## How the Sector is Changing....

With the launch last Friday of the latest Sentinel, the range of data and services available from Copernicus increases further. Sentinel 5P will provide data on atmospheric chemistry and promises new products on air quality in the near future.

Copernicus is a wonderful success story for Europe. It is the foremost, operational satellite system in the world and through the 6 Copernicus Services is providing not just satellite data but information services to meet the needs of European policy makers.

Thoughts are now turning to the next generation of satellites and how Copernicus can evolve. EARSC has provided views on behalf of the industry based around 3 core elements; providing sustained access to data, developing demand especially in the public sector, and unleashing the potential of the downstream sector by creating an environment where private investment can be mobilised. Our position paper on the subject can be found on our web-site. Recently, a presentation was made to the EU Council space working party on the views of the EO services industry.

But increasingly we hear how the value-added industry is going to disappear as machine learning and automatic algorithms create new interpretations of satellite imagery. Indeed, we foresaw this trend 2 years ago and reacted through two key steps. Firstly, to ask for improved access to the existing data and information which should be combined with other data sources to broaden the scope. Secondly, we set out our vision for a Marketplace for EO services and called for support to set it up. The first was manifest with the Copernicus DIAS (Data and Information Access Service) and the second through our own initiative; eoMALL. The DIAS tender has been decided and negotiations are nearing completion with the selected winners. For eoMALL, the tender has also closed and evaluations proceeding. Both platforms are intended to become operational in the first quarter of 2018.

But the pace of change seems to be getting even faster and new trends need to be considered. Firstly, I do not believe the value-added sector will disappear. I do agree that more and more of the services will become automatic and hence open new markets to operators. I think that we shall see a shift towards vertical markets where specific services are targeted. Recently, BayWa, an agriculture supplies company took a 51% stake in Vista, a German VA company specialising in agriculture services using EO. We may see more of this type of venture, or we may see more consolidation amongst the VA companies - as recently where CLS has bought out SIRS another french service provider specialised in land products. Alternatively, the new satellite operators may push downstream to secure services based on their own data. This would lead to integrated offers and could result in another wave of industry mergers.

Either move could be good news for VA companies which continue to be the gateway to the end user market. The rich diversity of skills and competences developed over nearly 30 years of research should become even more effective as the amount and type of data increases and new processing techniques become readily available to take away some of the hard number-crunching needed for today's products. This should lead to new services, of higher quality, more affordable and open to a new-wider market.

On the other hand, maybe those saying the VA industry will disappear are right. Squeezed between satellite operators seeking whatever markets they can find for their data and large IT companies, throwing resources at machine learning and automated processing, will the middle part of the value chain be able to survive? They could be absorbed by those even closer to the end-user ie the IT players, and seamlessly integrated into vertical businesses as a small part of a much wider offer. Today, the IT players are very effective in the B2C market but less so in B2B. Will this be a factor in the evolution of the sector?

What will these trends mean for the VA industry, or the EO services industry, as it is today? How should the VA industry react and re-position in face of these technology and market forces? To seek answers to these questions, we propose to organise a workshop in the new year to consider these questions and how industry leaders view the future. Planning has just started and we'll make announcements as soon as details are available; watch this space! In the meantime, if you wish to comment then we should be delighted to hear from you either by email or through comments left on the page.