the PEN.

This personnel should be previously accredited by the competent authorities of each autonomous community.

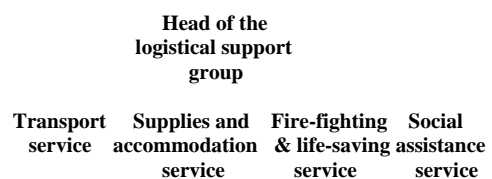
Functions of the logistical support group.

- a) To provide transport, supplies and accommodation for the population so requiring.
- b) To provide transport for the personnel and equipment of the operating groups and municipal response organisations, if necessary.
- c) To provide the fire extinguishing and life-saving service.

- d) To coordinate emergency actions in BSRA municipal areas, in collaboration with the municipal response organisations.
- e) To provide social assistance for the population so requiring.
- f) To provide the other operating groups with the logistical support required for them to perform their functions, when their own capacities are exceeded.
- g) To transmit to the head of the group any information on the emergency and on emerging needs for means and resources.

The logistical support group shall have human and material resources suitable for the performance of the functions assigned to it.

Figure 6. *Organisational flowchart of the logistical support group*



In performing its functions the logistical support group may be structured around the following services:

- a) Transport.
- b) Supplies and accommodation service.
- c) Social assistance.
- d) Fire-fighting and life-saving service.

Head of the logistical support group.

The head of the logistical support group will be appointed by the director of the PEN in response to a proposal by the counsellor responsible for civil defence in the autonomous community in which the nuclear power plant is located. A deputy shall be appointed using this same procedure.

Responsibilities of the head of the logistical support group.

- a) Execution of the orders of the director of the PEN, directing and coordinating the activities of the group.
- b) Management and coordination of the operative intervention of autonomous community and local services, means and resources in relation to transport, supplies and accommodation, fire-fighting and life-saving services and social assistance, in accordance with the territorial emergency plan of the autonomous community and special emergency plans applicable.
- c) Providing the means of transport required for evacuation of the population.
- d) Guaranteeing transfer, supplies, accommodation and social assistance for the population affected, as well as transport for the intervening personnel and material resources required in the emergency.
- e) Addressing of whatever logistical needs might affect the other operating groups.
- f) Gather and transmit information on the emergency and on emerging needs for extraordinary means and resources.

1.6 Organisation, structure and functions for the municipal nuclear emergency action plans (PAMEN)

The response organisation for the municipal nuclear emergency action plans (PAMEN) is structured around a central management and a number of operating services. These services will collaborate with the operating groups of the PEN in application, in the corresponding municipal area, of the protection measures for the population to be adopted in each emergency situation, as well as in the corresponding activities.

The organisation, structure and functions for emergency response in each of the municipal areas affected by the PEN shall be defined in the corresponding municipal nuclear emergency action plan (PAMEN).

1.6.1 Director of the municipal nuclear emergency action plan (PAMEN)

The director of the municipal nuclear emergency action plan will be the mayor of the municipality in question, as established in Law 2/1985, of January 21st, on civil defence. In the event of an emergency, the mayor shall be responsible for directing and coordinating the actions ordered for performance by the PAMEN organisation by the director of the PEN, through the coordination and technical assistance group.

The director of the PAMEN may be assisted by an executive body made up of the municipal delegate for civil defence, the secretary of the town council, the municipal chief of police, the head of the fire brigade and the municipal authority responsible for public health, were such to exist, as well as by the heads of whatever other heads of the municipal response organisation operating services might be necessary.

The personnel attached to the PAMEN shall previously be appointed and accredited by its director.

Responsibilities of the director of the PAMEN.

- a) To direct and coordinate the municipal nuclear emergency action plan.
- b) To activate the PAMEN by declaring the corresponding emergency situation, in accordance with the orders given by the director of the PEN.
- c) To apply the orders of the director of the PEN in his municipal area, ensuring the execution of the actions established, in permanent contact with the head of the coordination and technical assistance group.
- d) To ensure the correct operation of the municipal operational coordination centre (CECOPAL).
- e) To keep the population permanently informed of the emergency situation and of the way to proceed, in accordance with the directives issued by the director of the PEN.
- f) To provide information services for the family members of those affected, in

coordination with the information and communications office of the PEN.

g) To facilitate, where appropriate, the confinement of the population in the municipal area.

h) To facilitate, where appropriate, the evacuation of the population from the municipal area, taking into account the specific characteristics of centres attended by the public, such as schools, medical centres, etc.

i) To facilitate, where appropriate, transport, supplies and accommodation for the population so requiring.

j) To ensure collaboration with the operating groups of the PEN in the application of protective measures and the performance of the corresponding activities.

k) To transmit to the director of the PEN, via the coordination and technical assistance group, of the information on the emergency available at the CECOPAL.

l) To request support from the management of the PEN if the capacities of the PAMEN are exceeded.

1.6.2 Types of response organisations in the municipal nuclear emergency action plans and their functions.

The planning areas established in title II of this Basic Plan determine the protection measures and the actions to be applied in the territory.

This in turn determines the types of municipal action plans for the purposes of the PEN, along with the organisation and functions for municipal response in the event of a nuclear emergency.

