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| WiN France | |
| Chapter president | Dominique Mouillot |
| Chapter board members | **Vice-President**: Aline Des Cloizeaux **Treasurer:** Marie-Josèphe Auguères **General Secretary** Patricia Schindler **Communication**: Anne-Marie Birac  **Regional Presidents:**  Bourgogne: Anne-Marie Goube Grand Est: Isabelle Rossini Ile de France: Elisabeth Stibbe Languedoc-Roussillon-Vallée du Rhône: Perrine Tudela Normandie: Marie Kirchner PACA: Patricia Schindler Rhône-Ain-Loire: Marie-Josèphe Auguères  *Other members:*  *Michèle Archimbaud Annick Carnino Valérie Faudon Valérie Pontier Isabelle Taillois-Calbano Anne-Marie Roy* |
| Number of members | 500 |
| Chapter accepted by WiN Global | 1993 – cofounder of WiN Global |
| Nuclear power infrastructure | * Number of NPP`s     *Courtesy of CEA*  French reactors are operated by EdF. The safety authority is ASN. The TSO is IRSN.  ANDRA is the French Agency for the management of Nuclear Waste  AREVA is the manufacturer.  A very large number of companies including small and medium ones are involved in construction, maintenance and dismantling of the French nuclear fleet.  For the fuel cycle, AREVA has several factories including mines outside France, and in France a conversion and enrichment facility (Georges Besse Facility), two fuel assembly plants (for Unat and MOX), and the recycling facility of La Hague. |
| Nuclear medical applications | More than 220 Medical Nuclear Departments especially in Hospitals all around France  To know more: [www.sfmn.org](http://www.sfmn.org), website of the Société Française de Médecine Nucléaire et Imagerie Moléculaire (SFMN) |
| Waste management philosophy | * 1. **Overview of the French policy concerning radioactive waste management**   The French nuclear activities produce solid, liquid or gaseous waste, some of which is radioactive. The national policy on radioactive waste is that reliable, transparent and stringent management of this waste must ensure the protection of individuals, preservation of the environment and limitation of undue burdens imposed on future generations**.**    The general principles of radioactive waste management have been set initially by the December 30th 1991 Waste Act (called as well [loi Bataille](http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000006078480&dateTexte=20090730)) and later modified by the above-mentioned [2006 Planning Act on the sustainable management of radioactive materials and waste](http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000240700&dateTexte) , and are the following**:**   * sustainable management of radioactive materials and waste of whatever nature, resulting in particular from the operation or dismantling of installations using radioactive sources or materials, with due regard for the protection of personnel health, safety, and the environment, * in order to avert or limit the burden that will be borne by future generations, research is undertaken and the necessary means for the definitive securing of radioactive waste shall be implemented, * producers of spent fuel and radioactive waste are responsible for those substances, without prejudice to the responsibility their holders have as nuclear activity operators.     A National Plan for the management of radioactive materials and waste (PNGMDR) is considered as an important tool to improve radioactive waste management. The first edition of this plan has been issued at the beginning of 2007 by the Nuclear Safety Authority (ASN) and the General Directorate for Energy and Climate (DGEC), Ministry of Industry. It is notably based on the National Inventory of radioactive waste and recoverable materials issued by ANDRA.  After their operating period, nuclear installations need to be decommissioned and dismantled in due time. Installations (NPPs, nuclear plants, research installations, etc.) have to remain at all times in a satisfactory safety condition, even they have ceased to be operated, taking into account the specific nature of the dismantling operations. Dismantling operations produce radioactive waste which has to be managed with the same principle as the above-mentioned one.    In this respect two important acts were promulgated in 2006:   * the “[Transparency and Security in the nuclear field Act](http://annual-report2006.asn.fr/PDF/nuclear-safety-and-transparency-act-130606.pdf)” (June 13th 2006), sometimes called TSN Act. * the "Planning Act on the sustainable management of radioactive materials and waste" (June 28th 2006). The articles of this 2006 Planning Act are now part of the Code of Environment.   1. **Radioactive waste management**   The general principles of radioactive waste management have been set initially by the December 30th 1991 Waste Act (called as well loi Bataille) and later modified by the above-mentioned 2006 Planning Act on the sustainable management of radioactive materials and waste, and are the following**:**   * sustainable management of radioactive materials and waste of whatever nature, resulting in particular from the operation or dismantling of installations using radioactive sources or materials, with due regard for the protection of personnel health, safety, and the environment, * in order to avert or limit the burden that will be borne by future generations, research is undertaken and the necessary means for the definitive securing of radioactive waste shall be implemented, * producers of spent fuel and radioactive waste are responsible for those substances, without prejudice to the responsibility their holders have as nuclear activity operators.   A National Plan for the management of radioactive materials and waste (PNGMDR) is considered as an important tool to improve radioactive waste management. The plan has been issued at the beginning of 2007 by the Nuclear Safety Authority (ASN) and the General Directorate for Energy and Climate (DGEC). It is notably based on the National Inventory of radioactive waste and recoverable materials) issued by Andra.   * 1. **Current waste management industrial solutions**   The management strategy must cover all categories of radioactive waste as prescribed by the legal framework. This involves setting up specific waste management systems, taking into account not only radiological risks, but also chemical and sometimes biological hazards incurred by that waste.  Waste management begins with the nuclear plant design, proceeds during the operating life of the installation through concern for limitation of the volume of waste produced, of its noxiousness and of the quantity of residual radioactive materials contained. It ends up with waste elimination (recycling or final disposal) via the intervening stages of identification, sorting, treatment, packaging, transport and storage. All operations associated with management of a category of waste, from production to disposal, constitute a waste management route, each of which must be adapted to the type of waste concerned.    The operations within each route are interlinked and all the routes are interdependent. These operations and routes form a system which has to be optimized in the context of an overall approach to radioactive waste management encompassing safety, traceability and volume reduction issues.  location04-small480  *Courtesy of Andra*  It is to be noted that long-term management solutions exist in France (repositories) for the categories of radioactive waste which represents the major volumes (but with a low radioactive content): the short-lived low- and intermediate-level waste (LIL-SL waste) and the very-low-level waste (VLL waste).  Studies are conducted for the High Level Long Life waste in a dedicated laboratory in Bure (Aube) in clay stone. CIGEO project is on the way, to know more http: //www.xn--cigo-dpa.com/. |
| Research | * Number of Research Reactors / Reactors for medical isotope production   There are several Research reactors such as OSIRIS, ORPHEE, ILL, PHEBUS, …they have different purposes : training, fuel studies, safety studies, ..  OSIRIS produces medical isotopes.  One research reactor is under construction in Cadarache: Reactor Jules Howoritz (RJH) which will be used for material testing and for radioisotope production.  One research facility is dedicated for fusion :TORE SUPRA  Regarding fusion, one have also to mention the ITER project under construction in Cadarache. |
| Post-Fukushima | ASN has issued specific post-Fukushima requirements (ECS = Evaluations Complémentaires de Sûreté) to be implemented in the coming years. This concerns:   * + Review and increase of major hazard levels (seism, climatic events,..)   + Fast track mitigation and remediation measures are being implemented   + Safety assessment for “hard core” functions have been performed, leading to reinforcement or replacement of old facilities with specific deadlines (no facility has been shutdown)   + New crisis centers are being built on NPPs and nuclear facilities   + National crisis organization: creation of the FANR in EDF and FINA in AREVA able to help distant sites, central coordination of all public forces at French government level |
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| website | www.win-france.org |