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Actions taken by France in support of the International Atomic Energy Agency's Action Plan on Nuclear Safety

With regard to its nuclear facilities and in its cooperation with third countries, France considers nuclear safety and its continuous improvement a top priority and an inherent condition of responsible nuclear energy development, without which public trust in nuclear energy cannot be maintained. As Chair of the Group of Eight and the Group of 20 at the time of the accident at the Fukushima Daiichi nuclear power plant, France worked with its partners to provide emergency assistance to Japan and to ensure that the nuclear community took stock of the accident and learned lessons from it for the future. Its initiatives in the weeks following the accident (ministerial-level meeting and meeting of nuclear safety authorities in Paris, proposals for strengthening emergency preparedness and international assistance mechanisms under the aegis of the International Atomic Energy Agency) made a useful contribution to the development and implementation of the Agency's Action Plan on Nuclear Safety in September 2011.

Responsibility for implementing the Action Plan lies not only with the Agency but also with each of its Member States. As a party to the Convention on Early Notification of a Nuclear Accident, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, France reaffirms its commitment to assume all its responsibilities for the implementation of these conventions and the principles set out therein, and to work with its partners to ensure that the international safety framework is effectively strengthened. France is also convinced that the highest levels of safety can only be attained and maintained if each operator and each nuclear State assumes its full responsibility in this regard.

It is for this reason that, a few days after 11 March 2011, the French Government asked the Autorité de Sûreté Nucléaire (nuclear safety authority) to immediately carry out a complementary safety assessment of French nuclear facilities, in order to ascertain their resistance to exceptional situations such as those that had led to the accident at the Fukushima Daiichi power plant, and that a similar process (stress tests) was undertaken at the level of the European Union. French nuclear operators were fully involved in those assessments and took the initiative to propose concrete measures for improving safety in their facilities. Following the



assessments, which it conducted in facilities that it considered of utmost priority, the Autorité de Sûreté Nucléaire concluded that safety levels in the assessed facilities were high enough that none of them needed to be shut down immediately. However, it also concluded that, to continue operating, the facilities needed to bolster their resistance to extreme situations as soon as possible, over and above the safety margins already in place. The feedback process from the Fukushima Daiichi accident will last several years, but the first prescriptions set out by the Autorité in June 2012 are already being implemented by operators. The Autorité published a national action plan on 20 December 2012 to review implementation in France of the recommendations resulting from the European stress tests conducted in 2011 and, more generally, of all the decisions taken following those assessments.

France has not limited its actions to the assessment of its nuclear facilities. It has also taken action in various areas where avenues for progress have been identified, acting on its own within its borders or in partnership with the International Atomic Energy Agency, its Member States and, where applicable, other relevant international organizations or groups outside its borders. It has drafted a summary of the actions taken, which are presented in the table below under the twelve areas identified in the Agency's Action Plan on Nuclear Safety. In the field of nuclear safety, transparency is absolutely essential, and this effort may contribute to that end. Nuclear safety is also a collective responsibility. France plans to continue working to ensure that nuclear safety is improved and maintained at the highest levels throughout the world.