In accordance with these objective criteria, the director of the PEN shall explicitly establish the different type of municipal areas, for the purposes of the PEN, and the corresponding municipal nuclear emergency action plan, which shall be among the following:

1.6.2.1 Zone I municipal areas.

The zone I municipal areas will be those inhabited municipal territory is wholly or partially included in zone I.

The corresponding nuclear emergency action plan shall be adequate for performance of the following functions:

a) Alerting, informing and warning the population.

b) Collaborating with the services of the operating groups in the application of measures to protect the population.

c) Facilitating the distribution of substances for radiological prophylaxis.

d) Facilitating confinement and the supply of the confined population.

e) Facilitating the evacuation of the population if necessary.

f) Transmitting, receiving and recording communications during the emergency.

1.6.2.2 Zone II municipal areas.

The zone II municipal areas will be those inhabited municipal territory is wholly or partially included in zone II and that do not belong to zone I.

The corresponding nuclear emergency action plan shall be adequate for performance of the following functions:

a) Alerting, informing and warning the population.

b) Collaborating with the services of the operating groups in the application of measures to protect the population.

c) Facilitating the supply of the population if necessary.

d) Transmitting, receiving and recording communications during the emergency.

1.6.2.3 Municipal areas hosting classification and decontamination stations (CDS).

CDS-hosting municipal areas shall be those having an installation of this type in their territory. These municipal areas shall be established on the basis of the following criteria:

1. Their urban centre shall be outside zone I as close as possible to the boundary with it and at a distance of no more than 50 km from the nuclear power plant.
2. They shall have adequate access for the transit and manoeuvring of emergency vehicles.
3. They shall have fixed facilities suitable for this type of use.

The classification and decontamination stations are installations existing in these municipal areas and capable, once adapted and equipped, of allowing the following activities to be performed:

Reception and identification of the evacuated population.

Headcounting and classification of persons.

Measuring and decontamination of persons.

Transit, parking, manoeuvring and decontamination of emergency vehicles.

The municipal nuclear emergency action plans of such areas shall be adequate for the performance of the following functions:

- a) Activation and preparation of the CDS for it to be operative during the emergency.
- b) Information and warnings for the population.
- c) Facilitating and collaborating in the activities of then services of the operating groups at the CDS.

d) Provisionally accommodating and supplying the population transferred to the CDS.

e) Collaborating in the provision of medical care.

f) Collaborating in the provision of social care.

g) Transmitting, receiving and recording communications during the emergency.

h) Collaborating with the public security and order group in the performance of its functions in the municipal area.

The head of the CDS shall be responsible for directing and coordinating all the activities of the station. He shall be appointed previously by the director of the PEN, in response to a proposal by the executive body.

1.6.2.4 Municipal areas with basic social reception area (BSRA) functions.

The municipal areas having BSRA functions shall be those capable of accommodating and supplying the evacuated population. These municipal areas will be selected in accordance with the following criteria:

1. Their urban centre shall be outside zone I and at a distance of no more than 100 km from the nuclear power plant.

2. They shall have adequate access for the transit and manoeuvring of emergency vehicles.

3. They shall have infrastructures adequate for the accommodation and supply of the evacuated population.

The municipal nuclear emergency action plans of these areas shall be adequate for the performance of the following functions:

- a) Providing accommodation and supplies for the evacuated population, making available for this purpose the fixed or emergency installations required when necessary.

- b) Providing information and warnings to the population.
- c) Facilitating and collaborating in the activities of the operating groups in the municipal area.
- d) Providing medical care.
- e) Providing social care.
- f) Transmitting, receiving and recording communications during the emergency.
- g) Collaborating with the public security and order group in the performance of its functions in the municipal area.

2. Organisation, structure and functions for the central level response and support plan (PENCRA)

The organisational structure of the PENCRA shall allow for the performance of the following basic functions:

- a) Attending to and managing the demands for extraordinary means and resources and making them available to the director of the PEN.
- b) Evaluating, managing and coordinating the needs for human and material resources at international level and making them available to the director of the PEN.
- c) Generally advising the director of the PEN in decision-making during the emergency.
- d) Undertaking permanent tracking of the emergency, acquiring data and drawing up official reports.
- e) Notifying and reporting to the Ministry of the Interior, the competent authorities and the corresponding organisations of the General State Administration concerned, as well as the authorities and organisations of the autonomous communities affected by the emergency of the initiation, development and end of the emergency.
- f) Where appropriate, notifying and informing the authorities of neighbouring

countries and the international organisations with which Spain has agreements in this area.

- g) Informing the general public and the national media of the emergency.

For the performance of its functions the PENCRA organisation shall be structured basically around a management body, a state coordination committee (CECO), a central information and communications office and a technical and operating assistance group.

The emergency response organisation (ERO) of the Nuclear Safety Council shall be responsible for all those functions that specifically relate to nuclear safety and radiological protection.

2.1 Director of the PENCRA

The director of the PENCRA shall be the head of the body of the Ministry of the Interior having competence in matters relating to civil defence.

The Minister of the Interior shall appoint a deputy, in response to a proposal from the director of the PENCRA.

Responsibilities of the director of the PENCRA.

