



## THE RESPONSIBLE DEVELOPMENT OF NUCLEAR ENERGY: FRANCE'S ACTION

Working paper submitted by France

“France’s vision is of a world that will not be divided between countries with nuclear technology, jealously guarding their privileges, and nations demanding a right to nuclear know-how that the others deny them. (...) In France’s view, civil nuclear energy can be the cement of a new international solidarity, where each country will need the others to advance”

*The President of the French Republic, Mr Nicolas Sarkozy at Paris Conference, 8<sup>th</sup> March, 2010*

France attaches a great importance to the development of peaceful uses of nuclear energy, an available, cost-effective and environmentally-friendly source of energy. It is fully committed to the application of article IV of the Treaty on the Non-Proliferation of Nuclear Weapons, and to a secure and responsible development of nuclear energy.

France is convinced that **nuclear technologies have a vital contribution to make in meeting essential human needs and sustainable development** and should benefit to all countries, in the fields of health, agriculture, industry, access to water and energy and protection of the environment.

### 1. FRANCE'S NUCLEAR COOPERATIONS: PROMOTING ACCESS TO CIVIL NUCLEAR ENERGY

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In a context of spiralling fossil fuel prices and the drive to combat climate change, France has expressed its willingness to assist any country wishing to access nuclear energy for peaceful purposes which fully abide by their non-proliferation obligations.

## 2. WHAT FRANCE DOES: CONCRETE ACTIONS TOWARD THE RESPONSIBLE DEVELOPMENT OF NUCLEAR ENERGY

<p><b>Support for IAEA's activities in the field of peaceful nuclear applications</b></p>	<p>France actively supports the <b>International Atomic Energy Agency's (IAEA) technical cooperation programme</b> and acknowledges its positive contribution for development. In addition to its participation in the technical cooperation fund, it also supports several actions via voluntary contributions (Placements for trainees, training expert assignments, financing of major projects, particularly in the fields of research into cancer treatments and fight against insects transmitting malaria).</p>
<p><b>Promote access for all to civil nuclear energy</b></p>	<p>France has signed many bilateral cooperation agreements in the field of peaceful uses of nuclear energy: <b>8 since 2008</b>. These agreements cover <b>all geographical areas</b>.</p> <p>Such agreements form the legal framework required for any long-term partnership and aim at enabling the development of cooperation under the best <b>safety, security and non-proliferation conditions</b>. The procedures for transfer of materials and equipment provided by France to third parties are designed to avoid any misuse, and include a specific commitment to use for peaceful, non-explosive purposes.</p> <p>In order to initiate full bilateral cooperation, France encourages its partners to complete their <b>comprehensive safeguards agreement</b> with an <b>additional protocol</b> and to adhere to <b>all relevant international agreements in the field of nuclear energy</b> (Conventions in the field of nuclear safety, Convention on the physical protection of nuclear materials, Convention on civil nuclear responsibility, etc.).</p> <p>France intends to develop its international cooperation <b>in complete transparency</b>, and in strict compliance with its international obligations. All agreements are <b>subject to approval from the European Commission</b>, in accordance with the terms of the EURATOM treaty, and <b>published</b> once ratified</p> <p>France has set up a specialist entity, the <b>AFNI (Agence France Nucléaire Internationale - French International Nuclear Agency)</b>, to assist countries wishing to access nuclear energy with the implementation of the infrastructures necessary for the safe development of civil nuclear energy.</p>

<p><b>Multilateral assurances of nuclear fuel supplies</b></p>	<p>France made a commitment, in conjunction with its European partners, to the EU's financial (up to 25 million Euros) and technical contribution to the creation of a <b>Low enriched uranium bank under the auspices of the IAEA</b>. France also supported the Russian initiative related to the creation of a LEU bank. These projects must allow countries which fully meet their non-proliferation obligations to have security of fuel supplies.</p>
<p><b>Control of sensitive technologies</b></p>	<p>France considers that a clear distinction should be made between:</p> <ul style="list-style-type: none"> <li>- the supply of reactors based on non-proliferating technologies (Light Water Reactors) and the supply of the fuel required for the operation, which should be facilitated,</li> <li>- and the export of enrichment and reprocessing technologies, which should not be forbidden , but strictly controlled due to the sensitive nature of these technologies vis-à-vis non-proliferation commitments.</li> </ul>
<p><b>Participation in the development of nuclear technologies for the future</b></p>	<p>France considers that international cooperation is essential for the <b>design of a new generation of safer, more competitive reactors, which will be more resistant to proliferation and generate less long-term radioactive waste</b>. France participates in the Multinational Design Evaluation Programme (MDEP), which aims to improve the efficiency and effectiveness of the safety evaluation procedure when reviewing new reactor designs. It takes an active part to multilateral initiatives in this field: Generation IV International Forum, IAEA's International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), GNEP initiative (Global Nuclear Energy Partnership). Regarding fusion technology, the ITER (International Thermonuclear Experimental Reactor) reactor will be located on the European site of Cadarache, in France.</p>

