

VOL. VI NO. 1

JULY-SEPTEMBER 2003

IMPLICATIONS OF WTO-TBT AGREEMENT ON EXPORTS

S.P. Agarwal* and Rajeshwar Dayal**

TBT Agreement

THE important role that International Standards and Conformity Assessment procedures play in the context of international trade resulted in the Agreement on Technical Barriers to Trade (TBT). The agreement on TBT in principle aims to benefit the WTO Members as it espouses the cause of smooth trade. The Membership of the WTO provides confidence in international trade amongst the consumers, producers, manufacturers and exporters of the member-countries. While the consumers and producers enjoy secure supplies and wider choice of finished products, raw material and services, the producers and exporters are benefited with foreign markets being opened to them.

The WTO is the only international organisation that deals with the global rules of trade amongst various nations. Its aim is to ensure that the trade of various goods flows in smooth, predictable and free manner across the nations. The strategies are still being evolved in terms of simplification of trade procedures. Currently, the WTO has 144 members in its fold. Indian industry and exporters are yet to fully understand its complex rules to see that the WTO era becomes an opportunity rather than a threat for our trade.

Earlier, tariffs used to act as a tool to keep imports out. Nowadays, the focus has shifted to laying down more stringent standards and conformity assessment procedures to check imports. This is affecting the exports of developing countries due to more stringent requirements for products like textiles, leather, engineering products, agriculture produce, etc. Now, with the introduction of Environmental Management Certification, Social Accountability requirement, Occupational Health & Safety Measures the exports of developing countries have suffered maximum. Therefore, the emphasis has now shifted from tariffs, as trade barriers to non-tariff barriers.

The TBT Agreement was negotiated in the Uruguay Round, with the objective of improving market access and to ensure that Non Tariff Barriers (NTBs) in the form of technical standards become non-operative. It primarily focuses on reducing technical barriers to trade by requiring members (governments) to use international standards as the basis for their technical regulations, which has the added advantages of transparency and predictability of requirements, and efficiency in production. While the Agreement recognises that there may be legitimate reasons for differences in technical regulations, because of climatic or geographical factors, it requires members to avoid the adoption and application of unnecessary differences in technical regulations and their conformity assessment procedures that in turn have an effect on trade.

The Agreement encourages countries to seek ways to reduce the trade impact where their requirements differ legitimately through means such as not requiring additional tests of products beyond those undertaken in the producer's market, accepting another country's technical regulations as equivalent to their own, or harmonising technical regulations to those required in other markets.

TBT Agreement mandates the use of international standards as the basis of technical regulations. The Ministry of Commerce & Industry, Govt. of India, is the nodal Ministry for implementing and administering the Agreement on TBT. BIS, the National Standards Body has been designated as the WTO/TBT Enquiry Point by Ministry of Commerce & Industry as required under Article 10 of the TBT Agreement.

As per the TBT Agreement (Article 4), it is an obligation that the standardising bodies should accept and comply with the Code of Good Practices for the Preparation, Adoption and Application of Standards. BIS being the national standards body of India has accepted the Code of Good Practices.

TBT has prominence in the overall trade framework as increasing number of technical regulations are required

^{*} Head, Centre for International Trade in Technology (CITT), IIFT, New Delhi

^{**} Consultant, CITT, IIFT, New Delhi.

TECHNOLOGY EXPORTS

EDITORIAL BOARD

B. Bhattacharyya

Indian Institute of Foreign Trade

Ranjan Chatterjee

India Trade Promotion Organisation

Ashwani Gupta

Department of Scientific & Industrial Research

Nirupama Rao

Ministry of External Affairs

S.R. Rao

EXIM Bank

Dr. K.V. Swaminathan

Waterfalls Institute of Technology Transfer

EDITOR

Anil K. Kanungo

ISSN 0972-1460

SUBSCRIPTION RATES

Single Copy : Rs 100 ; \$5 Annual Subscription : Rs 360 ; \$18

Reproduction of features and news from Technology Exports with due acknowledgement is welcome. Two copies of the issue reproducing any material from Technology Exports may kindly be sent to the Editor.

Printed and published by **P.K. Puri** for Indian Institute of Foreign Trade, B-21 Qutab Institutional Area, New Delhi-110016 with support of Department of Scientific & Industrial Research at Aristo Printing Press, New Delhi.

by governments because of factors such as the complexity of products, consumer demand for safe products, and growing problems of water, air and soil pollution. The increasing use of technical regulations along with the successive reductions of tariffs and their impact on market access have resulted, paradoxically, in technical barriers to trade becoming one of the major impediments to the international flow of goods and is now perceived to be a major barrier for exports from developing countries.

Impact on Exports

Divergent and higher technical standards can become barriers for cross border transactions to an export firm basically due to two reasons: *first*, incremental costs to be incurred to make the domestic product conform to foreign standards; *second*, the costs to be incurred for certification procedures and difficulties in proving product conformity.

National Workshop

In India, various provisions and implementation of the WTO Agreement related to TBT would have significant impact on our exports especially from the year 2005 onwards and would definitely need greater role of R&D institutions in enhancing export competitiveness. Also, there does not appear to be adequate awareness in India, about the provision of TBT Agreement, the implementation mechanism and the notifications issued by the WTO from time to time, among our exporting community and related organisations.