- a) Directing and coordinating the PENCRA.
- b) Ordering the activation of the PENCRA in view of the situation or situations declared by the director of the PEN.
- c) Alerting and notifying the Minister of the Interior, the competent authorities and the corresponding organisations of the General State Administration concerned, as well as the authorities of the organisations responsible for civil defence of the autonomous communities not affected by the emergency where appropriate.
- d) Guaranteeing adequate coordination with the director of the PEN.

e) Guaranteeing the availability of the extraordinary means resources required for the director of the PEN.

f) Coordinating the necessary international aid.

g) Ordering the deactivation of the PENCRA when the director of the PEN declares the end of the emergency.

2.2 State coordination committee (CECO)

The state coordination committee (CECO) will be the executive body of the PENCRA. The committee headquarters shall be at the same place as the headquarters of the body of the Ministry of the Interior responsible for civil defence. The committee shall be made up of representatives of the following organisations and institutions belonging to the General State Administration, who shall have an administrative level of at least sub-director general:

a) The Nuclear Safety Council, which will act as the liaison with this organisation's ERO.

b) The Ministry of the Interior:

1. Directorate General of the Guardia Civil.

2. Directorate General of the Police.

c) The Ministry of Public Health and Consumption.

d) The Ministry of Defence: the competent organisation for matters relating to defence policy.

e) The organisation responsible for infrastructures and tracking for situations of crisis.

f) The organisation responsible for energy regulation.

g) The Secretariat of State for Communications.

Depending on needs, representatives of the Ministry of the Environment, the Ministry of Agriculture, Fisheries and Food and

other ministerial departments may also be integrated in the CECO.

Functions of the state coordination committee.

a) Responding to the director of the PEN in his demands for extraordinary state-owned means and resources, extraordinary means and resources belonging to other autonomous communities not affected by the emergency and, where appropriate, privately-owned means and resources.

b) Generally advising the director of the PEN on decision-making during the emergency.

c) Undertaking permanent tracking of the emergency, acquiring data and drawing up official reports.

d) Notifying and informing the International Atomic Energy Agency, the European Union and, where appropriate, other States, in keeping with the international commitments and obligations contracted by the Kingdom of Spain.

e) Where appropriate, notifying and informing the authorities of neighbouring countries, in keeping with the applicable bilateral commitments.

f) Evaluating, requesting and managing the international aid required in accordance with the European Union mechanism of reinforced cooperation in civil defence and the international conventions and agreements ratified by the Kingdom of Spain.

g) Notifying and, where appropriate, alerting hospitals and other medical centres for irradiated and contaminated persons and located outside the territory of the autonomous communities affected by the emergency, previously appointed and accredited for the purposes of nuclear emergency planning by the Inter-territorial Council of the National Health System, for them to activate their respective emergency plans and report on the actual availability of resources.

h) Activate other specialist services, means or resources when necessary.

2.3 *Central information and communications office.*

The central information and communications office will be the informative core of the PEN and will be located at the headquarters of the organisation responsible for civil defence of the Ministry of the Interior.

The head of the central information and communications office will be appointed by the Minister of the Interior, in agreement with the official Government Spokesperson.

The head of the central information and communications office will also be the sole spokesperson for the director of the PENCRA during an emergency.

A deputy will be appointed using this same procedure.

The central information and communications office will be staffed by people from the Directorate General for Civil Defence and Emergencies and, where appropriate, by other personnel from the Ministry of the Interior. Likewise, the office may be joined by persons specialising in information and communications from the organisations of the General State Administration affected by the PENCRA.

Functions of the central information and communications office.

a) To centralise, give shape to and distribute the information on the emergency for the general public and the national media, drawn up by the Nuclear Safety Council, this being accomplished in collaboration with the competent medical authority.

b) To gather and track all information being supplied by the information and communications office of the PEN.

2.4 *Technical and operational assistance group.*

The technical and operational assistance group will be made up of personnel from the organisation of the Ministry of the Interior responsible for civil defence and, where appropriate, by personnel from the organisations represented in the CECO.

The head of the group and his deputy shall be appointed by the director of the PENCRA.

Functions of the technical and operational assistance group.

a) To provide technical and operational assistance for the members of the CECO and, where appropriate, to the technical assistance and coordination group of the PEN.

b) To apply the procedure for activation and deactivation of the PENCRA.

c) To ensure the correct operation of the operations coordination centre (CECOP), providing all the necessary personnel and material resources.

d) To ensure links between the CECOP of the PENCRA and the CECOP of the PEN, as well as with the coordination centres of the organisations represented in the CECO and activated in an emergency.

e) To gather from the operations coordination centres activated the information on the emergency required by the director of the PENCRA.

f) To control the transmission and reception of notifications, information and data on the emergency via the CECOP of the PENCRA.

g) To transmit, receive and record communications during the emergency.

h) To ensure the correct operation of the systems and equipment of the CECOP of the PENCRA during the emergency.

i) To transmit to the director of the PENCRA and the state coordination committee the information available at the CECOP of the PENCRA and necessary to

maintain adequate tracking of the emergency.

3. Off-site response level operations coordination centres

The operations coordination centres of the off-site response level nuclear emergency plans shall be all those that necessarily have to be put into operation on activation of a PEN, in order for them to carry out the functions and tasks required to efficiently coordinate and manage the emergency operations.

