DIALOGUE WITH THE PUBLIC

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SUMMARY

Transport is a vital element of and for the nuclear industry. Contrasting to new multimedia technologies, it continues to use classical ways, which means road, sea, air or rail. Moreover, the growth of nuclear transportation will go together with its industry increase outcomes. Actually, this sector concerns all the stages of the nuclear fuel cycle. It begins with mine extraction, conversion, uranium enrichment, fuel fabrication, transportation of the fresh fuel to the reactors followed by spent fuel reprocessing, waste treatment and conditioning, MOX fabrication, etc.. and indeed between each steps of this long list of operations and processes some transport activities take place.

Transportation appears therefore as a key component of the nuclear fuel cycle industry. It contributes to the production of one of the most vital commodities of the modern world: electricity. Indeed, it does so in a safe, regular and cost-effective manner.

However, the quantities transported by this industry are very low as demonstrated further on. Over 10 million radioactive material packages are transported all around the world each year. Only 5% of these relate to nuclear fuel cycle materials. The remainder consists of radio-isotope transports, generally used for medical purposes.

Despite these small quantities, the nuclear transportation industry faces a real challenge mostly due to its economical, public and strategic place. This former principle has to be explained. Thus, communication plays an increasing role in this framework. Moreover COGEMA and Transnucléaire, its supplier in the nuclear fuel cycle transportation, have developed a policy of transparency, clarity and openness, in order to explain, educate and inform the Authorities as well as the international and national publics. We feel that this is not only made in the interest of COGEMA, Transnucléaire and their customers, but also in the interest of the industry as a whole.

NUCLEAR TRANSPORTATION FACES WITH REALITY

Despite its strategic place, the nuclear transportation industry remains a modest one. It involves specialists. In the transportation framework, because it concerns both nuclear matters and takes place in the public domain, every precaution must be taken both to eliminate serious accidents and to avoid, as far as possible, minor incidents which might endanger the public confidence, even if they do not result in any nuclear risks in relation with the radioactive nature of the cargo transported.

Considering that the transport of radioactive materials is a world-wide business, a minor incident in a certain part of the world might jeopardize the activity of another part of the industry in a totally different part of the world, thus any operator should consider itself as responsible towards the rest of the industry.

In France:

15 million dangerous goods containers are transported each year. 300 000 - 2% of the total - are radioactive materials (200 000 of these are radio-isotopes). 15 000 are related to the nuclear fuel cycle, which is 5% of the 300 000 and 0,1% of 15 million. Finally, only 750 are Type B packagings for high activity materials (spent fuel, plutonium, fresh MOX - Mixed Oxide fuel - fuel assemblies, HLW...). This number represents 5% of the number of movements of containers all along the nuclear fuel cycle and 0,005% of the total dangerous goods containers transported.

The activity distribution of those radioactive materials transports is eloquent: 60% of it goes to medical uses, 29% to industrial uses, 5% to nuclear reactors, 3% to waste repositories and 1% to research centres which are part of nuclear industry.

More precisely, in France, considering only the transports made in relation to the production of electricity by EDF, there are in a year:

- approximately 40 transports of ore concentrates ;
- 200/240 shipments of UF6 and fresh fuel (UO_2 and MOX) ;
- 100/110 transports of spent fuel ;
- 500 shipments of waste ; and
- 150 of materials arising from reprocessing (uranium and plutonium).

The total amounts to about 1000 transports per year, most of them being performed by rail on most of the itineraries.

In the United States:

Approximately 3 million shipments of radioactive materials occur annually, mostly on highways. The great majority of these are radio-pharmaceuticals. Only 0,5% of them concern the nuclear fuel cycle. Moreover, since 1995, less than 20 packages of spent fuel were transported in each year.

This world-sized activity in Europe, in USA, between the Far East and USA and Europe, has taken place for 35 years without any injury arising from the radioactive nature of the material transported. This excellent safety record, throughout such a long period, certainly form part of the basis of the credibility of the authorities and of the operators in this field.

THIS REALITY TAKES PLACE IN THE PUBLIC DOMAIN AND NATURALLY IMPLIES COMMUNICATION WITH THE PUBLIC

Above all, alike most of the transportation activities, the transport of nuclear materials takes place in the public domain, which means that it has a close relationship with both the public and the environment. Thus, this situation concerns everyone.

Actually, much more than any other kind of transportation, nuclear transport is wrapped in a very strict set of rules. There are several reasons for this. On one hand, it is to protect the material transported itself from human errors and interventions (theft, loss,..) this is the purpose of physical protection or security rules. On the other hand, it is to protect the public itself and the environment from the contamination and irradiation risks associated with the radioactive nature of the material to be transported: these are the safety rules. Such safety rules started to be developed in France and in other countries with a nuclear programme almost 40 years ago. Since then, they have been constantly improved, adapted and reinforced: they provide safety, quality and effectiveness to the industry.

Quite understandably, these rules are somewhat international ; like indeed most of the transport, and relatively stable nowadays although some reinforcements are foreseen (for example transports of plutonium by air). When discussing safety in respect of the transportation of radioactive materials in general, and of spent fuel, waste or plutonium in particular, it is important to recognize the gap between « actual » safety as felt and recognized by the authorities, either national or international, and the « publicly perceived » safety as seen from the public, the media, not to speak of anti-nuclear groups.

In fact, the industry has to deal with three aspects:

- The concern about the safety of hazardous materials transportation in general has increased during the last two decades: the public is fond of transparency and its expectations and concerns are legitimate: indeed this is quite understandable as many accidents occur on roads, motorways. some with severe consequences when dangerous - although not

radioactive - goods are involved ; it is worth noting for example that we have an exemplary safe but unknown transportation record.

