

2018 French IPPAS mission – Experience and lessons learned

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I - Introduction

a) The French nuclear security competent authority

According to the French national security strategy, there is in each ministry a dedicated entity in charge of implementing the policy developed by the General Secretariat for National Defense and security (SGDSN), a service of the Prime Minister. In each ministry, the dedicated entity is called the Senior official for defense and security (HFDS in French). Within the ministry for an ecological and solidary transition (MTES in French), which is in charge of energy, the HFDS is the nuclear security competent authority, notably in charge of:

- Issuing the regulation for the security of nuclear material, facilities and transports, and the security of radioactive sources ;
- Licensing operators, facilities, transports, carriers and vehicles;
- Controlling through inspections and exercises;
- Enforcing in case of significant deviation from the regulation.

To perform all these duties, the department for nuclear security has been created in 2010 within the service of the HFDS.

b) A political decision

During NSS 2016, President HOLLANDE stated that France would host a mission in 2018. This decision was consistent with the action plan in support of IAEA that mentions, among actions to be done “*E. IAEA SERVICES FOR STATES*”

1. Use the IAEA’s extensive nuclear security services and to make available experts to the IAEA to carry out these services, including the International Physical Protection Advisory Service, International Nuclear Security Advisory Service, nuclear security training, exercises, education and workshops”.

As the competent authority, MTES was in charge to host this new mission.

c) Modules covered

Before this new mission, France had already hosted its first IPPAS mission in 2011. This year, the modules covered by the IPPAS mission were the following:

- National review of nuclear security regime for nuclear material and nuclear facilities (module 1)
- Nuclear facility review (module 2): visit of Gravelines NPP, one of the biggest in Western Europe, operated by EDF

It was decided that the 2018 mission would be a follow-up of the first mission and a full mission as the 2011 mission had taken place long before

The modules covered by the 2018 mission were the same as those covered in 2011. In addition, the IPPAS team reviewed module 5 dedicated to computer security. The facility chosen by France for the review of module 2 was the enrichment facility Georges Besse II, operated by ORANO.

II – Conduct of 2018 French IPPAS mission

For the preparation of the mission, a clear framework was at first defined, thanks to an exchange of letters. Then took place the selection of experts, with suggestions made by IAEA and a validation by MTES. The team was composed of a team leader from UK, experts from Europe (Belgium, Lithuania, Germany, the Netherlands, Finland and Hungary) and the IAEA technical officer. Each of the experts had an expertise in one or two fields: computer security, response forces, accountancy, regulation, etc. Almost all of the experts came from their national nuclear security competent authorities and had a significant and relevant experience to perform such missions, in particular those who carried out inspections in their country. Even if IPPAS missions are not inspections, the process is similar and sounds familiar to nuclear security inspectors.

A preparatory meeting was held in France several months before the mission to clarify the framework of the mission, the agenda and logistical arrangements. The advanced information package was sent to the experts in order to give them a general overview of the French nuclear security regime and the activities of the operator.

Presentations were prepared by the key French stakeholders, such as the services of the Prime Minister, the Ministry of Europe and foreign affairs, the ministries of Interior and Defense, the operators EDF and ORANO, the TSO, etc. The general consistency of the presentations was reviewed by MTES.

Then, the mission started and was composed of two weeks of intensive work, including two days within the facility. Some time slots were used to organize specific interviews in order to clarify some technical issues. No classified information was given to the experts during the mission. No classified information was given to the experts. To take the example of the DBT, the experts didn't need to read it to understand the process used in France to develop it. The draft report was submitted to MTES for comments and observations two days before the closing meeting.

The report provided by the experts to the MTES at the end of the mission concludes that “*The nuclear security regime in France is robust and well-established, and incorporates the fundamental principles of the amended CPPNM*”. It also contains recommendations, suggestions and good practices applying both to the State and the operator ORANO. The final report was given a few months later, after France had the possibility to review it carefully.

III - Lessons learnt

a) Preparation

The mission was an opportunity to draw some lessons, especially with a view to next missions that could be hosted by France in the future.

A good practice was the rehearsal of the mission one month before it took place. It was helpful to allow different stakeholders to feel fully involved and to communicate with each other. It was another opportunity to amend slightly the agenda before the actual mission started.

Then, during the mission, experts had no much time to draft the report and they relied on the Advanced Information Package to write it. In consequence, we concluded that the content of the AIP can have a significant influence on the way the report is written.

As mentioned before, many entities were involved to present different facets of the French nuclear security regime and it was necessary to take into consideration the fact that the terms used in the field of nuclear security are sometimes very specific. For instance, computer security is preferred to cybersecurity. Thus, MTES chose to use interpreters in order to give a speech as clear and precise as possible.

b) Collaboration with the experts

Before the mission, the way the experts would work was unknown but there was no bad surprise. Indeed, during the mission, the team had a constructive and collaborative approach and the mission was never experienced as an inspection nor an audit. MTES was impressed by their ability to understand so quickly the French nuclear security regime that was in some cases different from the one of their own country.

The draft report was reviewed by MTES and discussed with the experts, as well as the recommendations, suggestions and good practices it contains.

IV - French consideration on IPPAS missions

France fully supports IPPAS missions and French experts take part to such missions on a regular basis. The missions play an important role to provide with an external review of a nuclear security regime and its implementation on a nuclear facility. In addition, it gives international weight to the reliability and credibility of a country in the field of nuclear security.

France considers it as a very relevant tool developed by IAEA, whose legitimacy is internationally recognized, that can serve national authorities, according to their needs, to improve nuclear security globally. Internally as well, it can be a very good opportunity to raise the awareness of all the national stakeholders and to (re)create momentum.

V – Suggestions on IPPAS missions

In some countries, competent authorities in charge of the preparation of IPPAS missions have in some cases few human resources to prepare the missions and to host them. It is proposed to IAEA to give the opportunity to countries to host missions on very specific areas such as the development of DBT, the protection of sensitive information, security culture, etc, instead of tackling all topics covered by modules chosen by the country.

These tailored missions would require less time of preparation, less human resources for the host country and the IPPAS team. Finally, it could match more to the immediate needs of the country.