Systems and devices should be established at such centres ensuring the links between them required to guarantee communications during an emergency.

The essential operations coordination centres shall be the following:

3.1 PEN operations coordination centre (CECOP)

The CECOP of the PEN is the physical location from which all nuclear emergency activities are directed and coordinated. It is the command post for the director of the PEN and is located at the headquarters of the representative of the Government in the province in which the nuclear power plant is located.

Whenever the PEN is activated, the CECOP will become the integrated operations coordination centre (CECOPI).

The CECOP shall be provided with all the redundant data-processing and communications resources and all the auxiliary media required for the performance of the activities to be carried out at the centre.

The CECOP shall be equipped with an alternative and autonomous electricity supply system.

The CECOP shall include the capacity to register and record all communications carried out during the emergency.

The operations coordination room (SACOP), where the executive body will be

located, the transmissions centre (CETRA) and the administrative office will be part of the CECOP.

3.2 Autonomous operations coordination centres

The autonomous operations coordination centres will be, on the one hand, the operations coordination centres of the organisations responsible for civil defence in the autonomous community or communities affected by the PEN and, on the other, whatever other sector-specific service centres belonging to the said autonomous community might be determined.

3.3 Municipal operations coordination centre (CECOPAL)

The CECOPAL is the physical location from which the municipal response organisation is directed and coordinated. It is the command post of the director of the PAMEN. The CECOPAL shall be provided with the resources required to facilitate the direction and coordination of all the activities of the PAMEN. The headquarters of the CECOPAL shall preferably be at the town hall of the municipal area in question.

The CECOPAL shall be provided with the following:

- a) Secure and redundant communications for links with the CECOP.
- b) Redundant and autonomous electricity supply.
- c) Means to warn the population. In zone I there shall be fixed devices to warn the population.

3.4 PENCRA operations coordination centre

The CECOP of the PENCRA will be the operations coordination centre of the organisation of the Ministry of the Interior responsible for civil defence, and will be set up as the instrumental centre of the PENCRA.

3.5 Nuclear Safety Council emergency room (SALEM)

The Nuclear Safety Council's emergency room (SALEM) will be the operations centre of the CSN emergency response organisation and shall be equipped with the following:

- a) The human and material resources required to guarantee its permanent operability.
- b) Voice, data or video signal communications with the operations coordination centres of the off-site response level nuclear emergency plans and other emergency centres contemplated by the ERO.
- c) Communications system having technical characteristics adequate to guarantee communications with the head of the PEN radiological group and with the control room of each nuclear power plant under any circumstances.
- d) Connection to the automatic radiological surveillance networks operating in Spain and with the networks of those countries with which agreements have been signed in this area.
- e) Tools for evaluation of the situation of the nuclear power plant affected by the accident and of the radiological consequences that the accidents foreseeable at each nuclear power plant might have off site.
- f) Tools for the processing and display of all the information received and generated and for its transmission to those operations coordination centres that should be advised.

Title IV

Preparation for nuclear emergency response: effective material implementation of off-site response level plans and continued efficiency

The objective of the effective material implementation of the nuclear emergency plans and of the maintenance of their efficiency is to achieve and maintain an

adequate state of preparedness for action in emergency situations. In this respect it will be necessary to schedule, develop and systematically implement at least the following activities:

1. Previous information for the population that might be affected.
2. Theoretical and practical preparation and training for the personnel attached to the PEN's and the PENCRA.
3. Definition, provision, management and maintenance of the human and material means and resources required.
4. Verification and checking of the efficiency of the plans.
5. Revision and updating of the documentation of the plans.

The scheduling, development and implementation of these activities will require the systematic and coordinated participation of all the competent authorities and organisations of the public Administrations involved and, where appropriate, of responsible private entities, and shall fulfil the criteria listed below.

1. Criteria for the implementation and continued efficiency of the nuclear emergency plans

The criteria for the effective material implementation of the nuclear emergency plans and the maintenance of their efficiency shall be as follows:

- a) The criteria for the effective material implementation of the civil defence emergency plans and the maintenance of their efficiency are generally established in chapter IV, "Preventive civil defence actions" of the civil defence act, Law 2/1985, of January 21st, and in chapter II, "Civil defence plans: classification and preparation criteria" of the basic Standard on civil defence.
- b) Implementation and continued efficiency activities will be carried out in coordination between all the competent authorities, the organisations concerned and

the bodies included in the structure of the nuclear emergency plans.

c) The implementation and continued efficiency activities will be part of a continuous, successive and iterative process of preparation which, by incorporating the experience acquired, will make it possible to achieve and maintain an adequate level of operability and efficiency.

d) The directives for the implementation and continued efficiency of the nuclear emergency plans will be defined by the organisation of the Ministry of the Interior responsible for civil defence and by the Nuclear Safety Council, in collaboration with other competent authorities and organisations involved.

e) The activities for the implementation and continued efficiency of the PEN's shall be undertaken within the framework of a periodic programme and in accordance with the directives established.

f) Each of the bodies involved in the nuclear emergency plans shall undertake the activities corresponding to it with advice and support from the competent authorities and organisations involved.

g) The competent authorities and organisations involved shall contemplate the development and performance of these activities within their organisation and functions.

h) Within their budgeting forecasts the competent authorities and organisations involved shall contemplate the funds required for the development and performance of the activities necessary to implement the nuclear emergency plans and maintain their efficiency.

i) The nuclear power plant licensees shall collaborate in the preparation and performance of the activities for implementation and continued efficiency of the PEN's. The framework for their collaboration in this respect shall be explicitly established in their programming.

j) The organisation of the Ministry of the Interior responsible for civil defence and the Nuclear Safety Council shall periodically inspect the activities for the implementation of the PEN and for maintenance of its efficiency and, in particular, shall verify the operational status of the material means and resources attached to the plan.

