



Innovative Technologies Make Global Companies BHEL EXPERIENCE

*P. Jagannathan** and *K.D. Mehra***

Introduction

THE developed countries turned their R&D strengths to their economic and commercial benefit. Recognition of the importance of R&D for profit and economic growth is reflected in R&D spending by the Government and industries. USA spent a total of \$265 billion (approx. Rs 1.32 million crore) in the year 2000, compared to around Rs 13,000 crore in India. This translates into a figure of around 2.5 per cent of GDP for USA and 0.8 per cent for India. The R&D expenditure in India is very low and has to be stepped up if the country has to increase its technological base and capabilities.

India since independence has made notable progress in technology and technical education. India's spectacular achievements span from nuclear and space technology to software. Information Technology has become one of our greatest success stories. Manufacturing capabilities range from power plants to food processing, from automobiles to bicycles, from aircraft to fasteners, and from steel to aluminium. India has also become an important player in the world with more than 150 international companies, like GE, Microsoft, Accenture, Oracle, etc. setting up R&D facilities in the country and their numbers are growing every year.

And yet, Indian strengths have remained perceptibly low. This is reflected in the comparative export volumes: India's exports (2002-03) remain as low as around \$55 billion against China's exceeding \$200 billion.

In the technological achievement index prepared recently by the *World Competitiveness Report*, India was ranked 63rd rank out of 72 countries.

* Executive Director (CEPD/ARP), ** Asstt. General Manager (CEPD), Bharat Heavy Electricals Limited, New Delhi.

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The UNDP Report on *Human Resource Development 2001* makes some very significant conclusions which may be interesting to recapitulate. These are as under:

- The technology divide does not have to follow the income divide. Throughout history, technology has been a powerful tool for human development and poverty reduction. The market is a powerful engine of technological progress, but it is not powerful enough to create and diffuse the technologies needed to eradicate poverty. Developing countries may gain especially high rewards from new technologies, but they also face severe challenges in managing the risks.
- The technology revolution and globalization are creating a network age. Even in the network age, domestic policy still matters. All countries, even the poorest, need to implement policies that encourage innovation, access and the development of advanced skills.
- National policies will not be sufficient to compensate global market failures. New international initiatives and the fair use of global rules are needed to channel new technologies towards meeting urgent needs of the world's poor people.

India 2020 Vision prepared by TIFAC, DST envisions that in about a decade, Indian technological and business strength will grow tremendously. Indian companies may emerge as MNCs operating in different parts of the world. They would sell technology intensive products and services as well as export technologies. Even beyond 2020, India would continue to attract foreign direct investment. However, for all this to be realized, there is a need for massive step up in spending on infrastructure, R&D and most important on fostering a culture of innovation.

We now focus your attention to some issues related to R&D and innovation in the power sector since our organization, BHEL, is predominantly focusing this sector.

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It is true that the Government of India has invested large sums for creation of infrastructure for generation, transmission, distribution, etc. However, this was based mainly on borrowed technology since the intention was to strengthen the core sector. Sufficient attention was not paid to indigenous R&D in terms of the government's funding and other institutional support. Coupled with a large number of agencies in this sector, this led to a situation where though India has an installed capacity of around 100,000 MW, indigenously developed technologies could not emerge with a great degree of success. In contrast, in certain sectors like Space, Defence and Atomic Energy, a single agency entrusted with overall responsibility, massive funds and a mission oriented approach has resulted in good technological success. Possibly, a similar approach would be useful in fostering innovation in other sectors.

With progressive integration of India's economy with the world through the WTO regime, cost, quality and delivery will be taken for granted. Product and service differentiation will only hold the key to maintaining and increasing our market share. "Innovate or Perish" is truly the mantra of the day. As one of the leading engineering enterprises in India, BHEL has a high stake in harnessing the creative energies of its employees to the fullest possible extent.

We would now like to share some of the critical challenges that Indian companies including BHEL face while managing R&D and fostering innovation and subsequently make some suggestions to overcome them.

- In advanced countries, the bulk of R&D funds in commercial enterprises flow into those areas that promise the largest, even disproportionate returns. Product life cycle is getting shorter and R&D expenditures are growing. Being first to the market is critical since the window of opportunity during which super profits can be earned is short. Subsequently, imitators and competitors spring up, leading to a fall in prices. This process is very successful in those countries, since there are a fairly large number of early adopters who are willing to pay premium prices for new products, even at great risk. Companies are thus able not only to recover their R&D expenditures but earn enough surplus to invest in further R&D. As they move up the learning curve, the products are perfected and costs as well as prices come down. In India, the situation is different. Indigenously developed products often have to compete against foreign products which have already been perfected and are already down to normal price levels.
- Due to a phase shift in economic development, limited R&D infrastructure and lower availability of R&D funds owing to relatively lower GDP, we are not exactly at the cutting edge of technology in most areas. Our new products, with a few exceptions, are variants of products that have already been perfected abroad. Further, Indian customers, especially in the public sector, are generally risk averse, preferring to buy only those products that have proven track record or have collaborator's back-up. They are also invariably reluctant to provide opportunities for field trials for indigenously developed products.
- Pricing of new products is also a contentious issue. The manufacturing cost of new products is always high because full fledged facilities for manufacture have not yet been established, scale of economies have not been achieved, vendors have not been developed, etc. These costs get reduced as we progress on the learning curve. If the new product is priced to recover full cost, it faces resistance in the market. If it is priced low, then

there is no possibility of recovering its development cost. New products need savvy marketing on the basis of long-term benefits to users and innovative financial packages.