Action 1: Assessment of global nuclear safety in the light of the accident at Tokyo Electric Power Company's Fukushima Daiichi nuclear power station				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		National actions	
<i>Member States to promptly undertake a national assessment of the design of nuclear power plants against site specific extreme natural hazards and to implement the necessary corrective actions in a timely manner.</i>	<p>➤ Organization of targeted inspection campaigns by the Autorité de sûreté nucléaire (ASN) (French nuclear safety authority)</p> <p>Thirty-eight campaigns have been conducted to verify compliance of operators' equipment and organization with the existing safety reference framework on topics related to Fukushima (loss of power supply, loss of cooling capacity, etc.).</p>	→ Completed	<p>➤ Implementation of stress tests</p> <p>Following a decision taken at the European Council meeting held on 24-25 March 2011, for all European power reactors; stress tests were conducted between June 2011 and April 2012, in compliance with strict specifications drawn up by the European Nuclear Safety Regulators Group, on the basis of proposals by the Western European Nuclear Regulators Association. The recommendations issued by the European Nuclear Safety Regulators Group following these stress tests are currently being implemented by Member States, as part of a national action plan and at the European level.</p>	→ Completed
	<p>➤ Complementary safety assessments</p> <p>At the request of the Prime Minister, in March 2011, ASN asked operators to conduct complementary safety assessments in order to verify the resistance of their nuclear facilities to extreme natural threats. The specifications for the complementary safety assessments were developed in line with those of European stress tests and concerned not only power reactors but also research facilities and fuel cycle plants; a total of 79 nuclear facilities were given priority status. The reports submitted by operators were then analysed in detail by the Institut de Radioprotection et de Sûreté Nucléaire (IRSN) (Institute for Radiological Protection and Nuclear Safety). The whole reporting and analysis exercise, conducted within a very short time (four months), first by operators, then for two months by IRSN and ASN, led to the preparation of an ASN report, which was submitted to the Prime Minister on 3 January 2012. About one hundred experts participated in that exercise for the period in question. In 2012, on the basis of that analysis, ASN requested that nuclear operators should implement several measures to strengthen safety in the face of extreme natural situations (see below: actions by operators).</p>	→ Completed	<p>A national action plan was published by ASN on 20 December 2012 to take stock of implementation in France of the recommendations resulting from the European stress-tests conducted in 2011 and, more generally, of all the decisions taken further to those assessments.</p> <p>http://www.asn.fr/index.php/S-informer/Actualites/2012/Stress-tests-europeens-l-ASN-publie-son-plan-d-action-national</p>	→ Completed

→ Under way

→ Under way

The same exercise was planned for 2012 in France, covering an additional 22 facilities of secondary priority (International Thermonuclear Experimental Reactor (ITER), facilities being dismantled, etc.). For the remaining nuclear facilities — about 35 low-priority facilities — feedback from the Fukushima accident will be taken into account in safety reviews that might be conducted in the future.

➤ **Actions by operators**

- In addition to verification of facilities' compliance and the existence of safety margins with regard to threats taken into account in the design basis, an additional level of in-depth defence of nuclear facilities has been defined and proposed, to ensure that, under all circumstances, essential safety functions of the facility are available for a sufficient period of time to address any extreme environmental threat. This additional level of defence consists in the strengthening and/or installation of essential equipment for the management of extreme situations that can withstand significant earthquakes or floods beyond the current design basis. This minimum essential equipment would therefore constitute a "hard core" and would have to be extremely robust and available under all circumstances, in order to prevent a serious accident or limit the consequences thereof. The complementary safety assessments are just the first step in a long feedback process following the Fukushima accident. In France, they will help to strengthen the capacity of facilities to maintain their fundamental safety functions against markedly more severe threats than those taken into consideration in their design.

	<ul style="list-style-type: none">- Creation of a Force d' Action Rapide Nucléaire (FARN) (nuclear rapid response team) that can intervene on any Electricité de France (EDF) site within 24 hours. This team will be able to intervene on one reactor of a site by the end of 2012; and will be able to intervene simultaneously on all the reactors of a site by the end of 2014 (for a four-unit site), and by the end of 2015 (for a six-unit site).- The company AREVA is currently setting up a national response force comprising resources and equipment for intervention on its sites.- Strengthening of resources for on-site communication in extreme situations (strengthening of the self-sufficiency of communications resources, satellite communications).- Strengthening of the shared resources made available by EDF, AREVA and the Commissariat à l'Energie Atomique (CEA) (Atomic Energy Commission), which are currently limited to automated robotic equipment for operation in highly radioactive conditions.- Elaboration of an action plan to study and address risks associated with the surrounding industrial environment in the event of an extreme situation.	<p>→ Under way</p> <p>→ Under way</p> <p>→ Under way</p> <p>→ Under way</p> <p>→ Under way</p>	
<i>The IAEA Secretariat, taking into account existing experiences, to develop a methodology and make it available for Member States that may wish to use it in carrying out their national assessments.</i>			
<i>The IAEA Secretariat, upon request, to provide assistance and support to Member States in the implementation of a national assessment of the design of nuclear power plants against site specific extreme natural hazards.</i>			
<i>The IAEA Secretariat, upon request, to undertake peer reviews of national assessments and to provide additional support to Member States.</i>			

