STOCKPILE MANAGEMENT AND REDUCTION

As demilitarisation activity increases worldwide and increasingly effective recycling and disposal techniques are used the process of stockpile reduction becomes cheaper and will, hopefully, eventually become cost neutral.

To assist in implementing good management of stocks of ammunition worldwide the GICHD are developing a tool which will assist developing countries to introduce sound ammunition safety management techniques at a relatively low cost, enabling them to look after their munitions and decide which stocks are surplus to their requirement.

Meanwhile there are several ongoing stockpile reduction tasks which are showing the rest of the world how cheaply it can be done.

One example:

Denmark had a stockpile of just below 2 ½ million sub munitions which had to be disposed of. These sub-munitions were contained in:

27k Rd 155mm DM664
15k Rd 155mm DM662
and 20 Mk 20 Rocket dispenser systems.

Their initial concerns on costs were eased when they found that these weapons and ammunition were covered under the terms of their existing ammunition disposal contract with EXPAL, a Spanish firm with wide experience in demilitarising ammunition.

The estimated cost was 2.5 m Euros, working out at approximately 1 Euro per sub munition.

All positive actions taken to dismantle the weapons can be carried out remotely – human contact is only required to set each positive action up.

The Fuzes and ejection charges are the only parts destroyed – everything else can be recycled.

All the large metal items which are removed to recover bomblets, that is casings and the like, have value in their metal content.

The Bomblets, once the fuzes have been remotely cut off, are broken down using cryofracture, where they are frozen in Liquid Nitrogen to minus 195.8° C then crushed and the explosives and other materials separated. These parts are then also recycled.

EXPAL are reducing the cost all the time as they continually refine the technique – the price also reduces when ammunition is disposed of in bulk quantities.

The low cost of disposal isn't the only positive aspect to stockpile reduction – on the monetary side it reduces storage costs. More importantly it reduces the danger to the community by removing the older items of ammunition – it is in these older items that the explosive contents, especially nitro cellulose based propellants, are likely to

have deteriorated to such an extent that they present a massive hazard due to spontaneously combusting and causing fires, which can then spread to the rest of the stockpile leading to mass explosions.

From the evidence available it is apparent that those countries which allow stocks to age and become dangerous are also those most likely to have inadequate storage facilities and to not follow basic ammunition safety rules.

To summarise, ammunition store explosions result not only in huge clear up costs, but have a large human toll in deaths and injuries. Many people become homeless and the compensation costs are potentially massive. The cost of stockpile reduction is a far cheaper option – the sooner this action is carried out the more money a nation will save and the safer its people will be.

CM ID Tool

CLUSTER MUNITION ID TOOL

ID of CM can be complex.

The definition at article 2 of the Convention on CM (CCM) identifies the ammunition which is covered by the treaty as – 'a conventional munition that is designed to disperse or release explosive sub-munitions each weighing less than 20 kilograms, and includes those explosive sub-munitions'

BUT – it also includes descriptions of specific design features which exclude certain weapons from the Convention.

Non-Technical staff from the States Parties to the CCM may find it difficult to understand these differences in definitions when reporting stockpiled weapons.

GICHD have created a software tool – CM ID Tool – to address knowledge gap.

The tool can assist in identifying each weapon or sub-munition and tell us whether it is covered under the CCM.

It gives weights, contents, the make-up of weapons and bomblets and their dispersal methods, how many bomblets per weapon and so on. It is funded by Norway, Japan and Switzerland. Technical details have come from several countries, and there has been collaboration with many organisations and companies.

SHOW TOOL AND EXAMPLE

The tool is currently on MS Excel. Next step will be to put it on the net as a web based integrated tool – this will allow the expansion of information, including more photographs.

The new edition will give more examples of markings, the weapon footprint when it is used, the systems using it and so on. There will also be a comprehensive collection of pictures and videos of the weapons at various stages of their life (ie pristine, after firing, after being left in the open) and of them in use.