- Another dilemma we face, happens when we develop a new product, viz. should the first prototype be a basic, no frills type of product or a full featured, top of the line product? Invariably, whichever path you choose, customers seem to want the other. We have now adopted a strategy to develop product platforms on which additional features can be modularly added as options. We may then be able to customize the products to meet different requirements.
- We are somewhat in a better position as far as incremental improvements in existing products are concerned. It has been said that in the 21st century, technological development will be less about discovering new phenomena and more about finding imaginative and efficient ways of putting known things together.

Indeed, if we look at the progress of power equipment technologies over the last few decades, we can see that the basic technologies of steam turbines, boilers, generators, hydro turbines, transformers, etc., have remained almost the same. However, steady improvements have been taking place. As an example, since 1977, the heat rate of BHEL's 210 MW and 500 MW steam turbine has reduced by about 5.4 per cent and 3.1 per cent respectively. Similarly, hydro turbine efficiencies have been improving steadily. Boiler efficiencies have improved and emissions have been reduced. Unit ratings have increased, while geometrical dimensions and weights have fallen. The costs have also fallen. Similar is the case with most other equipment such as fans, boiler feed pumps, pulverisers, condensers, etc. The driving forces for these changes have been new materials and availability of engineering tools such as FEM, CFD, Simulation, Virtual Prototyping, etc. running on faster and cheaper computers.

- Two years ago in a talk delivered to the participants of the Advanced Management Programme at BHEL, the Hon'ble President Dr. Abdul Kalam laid emphasis on "Creative Destruction as a means of Continuous Self-renewal". However good our current products may be and however unassailable our market leadership may appear to be, threats in the form of disruptive new technologies can suddenly sweep us off our feet. All products need to be regularly upgraded and new products introduced, even in competition with existing products.

Several leading multinational companies have successfully followed this strategy. Intel, for example, regularly introduces microprocessors with ever faster clock speeds and other features, at premium prices, phases out the previous version, even before its achieving peak popularity.

Gillette introduced fixed, then hinged, then swiveling twin blades and now Mach 3, that is, triple blades, to compete against its own previous versions.

We have also adopted this strategy in a few cases. A smart wall blowing system has been developed with much greater benefits to customers than the conventional soot blowing system. Similarly, we have developed controlled shunt reactor which offers considerable advantages over conventional fixed reactors. Controlled shunt reactor comes in the circuit to control over-voltages during line charging and goes out of the circuit to enhance the power transfer capacity of transmission lines when power flow takes place.

- Wherever BHEL has remained satisfied with exploiting already acquired technology, BHEL had to face the threat of losing market in the long run.
- BHEL's current R&D expenditure is about 1.2 per cent of turnover. We are committed to raising this to 2 per cent of turnover by 2006-07. We have to lay emphasis on continuous upgradation of existing products, developing variants and new products and continuing work in futuristic technologies, etc. to meet market expectations.

Trends Towards Strengthening R&D and Fostering Innovation in the Power Sector

In the fast changing global business scenario, leading power plant equipment manufacturers in the world are consolidating through mergers and acquisitions, thereby enabling them to increase their product offerings and earmark higher R&D funds to develop more technologically advanced, customer friendly products. A deliberate attempt, at appropriate levels, will have to be made to ensure that in select areas of strategic economic interest, a policy of self-reliance is pursued vigorously so that foreign OEMs are obliged to share technology with Indian manufacturers.

In this context, it is worthwhile to mention the example of China with respect to procurement of power plant equipment. By leveraging the high market potential within the country, China has been able to ensure mandatory technology transfer in the power sector from world leaders like Siemens, GE, Alstom, etc. In the process, they have been able to raise their own technological level and have

used this transfer of technology as a stepping stone for their further developments. Some of the suggestions to this regard are given below:

