
Exercises in the field of security

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Abstract:

In the aftermath of 11 th September attacks, the French government required by an order than large scale exercises, in the field of security in sensitive sectors, must be performed at the national level. The main aim of such exercises is to test national contingency plans.

The Authority in charge of security for nuclear materials and nuclear facilities commissioned IRSN to build scenarios related to the French DBT and representative of realistic situation. All the entities involved in such crisis – Operators, state agencies at local and national levels – will be implied.

The main characteristic of these exercises is the duality between “Safety crisis” for which the management of emergency plans is tested from years and the classic “security crisis” well known by security people in areas like bank, jail, madman, hostage crisis, etc. Merge these two aspects in an exercise and combine theft of nuclear materials and hostage crisis in the same scenario leads to interesting results and ways of improvements.

The objective of this paper is to present briefly the different type of exercises performed in the field of security and develop some aspects of large scale exercises.

1 INTRODUCTION

In the aftermath of 11 th September attacks, the French government required large scale exercises in the field of security in sensitive sectors. The main aim of such exercises is to test national contingency plans and to imply all the entities involved in such crisis.

In the field of security of nuclear materials and nuclear facilities the French Competent authority commissioned IRSN for leading this kind of exercises (namely EPEES : Security, Protection and Evaluation Exercises) and proposing scenarios.

The scenarios must be in compliance with the french Design Basis Threat (DBT). It must be realistic in term of delay and the scenario must allow - by the engagement of a mock commando type adversary force - the response of the security forces as required in the contingency plans. All the entities involved in this type of crisis must play their role. In an other hand, Authority requires EPEES exercise as closed as possible actual situations.

Obviously, numerous aspects of exercises in the field of security are confidential and the purpose of this paper is not to describe in details scenarios, exercise performances and the completed feed-back but to emphasize some aspects.

2 FRENCH CONTEXT IN THE FIELD OF CONTINGENCY PLANS

The responsibilities of French authorities in terms of control and emergency planning are clearly distributed:

- An inter-ministerial Secretary (the Secretary-General of National Defence (SGDN - inter-ministerial secretary) for coordinating and planning exercises,

- The Safety Authority (the Directorate for Nuclear Safety and Radiation Protection (DGSNR – Ministry of Industry)) for nuclear safety supervision,
- The Security Authority (the High civil Servant for Defence (HFD) from the Ministry of Industry) for nuclear materials and facilities security supervision,
- The HFD's Technical Support Body (IRSN) acts to define the scenario, to coordinate the exercise and to assess the results.

One particular aspect of the French context in the field of security is the change of responsibility in the lead of the response plans which depends on the level of the crisis. For current events concerning protection, like alarm assessment or response at a low level of force by guards, the Operator representative is responsible. For more serious events requiring action of law enforcement force (Police or Gendarmerie) the responsible becomes the Administration representative (Prefect). Also there is a sharing of responsibilities between authorities and operator in term of action to be taken in case of an attack on a nuclear site.

Graded action plans are applied corresponding to the analysis of the situation. On a local level the first response is given by the local security guards, if necessary the local administration, under the responsibility of the Prefect: local Police and Gendarmerie forces and other entities involved in emergency plans operate. If the crisis is severe (terrorism, hostage crisis ...) special law enforcement forces respond: RAID (Police) or GIGN (Gendarmerie). The emergency plans implemented during such exercise cover on-site emergency plan (namely PUI), off site emergency plan (possible protection of the population around the site – namely PPI) and an emergency plan against malevolence the PIRATOME emergency plan which is the governmental plan intended to deal with threat involving nuclear and radiological materials.

3 TYPE OF EXERCISES

To test these plans or procedures three levels (or types) of exercise are performed in the field of security:

First type is limited at the operator level and involved on site response force (guards) and personnel implied in security matters. In such drills actions by guards related with the physical protection system of the site are tested like alarm assessment, response on nuclear material related alarm, delay for response, capability to alert Authorities. Other topics could be examined like simulation of an internal threat or the detection and the management of an explosive device. These exercises are organised in each site several times per year (typically 4 to 6 times).

Second type implied on site and off site response forces. Mains objectives are to test intervention procedures, management of interfaces between on site and off site response forces and typically response to counter outsider (external threat). These exercises are performed one time per year and per site.

Third type, the EPEES exercises are organised at the State level with the co-ordination of a national body. One per year is performed successively between the three main French operators. Numerous entities are involved: operator, local and special law enforcement agencies and local and national authorities.

