

# Product Survey on DPW

The capabilities of the software systems listed differ a lot, and end-user scope and intended types of applications are the decisive elements in their choice.

Although many photogrammetric projects are still flown with analogue cameras, as soon as the film is developed it is scanned to transform grey and colour tones into pixels, so enabling a complete digital workflow. In our previous product survey (March 2005) we were able to conclude that the photogrammetric workflow had definitely become digital, enabling automation of such tasks as aerotriangulation, creation of Digital Elevation Models (DEM) and production of orthoimages. As a result, DPWs have become software products that run on off-the-shelf consumer PCs to which may be attached special mouses, stereo-viewing hardware, and sometimes hand and foot wheels or other devices to support specialised tasks.

The answer to the question of which is the best DPW remains open, because what is the best depends on end-user scope and intended application. A topographic mapping organisation which uses aerial and satellite images for creating from scratch large-scale maps requires a steam engine whilst a municipal public-works department might make do with just one 50cc machine. The scope may also differ. For example, EnsoMosaic focuses on producing orthoimage mosaics covering large land areas, and suits clients who already have an image-capturing system and need image-processing power, whilst Socet Set supports a wide variety of heavy-duty tasks. In response to user demands for higher automation and more mapping flexibility several manufacturers have implemented automatic line-extraction modules for mapping features like road edges and shorelines.

Answers to the question of automatic matching in the DEMS/Orthoimages department include terms such as area-based, feature-based and hierarchical. What these terms mean and how automatic matching works are topics further scrutinised in this month's [Technology in Focus](#) column.