Action 2: Peer review				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>The IAEA Secretariat to strengthen existing IAEA peer reviews by incorporating lessons learned and by ensuring that these reviews appropriately address regulatory effectiveness, operational safety, design safety, and emergency preparedness and response; Member States to provide experts for peer review missions.</i>			<ul style="list-style-type: none"> ➤ Participation of French experts in IAEA peer review missions. On average, ASN experts take part in four IRRS missions a year. ➤ New permanent resources (CFE AREVA) made available to the Agency to directly help it complete IRRSs and its design reviews for new reactor models submitted by Member States. 	→ Regular
<i>The IAEA Secretariat, in order to enhance transparency, to provide summary information on where and when IAEA peer reviews have taken place, and to make publicly available in a timely manner the results of such reviews with the consent of the State concerned.</i>	ASN publishes on its website reports on International Regulatory Review Service (IRRS) and Operational Safety Review Team (OSART) missions conducted in France.	→ Regular	<ul style="list-style-type: none"> ➤ Agreement by France that information on IAEA peer review missions already conducted or planned in France should be published on the Action Plan on Nuclear Safety website (Governor's mail dated 28 March 2012). ➤ Agreement in principle by France that IAEA should publish the results of certain types of peer review missions conducted in France (Governor's mail dated 16 May 2012). 	→ Completed
<i>Member States to be strongly encouraged to voluntarily host IAEA peer reviews, including follow-up reviews, on a regular basis; the IAEA Secretariat to respond in a timely manner to requests for such reviews.</i>	<ul style="list-style-type: none"> ➤ One OSART mission hosted in France each year. ➤ IRRS mission hosted in 2006, with a follow-up mission in 2009; the next mission is planned for 2014. ➤ Twenty-four OSART missions hosted since 1985. ➤ After the Chooz mission in 2013, all French nuclear power reactors would have been visited by OSART. 	→ Regular		
<i>The IAEA Secretariat to assess, and enhance as necessary, the effectiveness of the IAEA peer reviews.</i>				

Action 3: Emergency preparedness and response					
IAEA Action Plan on Nuclear Safety	Actions taken by France				
	National actions		Bilateral and international actions		
<i>Member States to conduct a prompt national review and thereafter regular reviews of their emergency preparedness and response arrangements and capabilities, with the IAEA Secretariat providing support and assistance through Emergency Preparedness Review (EPREV) missions, as requested.</i>	<p>➤ Public authorities</p> <ul style="list-style-type: none">- ASN action plan to improve its crisis management by integrating feedback from the mobilization carried out during the Fukushima Daiichi accident.- Change in IRSN crisis management, integrating feedback from the mobilization carried out during the Fukushima Daiichi accident.- Creation of guidelines for post-accident management by the ASN Steering Committee for the Management of the Accident Phase (CODIRPA): publication of guides in the first half of 2012. At the request of ASN, the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (Committee on Radiation Protection and Public Health), conducted an international peer review to improve, prior to its validation, the guide drafted by CODIRPA describing French policy on the management of the post-accident phase of a nuclear or radiological accident.- Integration into the planning of nuclear and radiological emergency exercises of the feedback from Fukushima (simulation of accidents affecting several facilities at the same time — interministerial circular of 20 December 2011).		→ Under way		
	<p>➤ Operators</p> <ul style="list-style-type: none">- Standardization and streamlining of EDF emergency plans currently under review by ASN- Integration of a specific emergency plan for climatic and related safety risks. This plan applies to several facilities and is expected to be implemented by the end of 2012.- Establishment of a nuclear rapid response team by EDF and a national response force by AREVA (see Action 1).				

