Interview with John Allan, Executive Director, Business Developm

Big Changes Ahead for Geomatics

John Allan, Executive Director, Business Development at ERDAS, Inc. (Atlanta, GA, USA), has been involved for over two decades in the geographic image processing industry. John and I met during Map India 2001 and we talked in the garden of the Taj Palace Hotel in New Delhi. Commercially, Allan is very optimistic about the future: "We see a big change happening in our industry; business confidence is extremely high and only getting better".

By Mathias Lemmens, Editor of GIM International

Indeed, John Allan is very optimistic about the economic prospects of the geomatics industry. He takes pride in the fact that the world-wide growth of ERDAS has increased by more than 30 per cent each year for the past three years. Of increasing importance is the launch of commercial high-resolution remote sensing satellites because they raise awareness of the existence and importance of remotely-sensed imagery, both from space and aerial platforms, and open the door for the creation of more products that simplify image-processing procedures.

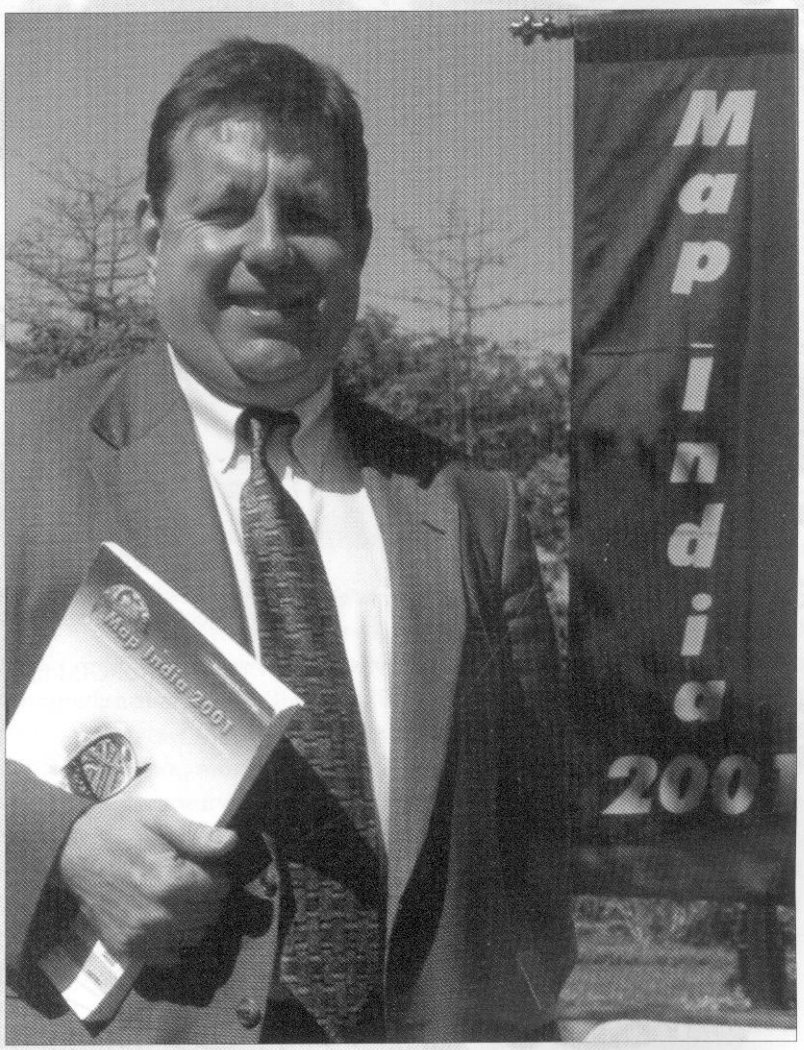
Now in its fourth year, the number of participants in Map India has tripled and it has had more than eight hundred participants since its inception in 1998. What are your feelings and impressions concerning this annual event?

I am very impressed with my first visit to Map India, and equally impressed by the commitment of the Indian government to geographic imagery technology and its widespread adoption. The decision-makers, together with government ministers, are making an investment that will pay dividends for themselves in the future. Both the commercial and the academic quality of the event are excellent, indicative of the 'booming' geomatics Indian market.

Can you elaborate a little more on the 'boom' rating of the Indian market?