2. Responsibilities for the implementation and continued efficiency of the PEN

The responsibility for the effective material implementation of the PEN and for the maintenance of its efficiency shall correspond to the following:

a) To the director of the PEN, who shall approve and direct the activities required for its effective material implementation and the maintenance of its efficiency. The director of the PEN shall also be responsible for informing the rest of the competent authorities of the capacities and needs of the PEN and for requesting their support where necessary.

b) To the management organisation of the PEN, which shall guarantee that the organisations involved belonging to the autonomous communities are aware of and participate in the PEN implementation and efficiency maintenance activities.

c) To the director of each PAMEN, who shall guarantee and direct the participation of his organisation in the PEN implementation and efficiency maintenance activities and facilitate the performance of the PEN activities carried out in his municipal area.

d) To the executive body of the PEN, which shall coordinate all the activities for implementation of the plan and for the maintenance of its efficiency, for which purpose it shall be constituted as a permanent working body.

e) To the head of each operating group of the PEN, who shall define the needs of the group, communicate them to the executive body and direct the PEN implementation

and continued efficiency activities corresponding to the group.

3. Previous information for the population

The objective of the information provided previously to the population that might potentially be affected by an accident at a nuclear power plant is to ensure that the said population is aware of the risks, of the nuclear emergency plan and of the protective measures contemplated in the plan. This will also allow the affected population to react adequately in the event of an emergency, facilitating the application of such measures.

The directives established in order to fulfil these objectives and ensure compliance with the Agreement reached by the Cabinet of October 1st 1999, in relation to public information on the applicable health protection measures and on the way to proceed in the event of a radiological emergency, will be published by way of a resolution of the organisation of the Ministry of the Interior responsible for civil defence and revised periodically, with the frequency contemplated therein.

Each PEN shall have a “programme of previous information for the public”, which shall be approved and directed by the director of the PEN.

The executive body of the PEN shall draw up and implement the corresponding programme of previous information for the public, taking into account the directives established and the proposals of the directors of the PAMEN’s and involved organisations of the autonomous communities.

The head of the technical assistance and coordination group of the PEN shall coordinate the implementation of the programme of previous information for the public, with the collaboration of the PEN information and communications office.

The following shall participate in performance of the programme of previous information for the public:

- a) The operating groups of the PEN.
- b) The directors of the PAMEN’s and personnel of the municipal response organisations.
- c) The information and communications office of the PEN.
- d) The Ministry of Public Health and Consumption.
- e) The Nuclear Safety Council.
- f) The competent authorities of the autonomous communities having responsibilities within the framework of the PEN.
- g) The organisation of the Ministry of the Interior responsible for civil defence.
- h) The licensee of the nuclear power plant.

The programme of previous information for the population shall contemplate at least the following issues:

1. The population at which the programme is aimed.
2. The objectives to be covered.
3. The informative activities to be undertaken.
4. The methodology to be used to perform these activities.
5. The contents of the informative activities to be carried out.
6. The necessary human and material resources.
7. The framework for collaboration by the different organisations involved in the PEN.
8. The schedule of activities.
9. The budget and financing.
10. The evaluation procedure.

The programme of previous information for the population of each PEN shall remain in force for a period of three years. On its completion, the programme and its implementation shall be evaluated and revised by the corresponding executive body.

4. Training and empowerment of intervening personnel

The objective of the training and empowerment of the intervening personnel is to ensure that the persons integrated in the operating groups and services of the PEN and municipal response organisations required to act in the event of an accident at a nuclear power plant achieve and maintain the following:

- a) Adequate understanding of the characteristics of nuclear accidents, the risks implied and the protective measures to be adopted.
- b) Sufficient knowledge of the organisational structure of the PEN and of their specific responsibilities, functions and tasks, in order to be able to address possible emergencies and apply the protective measures.
- c) The necessary knowledge of material means and resources and of their operation and use.
- d) The necessary practical preparation and adequate training for the performance of the functions and tasks assigned.

The directives established to achieve these objectives and fulfil the requirements of the Agreement of the Cabinet on the training of intervening personnel shall be published by way of a resolution by the organisation of the Ministry of the Interior responsible for civil defence, and shall be revised periodically, with the frequency contemplated therein.

Each PEN shall have a “programme for the training and empowerment of intervening personnel”, which shall be approved and directed by the director of the PEN.

The executive body of the PEN shall draw up and implement the corresponding programme for the training and empowerment of intervening personnel, taking into account the directives established and the proposals of the directors of the PAMEN’s and involved organisations of the autonomous communities.

