Executive Summary for Research Participants
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The following is a summary of the research gathered for the project entitled "Strategic Assessment of the European Market for *flex*Comm™ Products", completed by Peter Simmons for Spectrum Signal Processing Inc., of Burnaby British Columbia Canada, and which formed the Organizational Consulting Project for the MBA program at Royal Roads University, Victoria, British Columbia, Canada.

Size of the Market

The European Union with the second largest defence budget of almost US$200B is upgrading its capabilities in these C4ISR systems in order to more effectively pre-empt terrorist attacks and offer seamless integration between the different national forces as well as the American military. The EU spends approximately US$7B per year on procurement of C4ISR systems, of which US$70M is estimated to be available for outsourced signal processing products such as those offered by Spectrum. This amount is expected to grow at a compound annual growth rate of 4.7% over the next 4 years.

Driving Forces

Technology and political changes are responsible for most of the trends and driving forces facing the European C4ISR industry today. The threat of terrorism in isolated pockets has increased the demand for more intelligence and the ability to pre-empt such attacks. The main driving forces in the C4ISR industry are the move to network centric warfare, joint interoperability between different forces within a country and between different countries, the move to a professional army, the change in threat from the Soviet Union to terrorism, and the need to have a more independent European Army, that is less reliant on the United States.

Cultural Considerations

Countries north of the English Channel (the UK, The Netherlands and Scandinavia) are more likely to look at new technologies for their military programs. These are the markets that Spectrum should target with its products. The research arms of the MoDs in these countries are actively developing new technologies such as SCA (Software Communications Architecture) enabled radios which are good match for Spectrum's technology. The countries south of the Channel (Germany, France and Italy) are slower to adopt these technologies.

Procurement Policies

Historically, European countries favoured local procurement as a method of building their industry and preserving national security. However, with European technology years behind that of the United States, and many critical components made only in Asia, local procurement is not being enforced. Defence ministries still prefer to contract directly with a local prime contractor, who can then determine the technology to be used.

Discussion with representatives of prime contractors in Europe indicates that while they prefer to use their own in-house technology, cost and availability may lead them to look outside the company. If there are cost savings to be gained by outsourcing, then it is difficult to justify using in-house developed technology. Political considerations can affect buying decisions as evidenced by the reluctance of the European prime contractors to want to do business with some American firms following the Iraq war. This represents an opportunity for Canadian companies such as Spectrum.

France with the second largest defence budget in Europe has always considered itself a military power. Further, French companies view the world as their market and prefer to buy from vendors that do not have ITARS (International Traffic and Arms Regulations) controls on their products as this will increase their development costs or prevent them from exporting their systems to third countries. In the event that a system with an ITARS-controlled product is exported to a third country in violation of ITARS, a company such as Spectrum could face exclusion from further procurement by Tier 1 primes selling to the American military. This could devastate a company which relies on the sale of equipment to the American military.

Therefore the use of ITARS controlled technology must be considered very seriously. As of March 2004, ITARS restricted technology can be exported to four countries without a permit: Canada, Australia, Japan and the UK. Export to other countries, such as France, Germany, Italy, the Netherlands and Scandinavia is possible, but requires special export permits.

There is no COTS (Commercial Off The Shelf) mandate in the European Union or any of the six countries. There is a difference of opinion over the use of COTS technology with some people feeling that it will allow advances in the commercial world to be used in the military which will improve the features and reduce the cost, while others think of COTS as akin to low quality and prone to software problems.

Critical Success Factors

Relationship building is an important part of developing the business in Europe. This is complicated by the fact that the market is smaller than the American market, and is made up of different military bodies. Discussion with European defence officials indicates that companies hoping to sell to the military should have people familiar to the military establishment as part of their business development team. This would include ex-military or ministry of defence personnel. Once trust is established between the ministry of defence and the company, then the business relationship can be developed.

Selling to tier 1 primes requires similar business development practices as selling to other large organizations in the particular country. For instance in Germany, an introduction by a mutual third party will improve the chances of developing the business relationship between the supplier and the prime contractor. Therefore it is important that the distributors, who are the primary means of contact in continental Europe, have a network of contacts within the military and tier 1 companies.

The military establishment is conservative and prefers to buy technology that is widely adopted. The ability to refer to sales of equipment to other military customers (i.e., reference selling) will improve the prospective customer's perception of the company and its products.

The ability to have local support is crucial to the success of any development projects carried out by customers. The complicated nature of the technology and the application that the customer is developing require regular contact between the company and the customer. Ideally, each country should have at least one field application engineer that is fully trained on the products and fluent in the local language to provide ongoing support. The time difference between Europe and North America also makes it imperative to have European based support personnel.

Marketing Considerations

The most popular European tradeshows are DSEI in London and Eurosatory in Paris. Europeans also attend US tradeshows such as MILCOM and SDR Forum. However, commitment to the European market is displayed through attendance at European tradeshows.

Europeans read the same trade journals that Americans read, including COTS, RTC, compactPCI, and VME.

English marketing collateral is sufficient for all of the markets from an informational point of view. However, in France, the perception of commitment to the local market will be improved by having French marketing collateral. French expect Canadian companies to be bilingual, and therefore this will go a long way to meeting that expectation and will separate them from the American and British competitors.

Main Customers and Competitors

Over 50% of the C4ISR market is controlled by five Tier 1 prime contractors, Thales, EADS, BAE Systems, Alenia Marconi and Raytheon. While 80% of the signal processing work for C4ISR systems is done in-house, there is a move towards COTS products in order to reduce the development cycle and to reduce costs. Spectrum's main competitors for the outsourced signal processing subsystem market are the same as those in the United States, namely Mercury and Pentek, while Thales Computers is a strong competitor in the VME PowerPC market.