- (1) There is need for the Government to evolve a policy framework so that foreign companies are obliged to associate competent local Indian companies for technology transfer. In the matter of technology transfer, developing countries including India are not restricted as China now is. A few developing countries including India, Indonesia, Pakistan, Tanzania, etc. have set up a Working Group on Trade and Transfer of Technology for discussions within the WTO and have put up a draft proposal WT/WGTTT/W/6 dated 7th May 2003, to the WTO Secretariat in Geneva. In this document, which is being discussed in Geneva, it is clearly mentioned that special treatment will be given to developing countries for transfer of technology on reasonable terms and conditions and in a manner that contributes to the long-term developmental prospects of the host developing country.
- (2) Tax incentives can play a significant role from the point of view of both technology and product developers as well as users of the products. India had traditionally used tax incentives for encouraging R&D in the corporate sector. However, in actual operation, there were considerable uncertainties because of frequent changes in the terms and conditions due to which long term planning and investment by industry was difficult. As of now, there are no tax incentives on R&D expenditure except in some select areas. It is suggested that in-house R&D expenditure by all recognized industrial R&D units should get enhanced tax rebate of say 125 per cent of such R&D expenses. In addition, expenditure on sponsored R&D by industry in Educational Institutes/Universities/Research Laboratories should be encouraged by providing fiscal incentives such as tax rebate of 150 per cent of such R&D expenses.
- (3) Import of equipment for R&D projects is duty free only for Government laboratories, non-profit organizations and academic institutions. The same benefit should be extended to the Industry. In addition, products developed through commercialization of indigenous R&D should be exempted from excise duty for a period of five years.
- (4) Presently, there is an R&D cess being collected by Government on import of technology. The Government should identify critical areas of R&D, especially in the capital goods sector for funding from this cess. In addition, additional R&D funds can be created by imposing a nominal cess on the turnover of every

company, on the lines of the cess on petrol and diesel for developing national highways. The fund could also be used to provide comfort to customers who employ newly developed indigenous technologies through suitable insurance schemes to cover any potential risk over and above the normal warranties and guarantees of the manufacturers.

- (5) The Government should fund demonstration projects of new technologies requiring large investments, through grants and soft loans. For demonstration projects, a collaborative approach involving the developer, user and the Government with appropriate equity participation, will be beneficial. A start has been made with the 100MW IGCC project to be funded by the Government, NTPC and BHEL. This should be extended by financial support from the Government to BHEL in other areas like development of 765 kV transmission equipment, super critical boilers, etc.
- (6) For indigenously developed products, especially those involving heavy development investment, the qualification requirements specified by customers like Electricity Boards, NTPC, etc. should be suitably relaxed so that organizations like BHEL can put the products in the market place. The users can demand some safeguards from manufacturers in the form of deferred payment, extended guarantee or insurance cover to indemnify them against the risk of failure. In addition, where indigenous products have been developed, an opportunity for field trials should be given to BHEL and other companies in India who are in the same boat.

Conclusion

That “Innovative Technologies Make Global Companies”, which is the subject of this paper is self evident. The challenge for a developing country like India, which has made a mark in certain technological areas is to extend these success stories to cut a broad swath across a large gamut of industries. We need to invest much more funds for R&D, encourage more application-oriented research and promote human resources development. We have to assign priority to synergy among science, technology, public policy and organizational leadership. We have to focus on knowledge capital as a tool for economic development and accelerate national, regional and international collaboration, And lastly, but most importantly, we must not forget that around 70 per cent of our population live in rural areas and therefore we need to harness science and technology for raising the living standards of our rural brethren, including employment generation, better health care, environment protection and ecological security. ●

KALEIDOSCOPE OF INDIA'S TECHNOLOGY EXPORT EFFORTS

Zydus Cadila Launches 43 Drugs in French Market

The Ahmedabad-based generics major, Zydus Cadila, has launched 43 drugs in the French market and announced that it would launch another 20 products by December 2004. The products that were launched comprised six broad therapeutic categories—cardiovasculars, central nervous system (CNS), gastrointestinal, pain management, Type-II diabetes and anti-infectives.

Zydus Cadila entered the French market with the acquisition of Alpharma France in 2003. The company, with its ready distribution channel and a pipeline of 109 generics registrations, is being used by the Indian company to tap the French market, pegged at \$1.25 billion and growing at 30 per cent annually.

The company aims to capture 1-3 per cent of the market share in various product categories by the end of 2006. In the first phase, it is focusing its efforts on positioning Zydus France as a company that looks beyond drug dispensing.

Outward FDI Flow from India Goes Up to \$5.1 bn

India's outward Foreign Direct Investment (FDI) has increased significantly in the last few years. As per *World Investment Report 2003* of the United Nations, India's outward FDI has grown from \$0.6 billion in 1996 to \$5.1 billion in 2003, taking India to the 14th place in terms of outward FDI among developing countries.

The Report states that the country's annual average outward FDI flows during the period 2001-2003 touched \$1.1 billion. Most of India's FDI is in the manufacturing sector, but of late, it has begun to grow rapidly in IT services, particularly through mergers and acquisitions.

According to Mr. Karl P. Sauvart, Director, UNCTAD's Investment Division, the increasing competitiveness of Indian firms and their interest to expand globally, particularly in IT-related services and pharmaceuticals, are driving its outward FDI growth.

The most important destination for India's outward FDI till date is the US, which accounted for 19 per cent of

the total cumulative outflows during the period 1996-2003. The Report also reveals that India is becoming an important investor for the UK and France.