The heads of the operating groups shall guarantee the continuous training of the personnel attached to their corresponding groups and shall collaborate in the initial and on-going training of the other operating groups in aspects included within their realm of competence. The mayors shall facilitate the training of the personnel attached to the PAMEN’s.

The head of the PEN technical assistance and coordination group shall coordinate the implementation of the programme of training and empowerment of intervening personnel.

The following will participate in the performance of the programme for training and empowerment of the intervening personnel:

- a) The operating groups.
- b) The directors of the PAMEN’s and, where appropriate, the personnel of the municipal response organisations.
- c) The Nuclear Safety Council.
- d) The Ministry of Public Health and Consumption.
- e) The competent authorities of the autonomous communities having responsibilities within the framework of the PEN.
- f) The organisation of the Ministry of the Interior responsible for civil defence.
- g) The licensee of the nuclear power plant.

The programme for the training and empowerment of the intervening personnel

shall contemplate at least the following issues:

1. The population at which the programme is aimed.
2. The objectives to be covered.
3. The informative activities to be undertaken.
4. The teaching methodology and orientation.
5. The contents of the training activities.
6. The necessary human and material resources.
7. The framework for collaboration by the different organisations involved in the PEN.
8. The schedule of activities.
9. The budget and financing.
10. The evaluation procedure.

The programme for the training and empowerment of the intervening personnel of each PEN shall remain in force for a period of three years. On its completion, the programme and its implementation shall be evaluated and revised by the corresponding executive body.

In their respective work plans, the competent authorities and organisations involved shall contemplate the activities required for the initial and on-going training of the personnel belonging to their organisations and having functions assigned to them within the nuclear emergency plans.

5. Means and resources

Each PEN shall have available the means and resources required for the efficient implementation of the protective measures and other emergency actions foreseen in it. In addition, the PEN's shall have the extraordinary means and resources made available to them in an emergency by the competent authorities and the organisations involved and forming part of the PENCRA.

Established below are directives for the definition, supply, cataloguing and management of the material means and resources to be ascribed to the PEN's:

a) The competent authorities and organisations involved belonging to the different public Administrations providing direct support for the operating groups shall define the specifications of the material means and resources to be made available to the PEN's, taking into account the classification included in annex VI of the PLABEN.

b) The executive body of the PEN shall specify the material means and resources required to ensure the efficient application of the protective measures and other emergency actions contemplated therein.

c) The competent authorities and organisations involved belonging to the different public Administrations shall provide, replace and renew, depending on technology development, the material means and resources required to guarantee the efficiency of the nuclear emergency plans. The nuclear power plant licensees shall collaborate in providing, replacing and renewing the material means for each PEN. The director of the PEN shall ensure coordination between the competent authorities, the organisations involved and the nuclear power plants for provision of the necessary means.

d) The means and resources of the nuclear emergency plans will be catalogued on the basis of the criteria and definitions included in the national Catalogue of means and resources that may be mobilised in the event of emergencies, established by the National Civil Defence Commission.

e) The heads of the operating groups of the PEN and the directors of the PAMEN shall be responsible for ensuring that the material means and resources of the municipal response organisations are listed and catalogued. The head of the PEN technical assistance and coordination group shall supervise the updating of the catalogue of the aforementioned means and resources.

The director of the PEN shall approve the said lists and catalogues.

f) The management of the material means and resources, for the purpose of their being used in the PEN, shall include at least their suitable location, custody, inventory, maintenance, checking, verification, calibration and repair.

g) Each PEN shall have a “material means and resources management programme”, which will be approved and directed by the director of the PEN.

h) The executive body of the PEN shall draw up and execute the corresponding material means and resources management programme, taking into account the proposals made by the directors of the PAMEN and the organisations involved belonging to the autonomous communities.

i) The head of the technical assistance and coordination group of the PEN shall coordinate the implementation of the material means and resources management programme.

The following will participate in the execution of the material means and resources management programme:

The operating groups and municipal response organisations.

The competent authorities and organisations concerned.

The nuclear power plant licensees.

The material means and resources management programme shall contemplate at least the following:

1. List of material means and resources.
2. Objectives
3. Types of activities.
4. Procedures and specifications.
5. Necessary human and technical resources.

6. Schedule.

7. Evaluation procedure.

The material means and resources management programme of each PEN shall remain in force for three years. On completion of this period, the programme and its implementation should be revised and evaluated by the corresponding executive body.

6. Drills

A drill is a set of actions, previously scheduled in response to a supposed accident, aimed at checking the efficiency of the nuclear emergency plans in the implementation of certain protective measures and other emergency actions.

A drill may vary in its scope depending on the objectives sought with its performance. A drill is understood to be general in scope when it involves all the organisational structures of the nuclear emergency plans.

The objective underlying the performance of drills is to verify and check the following:

- a) The efficiency of the nuclear emergency plans response organisations.
- b) The preparedness of the personnel attached to the PEN and required to intervene.
- c) The sufficiency and suitability of the means and resources assigned.
- d) The adequacy of the operative action procedures.
- e) The coordination between the different organisations involved and, where appropriate, between the different levels of planning.
- f) The degree of response of the public.

The directive established to achieve the aforementioned objectives shall be published by way of a resolution from the organisation responsible for civil defence of

the Ministry of the Interior and shall be revised periodically, with the frequency contemplated therein.