### **3. INTERNATIONAL CONFERENCE ON ACCESS TO CIVIL NUCLEAR ENERGY (MARCH 8 AND 9, 2010, PARIS): HELPING CONCRETELY COUNTRIES UNDERTAKING A NUCLEAR POWER PROGRAMME**

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**France's position is that the peaceful use of nuclear power should not be confined to the handful of states that already hold the technology.** At the same time, though, it is essential - both for the countries under consideration and for the international community as a whole - that any country undertaking a civil nuclear programme is capable of meeting essential requirements regarding safety, security, non-proliferation and protection of the environment for future generations.

On the initiative of the President of the French Republic, the International Conference on Access to Civil Nuclear Energy was held in Paris on 8 and 9 March 2010 in coordination with the IAEA and with the support of OECD, attended by all the stakeholders of the responsible development of civil nuclear energy:

- Representatives from **63 countries**, mainly at ministerial level, showing the importance of a high level commitment for the setting up the necessary legal and political framework,
- **13 bodies in charge of nuclear safety issues**,
- **30 research centres** involved in the implementation of international commitments in the field of nuclear energy,
- Many representatives from **nuclear industry, civil society**, as well as **public and private financial institutions**.

The Conference has launched a fruitful dialogue which should be continued.

#### **Giving priority to training**

“We will step up our efforts by creating an International Nuclear Energy Institute that will include an International Nuclear Energy School. It will bring together the best teachers and researchers to provide very high quality education (...). The Institute will be an integral part of the international network of specialized Centres of Excellence now taking shape. We will set up the first Centre in Jordan”

The President of the French Republic, Paris Conference, 8<sup>th</sup> March 2010

At a time when more and more countries wish to acquire electro-nuclear energy capabilities, **France, in accordance with the commitments it has made under article IV of the NPT, is ready to respond to these expectations** by making its recognized expertise available to any country which scrupulously observes all of its nuclear non-proliferation commitments and in particular those required by the NPT.

**Far from being antagonistic, the strengthening of the non-proliferation regime and the development of civil nuclear energy go hand in hand.** As the NPT itself says, the inalienable right of sovereign states to use nuclear energy for peaceful purposes granted in article IV is subject to strict compliance with the other provisions of the Treaty, particularly with articles I and II. This is because the right to peaceful use of nuclear energy must not be circumvented in order to use technologies, equipment or nuclear material for purposes contrary to the aims of the Treaty. The international community must make every effort to share the benefits offered by civil nuclear energy, whilst eliminating the risks of proliferation associated in particular with the fuel cycle

That is why France wishes that the 2010 NPT Review Conference provides an opportunity to reaffirm the **major principles governing and facilitating the sustainable development of civil nuclear energy.**

*“The responsible development of nuclear energy is a critical issue for the future of our planet. We have to work together to achieve new nuclear governance based on an enhanced IAEA.”*

The President of the French Republic, Mr Nicolas Sarkozy, Paris Conference, 8<sup>th</sup> March 2010

#### **4. WHAT FRANCE PROPOSES, TOGETHER WITH ITS EUROPEAN PARTNERS:**

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- Assist countries to **plan and assess** their various energy needs;
- Assure a **responsible development** of peaceful uses of nuclear energy in the best safety, security and non-proliferation conditions;
- actively support efforts to further develop **multilateral fuel cycle mechanisms**;
- Promote the **highest non-proliferation, nuclear safety and security standards** and practices by assisting willing partners to set up the right regulatory, administrative and human environments;
- Encourage countries, which have not done so, to **join all relevant major nuclear conventions**, in particular in the fields of nuclear safety, physical protection and civil nuclear liability;
- Promote **responsible management of spent fuel and nuclear waste**, and assisting countries to plan waste management solutions, including regionally;
- Assist countries to set up or to reinforce **robust export control** systems;

- Support **IAEA assistance programs** and IAEA nuclear security fund with funding and technical expertise;
- Support national, bilateral and international efforts to **train the necessary skilled workforce** ;
- Seek to ensure the maximum appropriate **transparency and access to information**;
- Promote **health and agricultural nuclear applications**, in particular the fight against cancer in the developing world, hydrological applications, and helping developing countries to improve radio-protection.