IOC Clinches \$3 bn Deal for Iran Field

Indian Oil Corporation (IOC) has clinched a \$3 billion deal to develop a gas block in the gigantic South Pars Gas field of Iran. The IOC will have 40 per cent stake in the upstream development. In the liquefaction plant, the IOC would have 60 per cent stake and the marketing rights to sell the entire 9 million tonnes of LNG.

Petropars is a subsidiary of National Iranian Oil Co (NIOC). The NIOC has 60 per cent stake in Petropars while Iran's IDRO (Industrial Development and Renovation Organization) has the remaining share.

The South Pars Gas block is near the Yadevaran oilfield, where Iran has offered 20 per cent stake to the IOC in lieu of India buying 5 million tonnes per annum of LNG. Yadevaran oilfield is said to have a potential to produce 3 lakh barrels per day.

Ind-Swift Receives Research Order from Europe

The Chandigarh-based pharma company Ind-Swift Ltd has been awarded two process patents from the Indian Patent Office. One of the patents relates to an anti-infective, a new salt of an erythromycin derivative and the other to fexofenadine, an anti-histamine drug used in the treatment of allergies.

Meanwhile, the company is looking at the global market, where the two products have a combined market of about \$4 billion. The company received a patent for the anti-infective in the New Drug Delivery System category in the US in November 2003. A similar patent on the anti-histamine product is expected shortly.

The company makes finished dosage forms of medicines and is looking to clock a sales of about Rs 230 crore in 2004-2005.

The presence of Ind-Swift Labs, a group company, dealing in bulk drugs in the international markets, with an

export turnover of over Rs 60 crore, would facilitate the smooth entry of Ind-Swift Ltd in the soft regulated and non-regulated markets.

Meanwhile, Ind-Swift Laboratories have received research orders worth \$3-5 million from two European pharmaceutical companies. The contracts are in the cardiology and hypertension segments.

BHEL Bags Oman Order for Gas Compressor Package

Bharat Heavy Electricals Ltd. has bagged a Rs 115 crore order in Oman for three compressor packages against the stiff international competition. The order has been received from Petroleum Development Oman (PDO)—a joint venture company of the Government of Oman and the Royal Dutch/Shell Group of Companies. BHEL would be supplying three compressor packages to be installed at Yibal, located about 500 km from Muscat. These compressors are to be delivered by March 2006. This is the second order for compressors received from PDO. The first compressor order, received in June 2004 for PDO's Lekhwar Project, is presently under execution.

KEC Bags Rs 295 cr Orders

KEC International Ltd, a major player in the power transmission, engineering and construction business, has bagged new orders worth Rs 295 crore both in the international and domestic markets.

In the international market, KEC has been awarded the Rs. 120-crore order in Abu Dhabi by the Abu Dhabi Water and Electricity Authority for supply and installation of 94 km long 220 KV double-circuit overhead lines. In the domestic sector, the company bagged a Rs. 175-crore order from Power Grid Corporation of India.

The company's present order book position stands at Rs. 2,600 crore.

Welspun-Gujarat Bags Rs 500 Crore National Iranian Gas Order

Welspun-Gujarat Stahl Rohren Ltd (WGSRL), the Rs 815 crore submerged arc welded (SAW) pipes manufacturer has bagged an order worth Rs 500 crore to supply 69,000 tonnes of coated pipes to the National Iranian Gas Company.

The company is currently executing orders worth more than Rs 1,600 crore. WGSRL has the capacity to manufacture pipes around 1,000 km annually at its Dahej unit. The company can make pipes of diameter ranging from 16 to 60 inches.

Welspun-Gujarat is currently setting up a new manufacturing unit at Anjar in Gujarat at an investment of Rs 200 crore.

Sri Lanka Asks NTPC to Set Up Unit

Sri Lanka has awarded a contract to NTPC to build a 900-MW plant to meet its growing electricity demand. This was stated by the Energy and Power Minister, Mr Susil Premajayantha, Govt of Sri Lanka. It will be a Government-to-Government agreement between the two countries, he said. Sri Lanka wants NTPC plant to generate about 300 MW of electricity initially and then increase the same to 900 MW as demand grows.

PSL Bags Kazakh Contract

PSL Ltd has bagged an order to design and set up a steel pipe mill in Kazakhstan. The order, valued at \$9 million, is set for designing, engineering, supplying, erecting and commissioning of a plant with an annual capacity of 75,000 tonnes. The mill, to be owned and operated by Nefte Gastruba JSC, is promoted by Ispat Karnet, an outfit of the L. N. Mittal Group, and is scheduled to be completed by January 2006.

Electronic Goods Export to UAE Rises by 72%

Exports of Indian electronic goods to the UAE during 2003-2004 were estimated at \$100 million against \$58.11 million in the previous year, registering a growth of 72 per cent.