- The media play an increasing role to form public perception and opinion ; again this is perfectly understandable knowing that the public knowledge on this matter is extremely limited: the industry has thus to anticipate and explain very quickly any special situations. This is a difficult task but a mandatory one.

- The communication systems are such that any event can be known world-wide very quickly. This is the result of the modern communication's boom. For instance, over the past few years, particular shipments took place under the public interest, sometimes among strong but limited protests voiced by opponents: most of their arguments focus on the safety aspects to these transports. Moreover, some antinuclear groups focus on nuclear transports because they intend to destabilise the whole nuclear industry. Our duty is to demonstrate that such nuclear operations are routine and are made with safety and professionalism.

THE EXAMPLE OF COGEMA AND TRANSNUCLEAIRE

COGEMA and Transnucléaire know that the success of nuclear material transportation relies on two major criteria: effectiveness and safety. Communication policy with our foreign partners, information of the general public and the decision-makers are part of the nuclear industry role and are key elements to achieve global acceptance of nuclear material transports by the public.

The COGEMA Group's communication has adapted itself during the recent years to face this new reality. The public, from now on, wants to play what he thinks to be his legitimate role in a matter in which the attention is focused on environmental topics.

Relevant industries have to be aware of it. The progress made during the last few years might not be enough. We have been and we are always questioning ourselves on this issue. Let's then review firstly the communication policy and secondly describe examples of communication actions.

The COGEMA Group carries out its communication policy in three main ways.

- Firstly, numerous different leaflets are published each year. These leaflets explain the activities of COGEMA and its affiliated companies. These brochures are updated and improved on a routine basis. In addition, each of COGEMA plant sites publishes its own monthly newsletter, which includes the result of environmental monitoring activities.

- Secondly, all facilities can be easily visited by the public. For instance, COGEMA La Hague site receives each year more than 10 000 visitors of the general public.

- Finally, relationship with the media is becoming more natural and frequent. Press releases are part of the communication policy, even when there are no special events to justify them.

Basically, the communication actions implemented have three main goals: public education, public information and clarity of the information delivered. This is « Dialogue with the public ».

- Firstly, public education, that means helping the public to improve its own judgement in order to take into account the merits of an activity and not only its inconveniences, and in order to help it to distinguish between real risks and perceived risks.

  This question, which is central to COGEMA Group efforts, has two aims:

  - maintain the generally good support by the French public of the nuclear electricity generation programme,

  - convince not necessarily the greens, but at least their supporters, that nuclear energy is one of the less dangerous and less polluting energy resources.

  The case is excellent but, paradoxically, efforts to convince the opinion, including that of some opinion-leaders, will have to be strong and steady.

- Secondly, public information, which means providing information to the public to confirm or form its education. This requires a good appreciation of the events, that necessitates anticipation, analysis and transparency... goals which are sometimes difficult to reach altogether at the same time.

  Transnucléaire has participated in many actions to inform the public, the press and key representatives of various professions.

  Transnucléaire has organized an action which might prove useful although it was neither noticed nor reported by the media at the time: in September 1997, on behalf of COGEMA, BNFL and the Japanese Utilities, Transnucléaire organized a meeting called EVIDENCE which gathered together some 30 people of very different origins (experts, scientists, academics, journalists,.) from different countries (USA, Australia, Chile, Argentina, Jamaica, New-Zealand, South Africa, Barbados, Fiji, Panama).

  The purpose was to show those persons the reality, throughout Europe, of the reprocessing/recycling business, including its transportation aspects. This Public Acceptance mission was made mostly to demonstrate that this industry is full-grown, safe and far away from what is usually presented by the antinuclear groups. The indirect result of this mission was to create links among people, outside of the nuclear industry and

specially of the nuclear transport industry, known in their respective circles for their independent and balanced judgement. These people can now exchange views among themselves and prepare themselves to react when the public, the authorities and the press of their respective countries are confronted by circumstances, both real ones and also those artificially created by some anti-nuclear groups, fond of oversimplification, with high profile attributes aimed at frightening the public by using emotive assertions.

- Finally, clarity of the information delivered: Some people want an immediate answer on any event. However the information we have to deliver has to be clear and accurate, thus we have to work carefully on it. This is the reason why we never make an immediate answer on a difficult subject, even if there is another, quite understandable, expectation from the public. We have also to find a subtle balance between the necessity of transparency and the security requirements.

CONCLUSION

Transnucléaire, like COGEMA and most of the players in the nuclear industry world-wide, has adapted itself to a new demand of the public: knowledge for nuclear matters. We do it seriously, we maintain our openness and implement a proactive communication policy. We listen to people's concerns about what they want to know through discussions, explanations, demonstrations, visits and information. We do out best to be dynamic and to develop our anticipation sense: we try to anticipate critics, that is to act and not only to react. Our aim is to « de-legitimate » the opponents and to avoid to engage ourselves in an on-going debate.

We have to keep in mind the reality of the nuclear transportation activity: whatever the particular circumstances of one transport operation or another (various geographical, political, economical, or even media aspects), any response or initiative has to be closely evaluated in a global context. It is especially important to underline that the nuclear materials transportation systems is an international one.

For many years, international agencies such as IAEA, IMO and IACO, in charge of these matters, have efficiently dealt with regulatory issues. The result is a world-wide implemented safety-oriented regulatory framework applied to all types of transport conditions, whether normal or accidental. Added to that, these international regulations have been implemented through national legislation.

This transportation system efficiency and the consistency between all relevant organization's attitudes and actions have to be protected, or even improved: it is perhaps one of the most important tasks of the nuclear community leaders.