<i>The IAEA Secretariat, Member States and relevant international organizations to review and strengthen the international emergency preparedness and response framework, taking into account recommendations given in the final report of the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies, and encouraging greater involvement of the relevant international organizations in the Joint Radiation Emergency Management Plan of the International Organizations.</i>			➤ Planned IAEA-IRSN cooperation to support the strengthening of the technical capacities of IAEA and to establish an operational working relationship between the two based on the sharing of data and expertise. This technical cooperation programme, planned as a multi-year initiative (2012-2015), would be based on a first stage dedicated to the development of the technical capacity of IEC, followed by a set of actions taken on a periodic basis to maintain and strengthen that capacity.	→ Under way
<i>The IAEA Secretariat, Member States and relevant international organizations to strengthen the assistance mechanisms to ensure that necessary assistance is made available promptly. Consideration will be given to enhancing and fully utilizing the IAEA Response and Assistance Network (RANET), including expanding its rapid response capabilities.</i>			➤ French proposals concerning the establishment, under the aegis of IAEA, of an international rapid response mechanism for nuclear accidents, and a network of several national or regional nuclear crisis management training centres.	→ Under way
<i>Member States to consider, on a voluntary basis, establishing national rapid response teams that could also be made available internationally through RANET.</i>			➤ Statement by French and British authorities (17 February 2012) that they would work together to strengthen their own capacity and develop bilateral coordination on the organization and management of emergency situations. Work to that end started in the summer of 2012.	→ Under way
<i>The IAEA Secretariat, in case of a nuclear emergency and with the consent of the State concerned, to conduct timely fact-finding missions and to make the results publicly available.</i>				

Action 4: National regulatory bodies				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Member States to conduct a prompt national review and thereafter regular reviews of their regulatory bodies, including an assessment of their effective independence, adequacy of human and financial resources and the need for appropriate technical and scientific support, to fulfil their responsibilities.</i>	Increase in the number of staff members and budget of ASN and IRSN in order to meet the mission requirements of these organizations.	→ Completed		
<i>The IAEA Secretariat to enhance the Integrated Regulatory Review Service (IRRS) for peer review of regulatory effectiveness through a more comprehensive assessment of national regulations against IAEA Safety Standards.</i>				
<i>Each Member State with nuclear power plants to voluntarily host, on a regular basis, an IAEA IRRS mission to assess its national regulatory framework. In addition, a follow-up mission to be conducted within three years of the main IRRS mission.</i>	<ul style="list-style-type: none"> ➤ IRRS mission hosted in 2006, with a follow-up mission in 2009; the next mission is planned for 2014 (see Action 2). ➤ Pursuant to Council Directive 2009/71/Euratom on nuclear safety, this international peer review must take place in France at least every ten years (see Action 2). 	→ Completed		

Action 5: Operating organizations				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Member States to ensure improvement, as necessary, of management systems, safety culture, human resources management, and scientific and technical capacity in operating organizations; the IAEA Secretariat to provide assistance to Member States upon request.</i>	<ul style="list-style-type: none"> ➤ France has extended post-Fukushima complementary safety assessments and the resulting prescriptions to organizational and human factors, in order to ensure the continuous improvement of safety (see Action 1). ➤ Strengthening of crisis management and related resources by operators (FARN mobile resources, strengthened crisis buildings, etc.). 	→ Completed	Widening of the scope of action of the World Association of Nuclear Operators, in order to improve the level of prevention and mitigation amongst nuclear operators worldwide: external threats, management of serious accidents, emergency preparedness, etc.	→ Completed
<i>Each Member State with nuclear power plants to voluntarily host at least one IAEA Operational Safety Review Team (OSART) mission during the coming three years, with the initial focus on older nuclear power plants. Thereafter, OSART missions to be voluntarily hosted on a regular basis.</i>	<ul style="list-style-type: none"> ➤ One OSART mission hosted each year in France (see Action 2) ➤ After the Chooz mission in 2013, all French nuclear power reactors would have been visited by OSART. 	→ Regular		
<i>The IAEA Secretariat to strengthen cooperation with WANO by amending their Memorandum of Understanding to enhance information exchange on operating experience and on other relevant safety and engineering areas and, in consultation with other relevant stakeholders, to explore mechanisms to enhance communication and interaction among operating organizations.</i>				