UAE is the major destination for India's electronics and computer software exports in West Asia. Further segmentwise analysis reveals that during the period export of software and services registered a growth of 7.11 per cent. In total, export of electronics and software to the UAE during the year period is estimated at \$149 million up from \$102 million in the year 2002-03, registering a growth of 46 per cent. With various initiatives taken by the ESC, IT exports to the UAE are set to rise substantially in the coming years. .

During the year 2003-04, exports of electronics and computer software/services were estimated at \$14.28 billion which accounts for a share of 15.58 per cent in India's total exports..

RITES-IRCON Tie-up Bags \$152-m Beira Rail Project

A consortium of railway PSUs RITES and IRCON have won a 25-year \$152 million contract to rehabilitate Mozambique's Beira rail corridor, despite stiff competition from Chinese consortium comprising Tia-based trading company Tenwin and China Railways Construction Company.

RITES and IRCON will rebuild rail line and operate train services jointly with Mozambique Government-owned port and rail company CFM. The project would be undertaken by a newly incorporated company, Companhia Dos Caminhos DeFerro Da Beira (CCFB), the joint venture company where Rites hold 26 per cent and Ircon 25 per cent. An agreement where CFM would hand over the rail line to the JV company was signed recently. The rehabilitation package involves \$104.5 million credit from International Development Agency of the World Bank. The balance requirement would be met in part by equity contribution by the partners and rest by commercial borrowings.

Rites Director (Finance) B.L. Bagra said that about \$4 million of operating revenue would be ploughed back into the project. He added that the project is expected to break-even in the third year and generate profits from the fourth year.

BHEL Bags Award for Exports

Bharat Heavy Electricals Ltd (BHEL) has bagged the top exporters award from the Engineering Export Promotion Council for two consecutive years 2001-02 and 2002-03.

The company has also set a record by bagging the All-India Trophy for Top Exporters in the project exports category for the 14th consecutive year in recognition of its performance at the export front.

During 2001-02, the company exported goods worth Rs 987 crore while in 2002-03 it exported goods worth Rs 1,455 crore.

Indian Radiation Tech Gets Global Approval

Indian radiation technology and its quality has succeeded in getting seal of international approval with the export of cobalt 60, a radio active substance used in disinfecting medical instruments and other materials to Canada, a senior official of the Board of Radiation and Isotope Technology (BRIT) has said. The Board exported 400 million curie cobalt-60 to a private firm in Canada in 2003-04 earning Rs 1 crore. Efforts are being made to export the atomic product after meeting needs of cobalt-based units in the country.

Cobalt-60 is recovered from adjuster rods after their use in atomic power projects. The capacity of Rajasthan Atomic Power Project Cobalt Facility (RAPCOF) which produced 10 lakh curie cobalt-60 in 2003-04 was being raised from the present capacity of 20 lakh curie to 25 lakh curie. BRIT was spending Rs 18 crore on expansion and modernization of RAPCOF for processing the product.

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M&M Enters China Via JV with Jiangling Motor Corporation

The world's fourth largest tractor company Mahindra & Mahindra has made its first overseas acquisition in the tractor sector. The company has inked an MoU with Jiangling Motor Corporation Group of China (JMCG) to enter into a joint venture. The joint venture in turn will acquire the tractor manufacturing assets from Jiangling Tractor Company (JTC), a subsidiary of JMCG.

The deal has been struck at \$10 million, of which Mahindra & Mahindra will invest \$8 million. M&M in turn will acquire 80 per cent stake in the joint venture. It marks the entry of M&M into one of the world's premier tractor markets—China. The world's three largest tractor markets are the US, China and India. China accounts for about 20 per cent of the global tractor market.

Jiangling Tractor Company will provide the joint venture with a strong manufacturing base, an existing distribution network in China and a complementary product range. The Chinese company has a manufacturing capacity of around 12,000 tractors in the 20 to 30 hp range.

JMCG is a state-owned truck company in which global automobile major, the US-based Ford, acquired a 20 per cent stake a few years back. The company has around 19 subsidiaries.

Jindal Stainless Acquires Indonesian Cold Rolling Mill

Jindal Stainless has acquired a 50,000 tpa (tonne per annum) stainless cold rolling mill in Indonesia from PT Maspion Stainless Steel Indonesia. The company has commenced commercial production after the completion of all formalities on 30 November 2004.

The acquisition has been financed by internal accruals worth \$12 million and the balance \$20 million has been funded through long-term loans from Export Import Bank of India and State Bank of India, Singapore.

JCT Buys Textile Mill in Senegal

JCT Ltd has acquired a mill in Senegal with an annual capacity of 9 million metres of woven fabric and 2.45 million garments. The company will acquire the mill with a five year lease and an option to buy it outright after that.

JCT has invested \$3.34 million towards advance lease rentals and expenses and has finalized a \$3.2 million loan for renovation. It will make a further investment of about \$2 million and estimates operations to start by the end of February 2005.

JCT has already doubled its cotton fabric dyeing and processing capacity in India and plans to add facilities to produce 100 per cent nylon and polyester fabric. It is also planning to invest in a captive power plant.