Each PEN shall have a “programme of drills”, which shall be approved and directed by the director of the PEN, who shall inform the competent authorities and organisations concerned with sufficient notice.

The executive body of the PEN shall be responsible for drawing up and executing the corresponding programme of drills, taking into account the directives established and the proposals made by the directors of the PAMEN and the organisations involved belonging to the autonomous communities.

The head of the technical assistance and coordination group shall coordinate the implementation of the programme of drills.

The heads of the operating groups of the PEN and the directors of the PAMEN shall promote and facilitate the participation in the drills of their corresponding groups and municipal response organisations.

The directors of the PAMEN shall promote and facilitate the participation in the drills of the members of the public.

The following shall also participate in the execution of the programme of drills:

- a) The organisation of the Ministry of the Interior responsible for civil defence.
- b) The Nuclear Safety Council.
- c) The organisations concerned of the autonomous communities and the central response and support level.
- d) The licensees of the nuclear power plants.
- e) The municipal response organisations.

The programmes of drills shall contemplate at least the following elements:

1. Objectives, scope and area of application.

2. Drills to be carried out.
3. Methodology to be used for performance.
4. Scenarios for the drills to be performed.
5. Necessary material and human resources.
6. Framework for collaboration between the licensee of the nuclear power plant and the organisations concerned.
7. Schedule for drills and previous activities.
8. Evaluation procedure.
9. Budget and financing.

The programme of drills of each PEN shall remain in force for three years. On completion of this period, the programme and its implementation should be revised and evaluated by the corresponding executive body.

The organisation responsible for civil defence at the Ministry of the Interior and the Nuclear Safety Council shall coordinate the programmes of drills such that overall at least one general drill is carried out every three years.

The director of the PEN may require that the licensees of the nuclear power plants collaborate and participate in the planning, performance and evaluation of each drill, even when such drills are oriented specifically and exclusively towards checking off-site response level capacities.

The licensees of the nuclear power plants shall report to the competent authorities, annually and with sufficient notice, on the programme of drills of their PEI, in order to guarantee their adequate coordination with the drills of the PEN.

7. Off-site level response plan documents and procedure for their approval

The nuclear emergency plans deriving from the PLABEN shall adhere to the bases, directives and criteria emanating from the latter.

7.1 Nuclear emergency plan, external to the nuclear power plants (PEN)

The PEN shall contain the following documents or blocks of documents:

- a) Master plan: which shall develop the objectives, scope, organisation, structure and functions of the PEN and establish the list and types of municipal areas to be included in its scope of application.
- b) Nuclear emergency action plans of the operating groups: corresponding to the technical assistance and coordination group, the radiological group, the public security and order group, the medical group and the logistical support group.
- c) Nuclear emergency municipal action plans (PAMEN): corresponding to zone I and zone II municipal areas and to those hosting CDS's and BSRA's.

These documents shall contain at least the following, adapted to the corresponding political-administrative and territorial specifics of each area:

Objective, scope and area of application.

Organisation, structure and functions.

Annexes.

Operative action procedures.

List of means and resources.

Directories.

Cartography.

The PEN documents shall be drawn up in Castilian Spanish, without prejudice to the possibility of their being written in other official Spanish languages. Furthermore, they may exist on supports other than paper when the type or use of the document so requires. In such cases, however, the standards in force regarding the treatment and consultation of official data should be adhered to.

The head of the technical assistance and coordination group shall be responsible for revising and updating the "master plan" document and for ensuring the permanent availability at the CECOP of all updated PEN documentation.

The heads of the operating groups of the PEN shall be responsible for drawing up, revising and updating the nuclear emergency action plan of the corresponding operating group, in keeping with the territorial emergency plan of the autonomous communities concerned and with whatever special emergency plans might be applicable. In this respect the corresponding procedures shall be drawn up for the consultation and participation of the autonomous communities concerned.

The directors of the PAMEN shall be responsible for drawing up, revising and updating the nuclear emergency municipal action plan (PAMEN) of the municipal area in question. In this respect they shall be aided through the collaboration of the town council and its technical services, along with assistance from the technical assistance and coordination group of the PEN.

The executive body of the PEN shall ensure the coherence and updating of the documents constituting the PEN.

7.1.1 Procedure for approval of PEN documents.

a) Master plan: the "master plan" document shall be approved on agreement by the Cabinet, in response to a proposal from the Minister of the Interior and on the initiative of the director of the PEN and following a report by the Nuclear Safety Council and National Commission for Civil Defence.

b) Operating group nuclear emergency action plans:

1. The nuclear emergency action plan of the technical assistance and coordination group shall be approved by the director of the PEN, in response to a proposal from the head of the said group and following a

report by the organisation responsible for civil defence of the Ministry of the Interior.

2. The nuclear emergency action plan of the radiological group shall be approved by the director of the PEN, in response to a proposal from the head of the said group and following a report by the Nuclear Safety Council.

3. The nuclear emergency action plan of the public security and order group shall be approved by the director of the PEN, in response to a proposal from the head of the said group and following a report by the Secretariat of State for Security and, where appropriate, the Security Council of the corresponding autonomous community.

