

# World Champions

I am playing truant. I am speed skating when I should be writing my editorial. While I make my turns on the local ice rink, I slowly but steadily remember why it has been more than fifteen years since I was last on the ice - ouch. The speed skating fever has conquered Holland. The small country below mean sea level is world famous for its dykes, and -at this time of year- for its speed skating champions.

That reminds me of a speech at a seminar I attended recently held by the Netherlands Geodetic Commission (NCG). The NCG co-ordinates and initiates fundamental and strategic research in geodesy and geo-information. A laser altimetry and remote sensing specialist stated: 'The Netherlands is the world champion in Digital Elevation Models.' He said this because in 2003 the Netherlands became the first country in the world with a highly detailed nationwide Digital Elevation Model (the so called 'AHN-1'), covering all of the 3,5 million hectares. In 1997 it was decided to build it with one height point per 16m<sup>2</sup>, the limits of technology at that time for this unique scale. Ten years later, in 2007 the limits were pushed even further and the AHN-2 was upgraded to ten points per m<sup>2</sup>, with the aim of covering the entire country by 2011.

The second countrywide base map will contain detailed ground level elevation data, as well as data on built-up areas. The data will also include so-called line elements, such as dykes and roads, which were collected separately to AHN-1. The AHN dataset therefore offers unique information for a variety of users, whether they are in flood mapping, dyke management, 3D modelling or creating virtual reality and games. Archaeologists and geomorphologists have uncovered the detailed beauty created by small height variances in the natural landscape. AHN-1 won't be just history. The new dataset will bring fresh possibilities for comparing datasets and more importantly, AHN-1 will become a unique height archive.

AHN-2 represents exciting new developments within remote sensing: new sensors, higher density, smarter filtering, multi-sensor combinations, data fusing with satellite data and endless user possibilities. The used Airborne Lidar technology is addressed in our Product Overview in this issue of *GIM International*.

AHN is the result of a long Dutch tradition of measuring the height of polders and dykes. Past floods in our low and flat country have made us height aware and thus we are the measuring champions. But, as in speed skating, the competition is hotting up. What a race we are going to see!