Action 6: IAEA Safety Standards				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>The Commission on Safety Standards and the IAEA Secretariat to review, and revise as necessary using the existing process in a more efficient manner, the relevant IAEA Safety Standards in a prioritized sequence.</i>			<p>France contributes to the drafting of IAEA Safety Standards:</p> <ul style="list-style-type: none"> ➤ French experts attend the meetings of the Commission on Safety Standards, as well as those of the four technical committees. ➤ The Chairman of ASN chaired the Commission on Safety Standards from 2006 to 2011. ➤ CFE AREVA, CFE EDF are making resources available to the Agency to help it update its safety standards, including the lessons learned from the Fukushima accident, to the extent necessary. 	→ Regular
<i>Member States to utilize as broadly and effectively as possible the IAEA Safety Standards in an open, timely and transparent manner. The IAEA Secretariat to continue providing support and assistance in the implementation of IAEA Safety Standards.</i>	The French regulatory framework has been developed in accordance with IAEA Safety Standards.			

Action 7: International legal framework				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>States parties to explore mechanisms to enhance the effective implementation of the Convention on Nuclear Safety, the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management, the Convention on the Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, and to consider proposals made to amend the Convention on Nuclear Safety and the Convention on the Early Notification of a Nuclear Accident.</i>			<p>➤ Active participation in the extraordinary meeting of the Convention on Nuclear Safety in August 2012, including by submitting proposals for changes to the guides governing the Convention mechanism, in an effort to strengthen the effectiveness of the process established under the Convention.</p> <p>➤ ASN participates in the Convention on Nuclear Safety Working Group on Transparency and Effectiveness, and the joint working group of the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, to ensure consistency between the two conventions (working group initiated by France).</p>	<p>→ Completed</p> <p>→ Under way</p>
<i>Member States to be encouraged to join and effectively implement these Conventions.</i>	<p>➤ France has adhered to:</p> <ul style="list-style-type: none"> - The Convention on Nuclear Safety (France applies the Convention to research reactors on a voluntary basis) - The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management - The Convention on Early Notification of a Nuclear Accident - The Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency 	<p>1995</p> <p>2000</p> <p>1989</p> <p>1989</p>	Active participation by France in the meetings of the Contracting Parties to review implementation of these conventions	