Eureka Forbes Sets Up Unit in Singapore

Eureka Forbes, a leader in the domestic water purification segment, has set up a unit in Singapore in order to address demand for its products in the Asean countries.

Production at the Singapore assembly unit will commence from January 2005 and the unit will be utilized to assemble water purifiers.

Overall, the Rs 500 crore company is targeting a growth of 15-20 per cent in the current fiscal.

In view of the rising pollution levels in urban cities, Eureka Forbes sees the air purifying category as a very high potential segment for itself and has rolled out new products.

TVS Logistics Forms JV with Spanish Firm

TVS Logistics Services Ltd announced its entry into the Spanish market by entering into a joint venture agreement with Transcoma Group. Transcoma is a leading logistics provider in Spain.

The 51.49 joint venture between TVS Automotive Europe, the UK subsidiary of TVS Logistics Services, and Transcoma would be called TVS Logistics Iberia. The new venture would provide logistics solutions to Tier I and Tier II automotive companies in Spain and a large manufacturing base and a strong component base, Spain is one of the most competitive markets in Europe.

The Transcoma group is a 160-million euro company providing logistic services to automotive and non-automotive logistics services amount is around 6 million

euros of its total business. While the existing automotive clients of Transcoma would remain with itself, the new automotive clients would be diverted to TVS Logistics Iberia.

TVS Logistics Iberia is targeting a turnover of 3 million euros by 2005 and 10 million euros by 2007.

Antrix, Measat Form Joint Venture to Pool Satellite Capabilities

The Indian Space Research Organisation and Malaysian counterpart MEASAT Global Bhd have decided to form a 50:50 joint venture to promote their satellite capabilities in the Asia-Pacific region. An agreement signed to this effect paves the way for ISRO to extend the commercial reach of its broadcast and telecom satellites, the Insats, to Malaysia, Singapore, Indonesia, the Philippines and Australia who have a high density of such users.

The agreement on the tie-up was signed between ISRO's commercial arm Antrix Corporation and MEASAT in the presence of Indian Prime Minister Dr Manmohan Singh and the visiting Malaysian Prime Minister Mr Abdullah Ahmad Badawi. The move will develop a satellite neighbourhood for millions of broadcasting and telecommunication customers across the Asia-Pacific region.

The agreement is considered a major step in the ongoing cooperation between the satellite sectors of the two countries.

ISRO has so far launched four commercial satellites mostly for domestic and public sector users. MEASAT operates its network for customers in South-East Asia, Indo-China, South Asia and Australia.

Reliance Industries Buys Deepsea Oil Block in Oman

Reliance Industries, the country's largest private sector oil firm, has bagged a deepsea oil and gas block in Gulf of Oman, and is looking for oil assets in Qatar, Iran and Saudi Arabia. Oman's is the second oil and gas block which Reliance has acquired.

Reliance Industries, which operates a 33-million tonne-per-annum refinery at Jamnagar in Gujarat, has ventured into oil and gas exploration in a big way. It has already struck huge gas reserves at two fields in Bay of Bengal.

RECENT POLICY INITIATIVES

Singapore FTA to Open Export Avenues

After the Thai FTA, Singapore is all set to be the next big-ticket trade pact for India. The government has drawn up a Singapore Free Trade Agreement list, which is under negotiation.

The list which spans a large selection of manufacturing industries, will encourage Indian companies in sectors like automobiles and components, home appliances, apparels, soft drinks, petro products, steel and chemicals. For consumers, it might mean more choice, particularly in the electrical and electronic product categories, at a competitive price as Indian companies source the Asean route for their imports through Singapore.

The Singapore FTA will earn new markets for India's large component industry, which can use the island as a trace hub, besides sourcing raw material like coke, steel, rubber and plastics.

Given that India's auto manufacturing capabilities are bigger than Singapore, the FTA will offer more export opportunities than import threats, say auto experts.

Though India's small and medium enterprises have voiced their fear of being swamped by cheaper Chinese products routed through Singapore, industry experts feel the opportunity angle for Indian manufacturing is larger than Thailand

The Government's latest draft list follows the sectors outlined by the earlier NDA regime in the Asean FTA framework, namely agro-based industries, services, mining & energy, science & technology including IT, biotech & electronic products, transport & infrastructure, auto parts, pharma, textiles, petrochem, garments, leather and engineering. The offer from the Singapore government includes all sectors except beer, cigars, drawn steel products, chewing gum, cigarettes and matches. The Singapore Government had earlier been tiffy about the finer aspects of the Rules of Origin though it has now agreed to accept general rules of origin for the FTA – something India was pushing for.

On the Indian side, the emphasis on manufacturing is understandable given that Singapore is positioning itself as an R&D centre and a logistics hub for the automobile

industry in the region. The FTA gateway includes automobile manufacturing, coach work and trailers and absorbers, radiators, silencers, clutches and steering wheels among others.

On electrical and electronic products, Singapore has an edge. The FTA covers general and special purpose machinery, domestic gadgets, electric motors, generators, transformers, a range of electrical equipment, radio, TV and communication, medical & precision equipments.