It is a very positive time for our industry. Globally, we are growing on average 33 per cent per year. In India, we have increased our sales by 40 to 50 per cent per year, which is twice the size of our other markets in Asia.

Is India your largest growth market or are there other countries where the growth is comparable or even higher?



John Allan: "We need to solve data format issues if we want seriously to increase our markets"

ent, ERDAS

Industry

We have experienced growth in many of the developed nations. While our growth is not driven by one specific area, each of our geographical regions is hitting their sales target. Our partners in Japan, for example, realise the value of very up-to-date imagery, and programmes are being carried out to provide constantly updated image maps. Of course, a couple of years ago, a slowing Asian economy had an effect on the industry. But that changed as Asia began reinvesting in its infrastructure, making imagery a commodity that is in demand for planning purposes.

ERDAS has always been involved in developing imaging processing systems. In the past, software manufacturers could survive more or less by developing monolithic systems; customers simply bought them and vendors offered, in addition, some nominal training and that was that. Today, the user group is becoming more and more heterogeneous and demanding. They increasingly require valued-added services. What do you anticipate will be the direction of these major developments on the customer side and what is the significance of your partnership with ESRI in this respect?

There is a large growth in the number of 'casual' users of imagery. We split our market into three sectors. The first sector consists of what we call the 'imagery-aware' users. This sector corresponds to the traditional remote sensors and photogrammetrists, who are doing advanced imagery processing. They will continue to have sophisticated software on their local machines for processing very large datasets. The second type of users we look at is what we call the 'geographically aware' users. This group mainly consists of GIS users who understand the basics of mapping and projections but have probably never used imagery other than for backdrops. We are focusing on a new range of products directed at this user. The first product so directed was the Image Analysis Extension for ArcView. The aim of that product, which we developed in conjunction with ESRI, was to take certain components of ERDAS IMAGINE and to put these in the ArcView environment. This was done because ArcView users do not want to switch from the one package to the other; they want additional functionality as an extension to our products. This has been an enormous success. Many thousands of copies have been sold around the world. In the next step, our core technology for handling raster data has been embedded in ESRI ArcGIS software. We intend to extend this capability and create component-based software to serve both the geographically aware user and a third type of user – those who just want the information from the Web.

We have a very close relationship with ESRI. We have always had the capability to transfer data seamlessly between ERDAS and ESRI products. In the future, based on the new component architecture, you will also see an ability to integrate software from both companies. We intend to provide additional tools that integrate with ESRI web tools. As a result, more service-based products will emerge. Consequently, more advanced users, such as data providers, will be able to build engines that will serve their data and concomitant processing across the Web. Such engines will support the non-professional user using a browser: the user who wants answers to geospatial questions that require information based on imagery. Subscription-based services for agriculture, for example, need to have crop-vigour maps based on the latest imagery available on the Web. Our intention is to provide the servers to provide this service to Internet map servers.

The number of orbiting sensors producing continuous high-resolution imagery of the earth is obviously expanding rapidly. Do you think that the user community will grow sufficiently in the near future to justify the huge amount of financial investment involved in creating the necessary infrastructure?

We have to bear in mind that it is from the remote sensing perspective that IKONOS imagery appears to be very high-resolution. In contrast, the photogrammetric world sees it as very low-resolution imagery because they are used to aerial photography with a ground resolution that is measured in inches. Of course, IKONOS will be important but we can't only focus on that. We have to look at all the different types of data that will be available. Therefore, IKONOS is only one of a series of imagery sources that will be applicable to different applications. I think there will be a much larger application of simple digital cameras mounted on platforms such as planes and unmanned radio-controlled vehicles. For example, one of our customers in the U.S. is using a standard digital camera with a GPS unit attached to a remote controlled helicopter. The images are then automatically corrected with our software for the creation of accurate maps of specific areas. For large areas satellite imagery is all right, but when one moves down to city level, for example, one needs much more detailed data. It is all a matter of using the appropriate data source for the appropriate application.

How are you preparing yourselves to get a grip on this shift?

