National Distribution Centres

Geo-information is a commodity like any other. It is produced by manufacturers, the product can be promoted, it can be shipped by volume and there are customers who are willing to pay a price for it. What is the value of any given commodity? There are many principles available for determination of the value of a commodity. The price may be based on production costs or on the expected value for the customer, or the product may be provided free of any charge because the commodity has been derived from tax payers money. Since much geo-information was in the past produced by governmental organisations, such as National Mapping Agencies, it appeared very difficult to assign a cost-based price to the commodity. Consequently, pricing policy associated with geo-information has given rise to many controversial opinions and is presently a serious subject of scientific research and debate. To set an optimal price for geographic data is a very difficult issue, as Alenka Krek and Andrew Frank once noted in GIM International (September 1999, page 31-33.)

New Markets

The debate has currently received a new impulse. This originates in the present and forthcoming availability on the market of high-resolution space-borne imagery. Various space programmes now underway will ultimately result in nine high resolution earth observing satellite systems with spatial resolutions of 0.8 to 5 metres in the panchromatic band and of 3.3 to 20 metres in the multispectral bands. For all these image products new markets are envisaged. Prof. Harris provides in the present issue of GIM International an insightful overview of relevant pricing policies and their advantages and disadvantages.

Standard Processing Procedures

The main difference when comparing now with the previous era is that imagery is now produced by companies who want to make a living out of it, whilst in the past production was mainly financed by tax payers money. Does this imply that national non-profit organisations no longer have any role to play? To me, a scenario seems very attractive in which National Governments purchase blindly and on a centralised basis all spaceborne imagery produced by any of the earth observation satellites, for the purpose of distribution among all interested parties within the country. A National Distribution Centre (NDC) might harmonise imagery by carrying out standard processing sequences, such as geo-referencing to a National Geodetic Reference Frame. The national Geo-Information Infrastructure might benefit greatly from such a proposed distribution mechanism. For example, it would improve the interoperability and exchange of geo-data at national levels because everybody would be working with the same standardised products.

Trading Company

In the sketched scenario the NDC acts as a trading company; an intermediate between the Earth Observation Company (EOC) and national end-users needing the data to solve an (environmental) problem or to calculate future situations by simulation. On the one hand it may be surmised that EOCs might be reluctant to provide the NDC with all their images covering a certain country because national monopolies might thus easily be established. On the other hand, EOCs may benefit from NDCs. This due not only to reduction of overhead expenses but much more because standardised products may open up new and broader markets. Disputes might arise concerning subjects such as: what types of value-added products will a NDC be allowed to produce? what is a fair price for a NDC to pay for a set of imagery covering the entire country?

No Money, No Value

Notwithstanding all the problems involved in arriving at an agreement, let us for the time being assume that EOCs and NDCs are able to make a deal about the national distribution mechanism. The next question that comes to mind involves the setting up of an NDC pricing policy. Should the NDC provide the proposed standardised imagery free of charge to national customers? Giving things away for nothing is often a bad option. This is because, as prof. Harris rightly states, things that do not cost money are often considered to lack value: no money, no value. There is, in addition, another obvious argument for rejection of the 'free of charge' option. Let me explain this argument by drawing on my own experiences.

Continuous Debate

I once was invited to present a paper at the International Seminar on Satellite Info Systems, organised by the Ministry of Agriculture of Bulgaria. The main objective of the paper was to investigate the suitability of satellite imagery to act as a base map and a geometric reference for cadastral purposes in Mid-European countries in transition. Part of my paper was devoted to a cost identification of the different steps involved in the photogrammetric workflow. It emerged that only a minor proportion of costs (3 – 5 per cent) of the entire geo-information production process concerned the data acquisition stage. After geo-referencing, the costs of imagery rose to 20 to 25 per cent. The major costs are incurred in extraction of meaningful information. Thus prof. Harris is perfectly right in stating that the free availability of image data may result in users underestimating the costs of preceeding steps. The establishment of a proper pricing mechanism goes hand-in-hand with the creation of a proper distribution mechanism at national level. Pricing policy and pricing mechanisms will continue to be the subject of continuous debate over coming years.

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