Machinery & Auto Parts Bear Major Brunt of DEPB Rate Cuts

The DGFT recently released the new DEPB rates for engineering goods with cuts in 512 of the 592 listed items. The largest cuts are in parts of machinery, automobile parts and parts of general use like nuts and bolts.

Carbon steel items suffer the deepest cuts while stainless steel and alloy steel items have got away with relatively shallow cuts due to different rates on input customs duty. Finished products like motor vehicles along with handicrafts of iron and aluminium, too, have got away with 1-2 per cent cuts.

The entire group of HR products get just 2 to 3 per cent DEPB with a relatively liberal cap value at Rs 21 to Rs 22 per kg, which is equivalent to current market price of \$450 per tonne.

Pharma Cos. in Tax-Free Zone to Continue Enjoying Tax Holiday

According to a recent notification issued by the Ministry of Finance, the Government of India, pharmaceutical companies that have set up manufacturing bases in the hills of Baddi (Himachal Pradesh) will continue to enjoy excise tax holiday.

Companies setting up manufacturing bases in Baddi would be enjoying 100 per cent excise exemption for 10 years from the date of manufacturing, income-tax exemption for five years and sales tax levy of just one per cent for 10 years. Several pharma companies including Torrent Pharmaceuticals, Nicholas Piramal, Unichem Labs, Indoco Remedies and Ind-Swift Ltd are in the process of setting up units in the tax-free zone.

RBI Relaxes Period of Realization/Repatriation of EOUs to 12 Months

The Reserve Bank of India (RBI) has notified that it has relaxed the period of relaxation and repatriation of 100% export oriented units (EOUs) and units set up by electronics hardware, software and biotechnology parks within 12 months from the date of export as against the earlier 6 month period. This is for exports made on or after 1 September 2004.

DGFT Clarifies on Deemed Export Benefits for Supplies to Nuclear Power Projects

The Government has clarified that deemed export benefits would not be available on goods supplied to nuclear power projects prior to 21 December 2001. It has held that supplies made on or after this date would be eligible for deemed export benefits.

Goods supplied to nuclear power projects through competitive bidding were covered under deemed export benefits from 21 December 2001.

The DGFT has in a circular said that the benefits of deemed exports are to be given with reference to the benefits available on the date of supply irrespective of the date of contract for such supplies subject to the fulfilment of all parameters of the Exim/foreign trade policy and procedures.

Draft Notification on Standardization of Drugs Issued

The Ministry of Health and Family Welfare recently issued a notification to amend Schedule M to the Drugs and Cosmetics Act to achieve uniform standardization and production of quality drugs. This pertains to Good Manufacturing Practices and requirements of premises, plant and equipment to be followed by the drug manufacturers. It has sought comments from the public within 30 days of the publication of the notification.

This Schedule that was earlier amended prescribed detailed guidelines for requirements for production of different pharmaceuticals for maintenance of quality control in the production of drugs through appropriate methodology, procedures and documentation

Tech Transfer Costs Abroad Not to be Taxed, Rules AAR

Payment for transfer of technology, if the transaction takes place outside India, would not be liable to be taxed in India, according to a ruling by the Authority for Advance Ruling (AAR) on an application filed by global pharma major Pfizer Corporation

The AAR also accepted an argument put forward by Pfizer Corporation, the company that applied before AAR, that technical information and know-how which is transferred through diskettes, can be construed as capital assets and claim exemption accorded to capital gains.

The AAR is an authority which decides on matters related to taxation and though its decisions are binding only on the particular case it decides, its rulings are considered as general guideline on similar matters.

In this case, the issue was whether the consideration paid to Pfizer Corporation by a Denmark based company EAC nutrition for transferring trade marks and technical know how on how to produce Protinex and Dumex-manufactured and marketed in India by Pfizer India, a group company of Pfizer Corporation—is taxable in India or not.

The transfer of the relevant documents happened outside India, in Bangkok. So two issues were considered. Whether transfer of know-how could be considered royalty that is taxable in India. The second issue dealt with the taxability of a transaction that took place outside India.

In this case, the transaction was carried out between Pfizer India, part of global pharma major Pfizer Corporation, Panama, and a Denmark company EAC Nutrition Ltd, Denmark. Pfizer Corporation owned the technological know-how for manufacturing nutritional food supplement Protinex and Dumex, manufactured and sold by Pfizer India, a group company. In November 2003, EAC Denmark acquired from Pfizer Corporation the trade-mark and technology information.

Under a separate agreement, Pfizer Corporation and EAC agreed to terminate the license granted to Pfizer India to manufacture under the same trademarks. Seven million dollar was paid as consideration for extinguishment of the license. The dossier containing the technology information was handed over to EAC in Bangkok.

EAC had withheld tax at the rate of 21 per cent on payment of consideration to the applicant, Pfizer

Corporation, for the transfer of technology and the tax has been deposited with the Government of India.