The objectives is to test the overall organisation of the plan of action implemented, in particular the interfaces between operator and authorities, the organisation of command

posts (location and equipment) and communication with the general public and media are examined. An other aim is to evaluate the different plans available in the field of security. The co-ordination of interventions are also tested and points like alert of the units involved, assessment of this alert and response times, means used by response teams in particular transmission are evaluated.

4 LARGE SCALE EXERCISE

4.1 Objectives

The actual goal of these exercises is more to examine how the parties involved manage the crisis than to test the physical protection system and the response capabilities of the law enforcement agencies.

The main points assessed during exercises are :

- the global operability of the decision-making chaine integrated to the crisis management,
- the co-ordination of the differents entities involved and the global system,
- delays and means of response,
- means of transmission,
- reactivity of the decision-making and corresponding action to take,
- the posts of command (location and means),
- specificity of the dual crisis (terrorist commando in nuclear environment).

4.2 Exercise preparation

These exercises need a lot of preparation, one year is necessary for each. The HFD commissions IRSN to assist him in the preparation.

The first step consists in the choice of the operator then the facility where the exercise will be performed. The exercise programm is built to involve the main french operators.

A kiff-off meeting is organized to define : period of exercise, the participants, the specific objectives and the organisation of the work.

During the phase of preparation two main activities are carried-out : the definition of the scenario and the organisation for logistic

The definition of the scenario is carried out by a working group of experts from operator, law enforcement agencies and HFD/IRSN. This task covers the type of attack and the choice of the facility (or facilities) which allow to have a dual problematic : severe attack and sensitive material involved in the same time and location. The general outline of a realistic scenario is written in particularly the method of action used by the attacking party constituted by a mook attacker team. Then a precise chonology of the events and the characteristics of the commando are detailed.

The following working conditions are applied for the preparation:

- The scenario's writer who will be the exercise co-ordinators, cannot be "players",
- The applicable alert procedures and response delays must be respected to guarantee realism,
- The security of people, property and safety of the installation must be guaranteed particularly concerning the use of armament,
- The site must retain a constant level of safety/security and provisions for additional measures must be defined,
- The exercise and related documents must remain confidential.

An exercise protocol is draw-up, where all the points listed below and the role and responsibilities of all the participants in the exercise are defined.

The figure 1 shows the role of participants, in blue boxes are the direction of the exercise and the animation team, these entities do not play, just pilot the exercise's performance. In the red box are all the actors, these entities don't know the scenario and manage the crisis. In the black box are the "evaluators", the assessment team, where each entity has representatives, each of them examines more particularly entity he belongs.

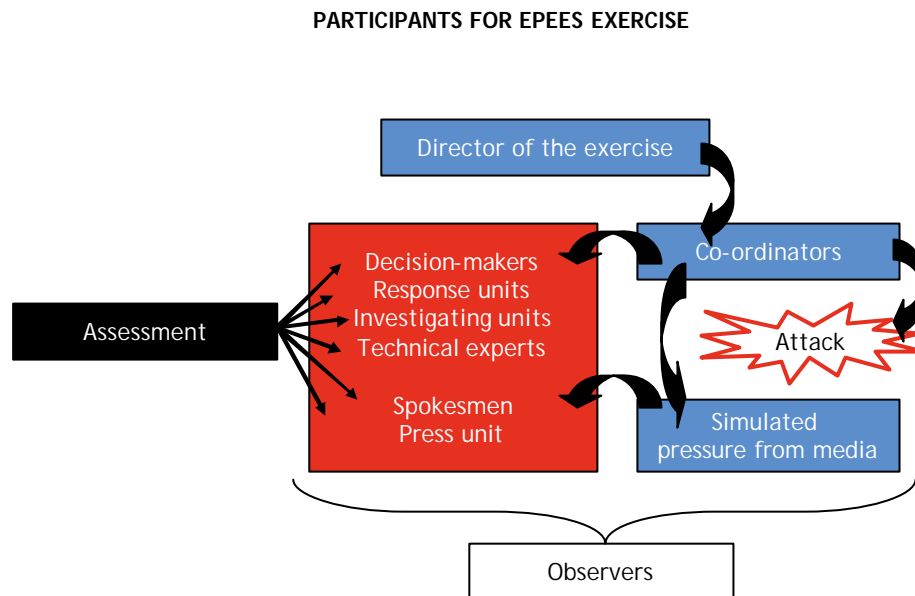


Figure 1

4.3 Exercise performance

The exercise is launched after authorisation by the minister of industry representative after the operator's representative has checked that such exercise could be performed.

Elected representative and operator personnel are informed just before the exercise is to take place. Concerning actual communication, press releases and statements are prepared in case of the media appears during or after the exercise.