<p><i>Member States to work towards establishing a global nuclear liability regime that addresses the concerns of all States that might be affected by a nuclear accident with a view to providing appropriate compensation for nuclear damage. The IAEA International Expert Group on Nuclear Liability (INLEX) to recommend actions to facilitate achievement of such a global regime. Member States to give due consideration to the possibility of joining the international nuclear liability instruments as a step toward achieving such a global regime.</i></p>	<ul style="list-style-type: none"> ➤ Accession by France to the Paris and Brussels Conventions ➤ Two draft laws were submitted to the French Senate in the spring of 2012, prescribing respectively: <ol style="list-style-type: none"> (1) Ratification of the Joint Protocol relating to the Application of the Vienna Convention and the Paris Convention. (2) Reflection in French legislation of the increase in compensation ceilings for nuclear operators set out by the amending protocols of 2004. ➤ The ratification process for the 2004 protocols amending the Paris and Brussels Conventions has been completed. The instrument of ratification will be submitted simultaneously for all member States of the European Union that are parties to the Paris and Brussels Conventions. 		<p>Participation by a French expert in the International Atomic Energy Agency's International Expert Group on Nuclear Liability</p> <p>Participation by France in the Organisation for Economic Co-operation and Development Nuclear Energy Agency's Nuclear Law Committee</p>	
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Action 8: Member States planning to embark on a nuclear power programme				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Member States to create an appropriate nuclear infrastructure based on IAEA Safety Standards and other relevant guidance, and the IAEA Secretariat to provide assistance as may be requested.</i>			<ul style="list-style-type: none"> ➤ France provides assistance to States wishing to launch a nuclear power programme, either as part of IAEA activities or as part of bilateral cooperation (organization of training and workshops for IAEA, actions by the Agence France Nucléaire International (French international nuclear agency), including developing skills in partnership with the International Institute of Nuclear Energy and CFE IRSN in the IAEA Nuclear Safety Action Team [2012-2014]). ➤ ASN responds to requests for assistance through bilateral initiatives or through European and international instruments (European Union Nuclear Safety Cooperation Instrument and IAEA Regulatory Cooperation Forum). The purpose of this cooperation is to enable the countries concerned to establish a suitable regulatory framework and a competent and independent safety authority, and develop a safety and transparency culture, which is essential for a national nuclear safety and radiation protection oversight system. 	→Regular
<i>Member States to voluntarily host Integrated Nuclear Infrastructure Reviews (INIR) and relevant peer review missions, including site and design safety reviews, prior to commissioning the first nuclear power plant.</i>				

Action 9: Capacity-building				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Member States with nuclear power programmes and those planning to embark on such a programme to strengthen, develop, maintain and implement their capacity building programs, including education, training and exercises at the national, regional and international levels; to continuously ensure sufficient and competent human resources necessary to assume their responsibility for safe, responsible and sustainable use of nuclear technologies; the IAEA Secretariat to assist as requested. Such programmes to cover all the nuclear safety related areas, including safe operation, emergency preparedness and response and regulatory effectiveness and to build upon existing capacity building infrastructure.</i>	➤ Scope of complementary safety assessments conducted by ASN extended to the areas of sub-contracting and consideration of organizational and human factors.	→ Completed	➤ France undertakes active collaborative initiatives with the Agency as part of its bilateral cooperation (see Action 8).	→ Regular
	➤ Establishment of the International Institute of Nuclear Energy	→ Completed	➤ ASN cooperates with its counterparts at their request (see Action 8).	
	➤ 8 February 2012: adoption of decree setting out the general rules for basic nuclear facilities, including provisions on safety policy, safety management systems, human resources and sub-contracting).	→ Completed	➤ IRSN and its European partners have created the European Nuclear Safety Training and Tutoring Institute, which provides training to safety professionals in Europe and worldwide.	→ Completed
	➤ Actions by operators: implementation of FARN and training of crisis teams in the use of mobile resources, extension of the scope of exercises for extreme situations affecting several sections at once.		➤ Under the aegis of IAEA, the Technical Safety Organizations Forum has been created to promote the sharing of information, experiences, lessons and safety cultures, and to harmonize nuclear safety practices in keeping with the highest safety standards.	
<i>Member States with nuclear power programmes and those planning to embark on such a programme, to incorporate lessons learned from the accident into their nuclear power programme infrastructure; the IAEA Secretariat to assist as requested.</i>	France has extended post-Fukushima complementary safety assessments and the resulting prescriptions to social, organizational and human factors, in order to ensure the continuous improvement of safety (see Actions 1 and 5).			

