

The independant qualified expert as an inspector

Koen Persyn, Jef Van Cauteren, AV Controlatom

In Belgium the role of the regulator and that of the inspector have been separated for 40 years.

Several governmental departments have acted as regulatory body until, in 2001, this has become the sole responsibility of the Federal Agency for Nuclear Control (FANC). This FANC has been created for this purpose and was originally staffed with people coming from former governmental departments.

In situ inspections have all this time been executed by private non-profit organisations (licensed inspection bodies).

Installations are divided in three categories (class I, II and III).

Class I installations need to organise a health physics department. This department is lead by a radiation protection expert, specially licensed for this task by the Competent Authority.

Independent inspections by a licensed body have to guarantee the independence and quality of these health physics departments.

Class II or III installations have the choice to either organise their own health physics department (and have it inspected by a licensed body) or to delegate the tasks of this department directly to a licensed body.

The quality of the radiological protection in Belgium is guaranteed by the high demands on the health physicists, be it leading the health physics department or working in a licensed body. To become a class I health physicist one needs to be a nuclear engineer (or equivalent), for class II and III an engineer, physicist, chemist or a non academic engineer. Furthermore a sound training in health physics and an important field experience is needed.

On top of this comes a continuing education, without which a prolongation of the license is impossible.

To guarantee a continuous follow up, the licensed body must perform in every installation a minimum number of visits per year. This inspection frequency, of course, depends on the risks associated with the installation.

On top of this the FANC can also perform inspections, at random or following a complaint. The FANC inspector has the possibility to enforce the implementation of the regulations. This is a strong advantage when compared to the inspection bodies which mainly have an advisory role.

One of the most important advantages of having these licensed bodies inspecting all sorts of installations several times per year is the structural implementation of the ALARA principle.

Comparison between installations and numerous discussions amongst the health physicists ensure the highest level of ALARA possible

Even though this system has worked well in Belgium for almost 40 years, a recent law might have an important influence on this system.

After a transitory period (due to end September 2003, but prolonged by a year) the FANC has to combine the task of regulatory body and the task of the licensed body. At the time this abstract is written, it is not yet clear what the implications will be for the radiological protection in Belgium.