Allan in Profile

Born and reared in the UK, Mr Allan recently returned to his homeland following a three-year stint at ERDAS corporate headquarters. He there served as Sales & Marketing Director and lead ERDAS in a record-breaking 250-per cent growth over the years between 1997 and 2000. In Cambridge, Allan supervises ERDAS Inc. product direction and strategy; fosters the relationship with key third parties and partners (satellite data vendors, third-party developers, etc); and oversees corporate growth strategy (new ERDAS companies overseas, acquisitions, etc.). In a reflection of his trans-Atlantic lifestyle, both sides of his business card are printed: one showing his ERDAS (UK) contact information in Cambridge, the other showing his ERDAS contact information in the United States. Allan says that most of his life is spent on an aeroplane in the middle of the Atlantic and he regrets that he cannot take the Atlanta weather back with him to the UK!

The launch of the commercial high-resolution satellites for earth observation purposes raises awareness in the mainstream market of the existence and importance of remote sensing imagery. We will benefit from this raised awareness by creating products that simplify image processing procedures originally established for the professional photogrammetric and remote sensing market such that a geographically aware user can actually extract information from the imagery himself. This is the GIS manager who wants accurate, up-to-date ortho-images. He doesn't want to go somewhere else to get his information; he wants to get it himself. Not all GIS managers want this but there is a definite market out there comprised of those who do, and the software we are producing now allows them to do that.

Our interview with John Allan took place in the open air, just after lunch, during Map India 2001 - held in New Dehli from 7-9 February

We talked earlier about private-private partnerships... Besides the private-private partnership, public-private partnership has become an important development nowadays. What is your opinion in this respect?

When we are talking in terms of satellite imagery and large-scaled aerospace projects, I think there has to be public involvement. When one compares the costs of emerging satellite-imaging systems with the revenues derived from selling the imagery there is a massive gap. It does cost hundreds of millions of dollars to put an earth observation satellite into orbit. And the sales just do not justify that at the moment. I think that local governments support many companies indirectly. The Indian government obviously sustains a remote sensing programme. So until the market can support the necessarily huge investments in infrastructure, governments have to look at the long-term benefits and invest accordingly. But I doubt whether public involvement is good in the long term. This is because public involvement sometimes means too much regulation and too much control. Public involvement is good for kick-starting and activating the initial process.

Do you within ERDAS use the expertise of Indian ICT specialists?

ERDAS India, a company that we recently set up with our Indian partners, has an exhibition stand here at Map India. One of the reasons that I came to New Delhi was to establish a development group within ERDAS India. This group will work with us to co-develop and develop specific Indian capabilities, working together with the Indian Remote Sensing Centre. So, yes, we are using Indian expertise based in Hyderabad more and more. The quality of the people we have found is excellent; they are very knowledgeable.

We are coming to the end of our interview, John. All the issues I wanted to cover have passed across the table. However, maybe you have a topic on which you would like to elaborate further or one you want to bring up? This is your opportunity to do so.

One issue that is very important to ERDAS and one that we have not discussed is our involvement in the OpenGIS Consortium. The remote sensing industry has been plagued for many years with a wide variety of so-called standards and data formats which, on closer inspection, are merely 'guides' for the data producer. Most of the issues our customers encounter do not concern software but the data format itself and its accessibility. ERDAS has joined the OpenGIS Consortium to look at ways of improving the issues of imagery and metadata format. When a user gets hold of an image it is very useful for him to know what has happened to that image since it was created, or else the image is being used blindly. This is an important area for us and to the same end we are also involved in a number of ISPRS working groups. This is a problem that we, as an industry, have to solve if we want seriously to increase our markets.◆

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ERDAS in Profile

As a pioneer of the first PC-based geographic image processing system, ERDAS has two primary goals The first is to create software that helps organisations around the world visualise, manipulate, analyse, measure, and integrate any type of geographic imagery and geospatial information into 2D and 3D environments The second is to simplify the use of all image processing (or Geographic Imaging) procedures originally established for the professional photogrammetric and remote sensing market such that any geographically-aware user can extract information from the imagery. The company is also looking to the future, with web-enabled Geographic Imaging capabilities complementary to the Internet mapping services of their partner, ESRI. ERDAS is actively involved in this field through, among other initiatives, joining the OpenGIS Consortium, a world-wide organisation that addresses lack of interoperability between systems processing geo-referenced data, and between these systems and the mainstream computing system.