Pfizer Corporation had approached the AAR objecting to the withholding of tax on the ground that Pfizer Corporation, based in Panama, has transferred the documents containing know-how and technical information outside India to EAC, Denmark and is hence not taxable in India. To support this point of view the company cited Supreme Court decision in the matter of Scientific Engineering House (1986) and another apex court verdict in the case of ACC (2001).

Both these rulings had been cited to support the view that if technical information, are put on media like diskettes, then the transaction could be construed as one pertaining to tangible assets. Since they are considered tangible assets handed over outside India, the capital gains on transfer of assets cannot be subject to taxation in India.

Government Simplifies Drug Pricing

According to a recent notification issued by the Ministry of Finance, the Government of India, it will provide 35 per cent abatement on retail prices of drugs before levying excise duty on medicines. The change in excise norms relating to medicines has been notified to avoid legal disputes and sort out the differences in the practice of assessing the value of medicines being sold from retail outlets.

The abatement will take care of the expenses incurred by manufacturers on packaging, dealers margins and cartage. Apart from allopathic medicines, the ayurvedic, unani, siddha, homoeopathic and bio-chemic drugs will come under the new excise dispensation.

This will lead to a simplification of the structure as the assessment value has been misused by some people.

Levying excise based on retail price of the drugs sold to consumers has been done as part of simplifying the excise procedures by Revenue Department in Finance Ministry. The new excise levy regime will come into operation from 8 January 2005.

Meanwhile, the National Pharmaceutical Pricing Authority (NPPA) has revised the prices of 99 formulations in accordance with revised norms for conversion cost, packaging charges, packing material cost and process loss.

The prices of medicines like Analgin, Vitamin-C,

Vitamin-E, Amoxicillin Cloxacillin, Vitamin-A, Ibuprofen, Paracetamol, etc will be impacted. However, the industry will take a fortnight to calculate the exact impact of this revision on consumers.

Customs Clearance for Textiles Relaxed

According to a recent Circular Issued by the Ministry of Finance, Govt. of India, the Government has liberalized the customs clearance procedures for exporters of textiles and garments in the wake of the removal of quota restrictions. The goods would now be cleared without quota certificate/visa/ export certificate. The export documents would be accepted for processing with effect from 25 December 2004 for shipments sailing on after 1 January 2005.

The requirement for country of origin would be required only if the importing countries - European Union and the US - specifically ask for it. For products claiming General System of Preferences (GSP), designated agencies like Export Inspection Agency, Textiles Committee, DC (Handicrafts) etc are already issuing the certificate including the country of origin declaration. For non-preferential production, certificate of origin issued by various agencies authorised by DGFT are acceptable, as per the EU amendment.

I-T Benefit for Converted EOUs

According to the Export Promotion Council for EOUs and SEZs (EPCES), units in domestic tariff area (DTA) which convert themselves into 100% export oriented units (EOUs) would be eligible for exemption under Section 10B of Income Tax Act.

In a clarification issued, the CBDT has said the deduction would be available only from the year in which the unit gets approvals as 100% EOU. This facility would be available to computer software exports also. The Foreign Trade Policy had a provision under which DTA units converted into EOUs would be entitled to tax exemption under Section 10B.

The CBDT has now implemented this policy to provide benefits to units which convert into EOUs. The benefit will not be available after assessment year 2009-10 when the tax holiday for EOUs ends.

Textile Units to Get 10% Capital subsidy

The Government will provide one-time capital subsidy of 10 per cent to processing units in the textile sector as part of enhanced assistance under the Technology Upgradation Fund Scheme (TUFS). The Cabinet had already approved this proposal.

The Textiles Ministry had proposed that interest subsidy given to processing units under TUFS be enhanced from 5 to 8 per cent.

To modernize each processing unit, an investment of Rs 50 crore to Rs 100 crore is needed.

The capital subsidy would only be available for a year to units that modernize using listed modern machines.

FEEDBACK

Dear Readers,

Indian Institute of Foreign Trade (IIFT) in collaboration with Department of Scientific & Industrial Research (DSIR) brings out Quarterly Newsletter, *Technology Exports*.

The Newsletter aims to familiarise trade & industry with the latest happenings and to bring out the policy analysis in the field of technology exports.

We have received encouraging responses from Indian missions abroad, embassies in India and trade & industry. Words of praise, especially coming from various Indian missions have been extremely fulfilling and inspiring for us.

While positive responses are highly encouraging, we believe continued "Readers' Feedback" will be the key factor not only for improving the contents but also for maintaining sustained interest.

Therefore, we at *Technology Exports* welcome Readers' valuable suggestions, inputs and constructive ideas. We would appreciate receiving specific information such as lead articles, exportable technological developments, achievements in technology related exports, etc., for publication in the Newsletter. Such information may be addressed to: Editor, *Technology Exports*, Indian Institute of Foreign Trade, B-21 Qutab Institutional Area, New Delhi-110 016.

E-mail: akanungo@iift.ac.in

Website: www.iift.edu