Action 10: Protection of people and the environment from ionizing radiation				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Member States, the IAEA Secretariat and other relevant stakeholders to facilitate the use of available information, expertise and techniques for monitoring, decontamination and remediation both on and off nuclear sites and the IAEA Secretariat to consider strategies and programmes to improve knowledge and strengthen capabilities in these areas.</i>			<p>➤ Studies at the Fukushima site</p> <ul style="list-style-type: none"> - participation in environmental measurement campaigns around Fukushima (IRSN-Japan Atomic Energy Agency (JAEA)) - projects (IRSN-JAEA: TOFU, FreeBird) <p>➤ Generic studies</p> <ul style="list-style-type: none"> - sharing of information on the management of post-accident situations (IRSN-JAEA) - Doctrine and tools on post-accident management developed under CODIRPA (coordinated by ASN). 	→ Under way
<i>Member States, the IAEA Secretariat and other relevant stakeholders to facilitate the use of available information, expertise and techniques regarding the removal of damaged nuclear fuel and the management and disposal of radioactive waste resulting from a nuclear emergency.</i>				
<i>Member States, the IAEA Secretariat and other relevant stakeholders to share information regarding the assessment of radiation doses and any associated impacts on people and the environment.</i>			Reception of people exposed to radiation for treatment in the specialized services of French hospitals: The IRSN and Percy Hospital are currently in discussions with IAEA and some South American countries to develop an international technical cooperation project.	→ Under way

Action 11: Communication and information dissemination				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Member States, with the assistance of the IAEA Secretariat, to strengthen the emergency notification system, and reporting and information sharing arrangements and capabilities.</i>	Continuous improvement of the emergency notification system (see Actions 1 and 3).	→Regular		
<i>Member States, with the assistance of the IAEA Secretariat, to enhance the transparency and effectiveness of communication among operators, regulators and various international organizations, and strengthen the IAEA's coordinating role in this regard, underlining that the freest possible flow and wide dissemination of safety related technical and technological information enhances nuclear safety.</i>	<ul style="list-style-type: none"> ➤ French law on nuclear safety and transparency of 13 June 2006: ➤ Establishment of local information committees. 	→Completed		
<i>The IAEA Secretariat to provide Member States, international organizations and the general public with timely, clear, factually correct, objective and easily understandable information during a nuclear emergency on its potential consequences, including analysis of available information and prognosis of possible scenarios based on evidence, scientific knowledge and the capabilities of Member States.</i>			Following national consultations, France will make proposals to the Secretariat to better define the role of IAEA in the event of a nuclear crisis. The aim is to stimulate discussion in the international community, including in the context of the Emergency Preparedness and Response Expert Group.	→ Under way

<i>The IAEA Secretariat to organize international experts meetings to analyse all relevant technical aspects and learn the lessons from the Fukushima Daiichi nuclear power station accident.</i>				
<i>The IAEA Secretariat to facilitate and to continue sharing with Member States a fully transparent assessment of the accident at TEPCO's Fukushima Daiichi Nuclear Power Station, in cooperation with Japan.</i>				
<i>The IAEA Secretariat and Member States, in consultation with the OECD/NEA and the IAEA International Nuclear and Radiological Event Scale (INES) Advisory Committee to review the application of the INES scale as a communication tool.</i>				

Action 12: Research and development				
IAEA Action Plan on Nuclear Safety	Actions taken by France			
	National actions		Bilateral and international actions	
<i>Relevant stakeholders, with assistance provided by the IAEA Secretariat as appropriate, to conduct necessary research and development in nuclear safety, technology and engineering, including that related to existing and new design-specific aspects.</i>	<ul style="list-style-type: none"> ➤ IRSN pursues research activities in a range of areas (environmental and human radiation protection and safety, development of codes, creation of databases, etc.). ➤ Call for proposals by the French national research agency as part of the new action entitled “nuclear safety research” under the nuclear component of the “Investissements d’Avenir” (Investments for the future) programme. ➤ CEA, EDF and AREVA cooperate within a joint research institute that which coordinates work on second- and third-generation reactors and their fuel. 			
<i>Relevant stakeholders and the IAEA Secretariat to utilize the results of research and development and to share them, as appropriate, to the benefit of all Member States.</i>			<ul style="list-style-type: none"> ➤ CFE IRSN mentioned in Actions 8 and 9. ➤ Establishment of the Technical Safety Organizations Forum to promote the sharing of information, experiences, lessons and safety cultures and to harmonize nuclear safety practices in keeping with the highest safety standards. ➤ Participation of French institutes in IAEA Coordinated Research Projects. 	→ Under way