4. The nuclear emergency action plan of the medical group shall be approved by the director of the PEN, in response to a proposal from the head of the said group and following a report by the Civil Defence Commissions of the autonomous communities concerned.

5. The nuclear emergency action plan of the logistical support group shall be approved by the director of the PEN, in response to a proposal from the head of the said group and following a report by the Civil Defence Commissions of the autonomous communities concerned.

c) Municipal nuclear emergency action plans (PAMEN): the municipal nuclear emergency action plans of zone I and II municipal areas and of this housing CDS's and BSRA's, along with their revisions, shall be approved on agreement by the Plenary of the town council, following a report by the executive body of the PEN, such approval to be ratified by the director of the PEN.

7.2 Central response and support level nuclear emergency plan (PENCRA)

The State Coordination Committee (CECO), under the direction and coordination of the organisation responsible for civil defence of the Ministry of the Interior, shall be responsible for the drawing up of the PENCRA, which shall be approved by

order of the Minister of the Interior following a report by the National Commission for Civil Defence.

Title V

Operative action procedures for off-site response level nuclear emergency plans

The objective of this title is to establish the list of operative action procedures that should, at least, be developed in the off-site response level nuclear emergency plans in order for the organisations involved to be able to carry out the functions assigned to them in such plans with the highest possible levels of efficiency.

These procedures shall contain the operative mechanisms to be established to ensure the rapid and coordinated action of the operating organisations, groups and services, as well as the mobilisation of the necessary means and resources that are to intervene, allowing for the efficient application of the protective measures in the different nuclear emergency situations declared.

The operative action procedures shall contain at least the following:

- a) Objective, scope and area of application.
- b) Person responsible for their preparation, updating and application.
- c) Operating instructions.
- d) Human and material resources.
- e) Technical instructions.

The procedures shall be drawn up in accordance with the functions assigned to each organisation within the off-site response level nuclear emergency plans included under title III and taking into account the objectives, bases, principles and criteria established in titles I and II of this same basic plan.

The operative action procedures should be dynamic and sufficiently flexible to allow for their adaptation to the circumstances of

the area of each PEN, to the experience acquired, to the progress made in technical know-how and to variations in the applicable standards.

The following are excluded from this title:

a) Procedures for the initial assessment of the accident, which will be the responsibility of the licensee of the nuclear power plant, its classification and the actions required to mitigate its consequences at the point of origin, which shall in all cases be the subject of the site emergency plan (PEI).

b) The operative action procedures internal to the competent authorities and organisations concerned.

c) Those required for the performance of longer-lasting protective measures.

1. Procedure for initial decision-making

The objective of the procedure for initial decision-making is to implement a rapid and efficient response outside the nuclear power plant site during the first moments following the accident. In this respect it shall ensure the exchange of urgently required information between those responsible for the internal and off-site response levels and shall include at least the information included in the format shown in annex II.

2. Procedures for activation and notification

The objective of the procedures for activation and notification shall be to facilitate from the very start the alerting and urgent mobilisation of all the emergency response organisations, the information to be provided to them and their coordinated intervention. The following should be included among these procedures:

2.1 Procedures for the activation of off-site response level nuclear emergencies:

2.1.1 Procedures for activation of the PEN.

2.1.2 Procedures for activation of the PENCRA.

2.1.3 Procedures for activation of the operating group plans.

2.1.4 Procedures for activation of the PLAMEN's.

2.2 Procedures for the activation of the operational coordination centres required to participate in the emergency.

2.3 Procedures for notification and information for the competent authorities and organisations involved belonging to the public Administrations.

2.4 Procedures for notification and information for international authorities and organisations.

3. Procedures for the performance of urgent protective measures

The objective of the procedures for the performance of urgent protective measures is to implement urgently and in a coordinated manner the measures to be taken to protect the public, in order to reasonably reduce the radiological consequences that might arise as a result of the nuclear accident, taking into account the measures to protect the personnel required to intervene in the emergency. These procedures shall include at least the following processes:

3.1 Tracking of the evolution of the accident and assessment of its possible consequences for the population.

3.2 Measurement and control of levels of radiation and environmental contamination in the affected areas.

3.3 Confinement of the population.

3.4 Radiological prophylaxis for the population and intervening personnel.

3.5 Evacuation of the population.

3.6 Control of accesses.

3.7 Radiological protection of the intervening personnel.

3.8 Decontamination of persons and equipment.

3.9 management of radioactive waste generated during the emergency.

3.10 Stabling of animals.

3.11 Restrictions on the consumption of foodstuffs and water during the emergency.

4. Other procedures relating to emergency action

The objectives of these procedures are, on the one hand, to provide adequate police, logistical support and medical services and, on the other, to improve the performance of the measures taken to protect the public. These procedures should include at least the following:

4.1 Warnings, instructions and recommendations for the public.

4.2 Information for the public in the event of an emergency.

4.3 Actions of fire-fighting services

4.4 PEN communications.

4.5 Accreditation of personnel and other emergency resources.

4.6 Medical assistance for the public.

4.7 Social assistance for the public.

4.8 Actions of the police services.

4.9 Mobilisation of transport resources for the personnel and equipment in the event of an emergency.

4.10 Information for the media.

4.11 Requests for international assistance.