

Handheld Test: Field Example

*Second Lieutenant Miguel Lopez Arias & Colonel Rafael Guerra Ibarra
(translated and summarized by Ananda S. Millard)*

The EOD IS-SURVEY tool has been used by the Chilean armed forces for testing purposes. The evaluation process began in March 2004. Here, some of the preliminary findings and comments regarding the tool, its usability and the Chilean experience are presented.

With specific reference to the components outlined below, the Chilean experience has thus far revealed the following:

- *Software:* It has become apparent that further training is needed so that software problems can be solved as and when they arise. The principal problem encountered is linked to transferring data from the PC to the Palm.
- *Hardware:* It can be difficult to see the screen of the Palm in daylight, the battery life is too short, and there is a need for a manual to assist in solving problems in the field.
- *GPS:* One of the machines failed owing to the effects of extreme cold. However, in general the GPS unit produces precise data. The battery has a long lifespan, and there are no problems with reception or linking to a satellite.
- *Binoculars:* In general, this tool is very useful when access to a mined area is impossible by land. However, the tool has demonstrated some precision problems, though these can be resolved by taking two or three measurements from the same point.
- *Camera:* We believe it would be beneficial to have a larger storage capacity for images. This would be possible if the external memory were enlarged.

On the whole, the actual use of the tool is not complex. However, problems arise when the system seizes up in the field without a logical explanation, and this can only be solved by shutting down and starting over again. Also, with reference to the transfer of data, the system is unstable. Usually, problems are finally solved by shutting down and restarting the system.

One of the benefits of the system is that the iPaq (Palm) has a large memory capacity, which is very useful in the field. However, the short lifespan of the Palm's battery and difficulties in clearly seeing its screen in sunlight are limitations at this time. Moreover, the maXML is easy to use as a program, but has presented some problems regarding data transfer.

In general, the system works well in a variety of settings, including adverse climatic conditions. The exception to this are problems with receiving signals on the GPS in temperatures of -10°C and below.

This prototype tool has been of considerable help in confirming the perimeter of suspected, in some cases previously marked, mined fields in Chile, despite some problems with the transfer of data into the IMSMA software. On the whole, the tool is very helpful for information management generally, and particularly in relation to data gathering.