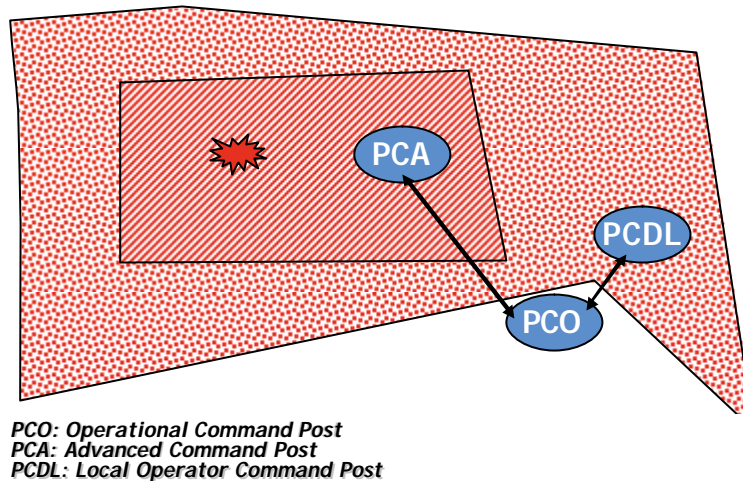
Simulated communication is injected by a specific team playing media, elected representatives and hostage's family.

A film is recorded especially on the response action for timely analysis.

The emergency plans implemented during such exercises cover on-site emergency plan (namely PUI), off-site emergency plan (possible protection of the population around the site – namely PPI) and emergency plan against malevolence, the PIRATOME emergency plan which is the governmental plan intended to deal with threat involving nuclear and radiological materials.

In particular due to the complexity of the management of this kind of crisis where Safety and Security have to be considered, several posts of command operate in parallel with a great number of actors (figure 2).

LOCAL COMMAND POSTS



In the performance of exercises some current limits must be considered. A great number of stakeholders are concerned by a large security emergency and currently only few are requested. A certain number of skews are introduced in the aim to not compromise security, safety or proper operation of the nuclear facility, so certain parts are played and others simulated and the total time of the exercise limited to approximately 10 hours.

4.4 Debriefing, analysis and assessment

Immediately after exercise debriefing is organised on the site for all the entities involved. Each of these entities have two months to perform analyses of the exercise and to transmit conclusions to the Authority.

5 SOME POINTS OF INTEREST

5.1 Realistic aspect

The nature of the attack by a violent mock team which takes delays for overcome obstacles and progress on the site and inside the facilities give a dynamic approach of the “foot race” between attackers and response. The use of actual alert’s means and procedure, real response forces action give a good picture of the delays necessary to respond properly to the level of threat considered.

Also, the scenario must be prepared very carefully.

In particular, this aspect implies to analyse in depth problems of security caused by armament and nuclear safety. Also, the animation team must foreseen all the situations and have always “an advance time” in regard of the action in progress.

5.2 Applicability of plans

One interest on these exercises is that when an exercise is decided somewhere the applicability of plans is checked and if necessary the plans are updated. Exercise plans is a good means to obtain them maintained and relevant.

5.3 A critical period

It's obvious that the beginning of such crisis, at least the first quarter, is a critical period. Due to the surprise impact and because for an exercise no advanced warning is taken into account. During this period of time, the crisis management responsibility is on the operator, and possibly, at a non decisional level. For that reasons, necessity of relevant reflex procedures, periodically tested, is clearly identified.

5.4 Organisation of the crisis team

If, for safety crisis one dedicated command post with relevant procedures is available any time on each site, for security crisis the situation could be less favorable. Today, implement a command post for security crisis is not a mandatory for the operator.

In the matter, several options could be examined, the same command post for safety and security purposes, one post dedicated to safety and other one for security. Due to the great number of people involved in this type of crisis, the command posts were separated and the transfer of information, sometime of responsibilities, between these posts a point to examine and assess.

The first representative of law enforcement force who arrives on site has to organize the "command post" dedicated to the Authorities.

5.5 Response time

Assessment of these exercises stress that response forces delays must be seriously examined and precised. What is the meaning of the "response time" taking into account in the security studies, the time to join the site, to assess the situation or to interrupt the malevolent action in progress ? This question must be considered in regard with contingency plans.

6 CONCLUSION

Following first exercise performances, all the entities involved (or invited as observer) have emphasized the interest and the value of such exercises. In these tests, the necessity to be able to manage interfaces and to share responsibilities in the aim to cope with severe malevolence threat was pointed. Axes of progress and improvements defined at the participant level.

EPEES exercises are an appropriated tool (and eprouved now) to test severe security crisis in sensitive area like nuclear industry related with french design basis threat.