In this context, a one-day Workshop on "Implications of WTO-TBT Agreement on Exports" was organised by IIFT's Centre for International Trade in Technology (CITT) in association with Department of Scientific and Industrial Research (DSIR), Government of India, and with the support of Ministry of Commerce & Industry, Bureau of Indian Standards (BIS) and Federation of Indian Export Organisations (FIEO) on 7 January 2003 at IIFT, New Delhi.

The objective of the above Workshop was to discuss the present status and implications of the various provisions in the TBT Agreement on our exports. The Workshop also focused on the experiences of our exporters and related issues with a view to taking the fullest advantage of the various provisions of the TBT Agreement. Two comprehensive background papers were prepared and presented by BIS for discussions. The participants included policy-makers and government departments, industry and exporters, industrial associations and export promotion bodies, R&D institutions and related technical institutions, consultants, etc. The discussions that took place and the recommendations emanated out of those discussions are briefly summarised below.

TBT Notifications

The notifications are the primary instruments for ensuring transparency in the multilateral system. The notifications are submitted by one member country and reviewed and examined by the relevant bodies of the WTO and other member countries. During the year 2001, the WTO members issued 538 notifications and since the inception of the WTO (Jan 1995 to Dec 2001), 4085 notifications have been issued by 65 WTO members. Out of these 4085, the maximum number of notifications have come from the Netherlands (570), USA (215), Japan (265),

UK (20), European Communities (191). India has issued 45 notifications during these years.

Various tariffs are used by the national governments, to keep the imports out for protecting their domestic industry. Some of these notifications may put more stringent standards by way of technical notifications and conformity assessment affecting the trade and export of the developing countries. TBT notifications and other regulations must result in smoother trade amongst nations. Different strategies are made in terms of simplification of trade procedures. There is a general feeling that quality standards are being used as NTBs.

Case Studies

The following few examples are being quoted which reveals how they have affected our exports of different commodities to various nations:

- Ministry of Health & Family Welfare, Govt. of India has proposed a new product standard for Distilled Spirits. USA has alleged that the intent of new standard is unclear and if enacted as proposed by India, US exports to the Indian market of Distilled Spirits could be severely impeded. The Distilled Spirits Council of USA has expressed concerns over Government of India's proposed revisions and amendments to the Prevention of Food Adulteration Rules, 1955, viewing them as discriminatory. It has offered comments directly to the Ministry of Health. On standards of identity-alcohol strength, we have been asked to revise the alcohol content requirements to allow the sale of spirits bottled at 40 per cent by volume, to remove the upper limit on the alcohol strength. On analytical parameters, India has proposed maximum concentration levels for a variety of naturally occurring substances in the distillation process. The US distilling industry believes that these substances are integral to the character of the final product and has requested us to remove any quantitative limitations on fusel oils. In addition, they note that the 500 grams per 100 litres of absolute alcohol limited proposed by the Scotch, but exclude US products. On Geographical Indicators, the Indian proposal does not provide for recognition of whiskey as distinctive US product. US industry has asked such recognition and that India does not permit sale of such products unless they have been produced in USA under US laws and regulations. On the question of standards to identify certain chemicals and metals, US industry has expressed its concern that testing will create an unnecessary burden on its product, which does not normally represent a risk of containing the chemicals and metals of concern.
- (ii) DGFT has issued a notification requiring that import of all pre-packaged commodities intended for retail sale carry specified declaration prior to clearance through Indian Customs. These include name and address of the importer, generic and common name of the commodity being imported, quantity, month and year of packaging, the maximum retail price. The notification also mentions about the list of 133 commodities including food preservatives, dyes, steel, cement, electrical appliances, etc. These products are subject to compliance with specified Indian quality standards and that exporters/manufacturers will be required to register and obtain a certificate from Bureau of Indian Standards (BIS). Various WTO members including USA, Japan, Canada have raised objections and have sought various clarifications.
- (iii) The All Indian Granite and Stone Association has informed that Xiamon Inspection and Quarantine Office of China has issued a notice and has stated that granite exporters from India are required to present a certificate for their blocks stating the levels of radio-activity range w.e.f. 1 July 2002. The Indian Embassy was also informed that the improper use of building materials has caused blood cancer amongst their citizens during last 5-10 years. The Association has also stated that these types of tests/certificates are not required for granite and marble exporters anywhere in the world. The Indian export of granite to China has suffered a setback with the introduction of this new regulation.
- (iv) Automotive Tyres Manufacturers' Association has raised many issues regarding tyres exported from India. Some of them are enumerated below:
 - (a) Brazil has imposed EN-METRO marking on all tyres being imported to the country. This is an expensive proposition as it costs a company around \$20,000 and the certificate is for one year only, which needs revalidation every year at a cost of \$1,100 per annum and Brazilian inspectors are to visit the Indian factories which costs \$600 per day.
 - (b) The Chinese government has implemented a new regulation by which it is mandatory to have compulsory product certification for tyres to be exported into China. According to this system, a team from certification authority will visit the factory and carry out the audit to ensure that the product meets China tyre standards.
 - (c) Mexico has required a "Norm" certificate awarded to each and every tyre and not to the tyre company.

- (d) Nigeria has imposed ITS marking on tyres for imports into the country.
- (e) European countries insist for E-marking.
- (f) Germany and Netherlands have banned use of certain dyes and chemicals which are not Ecofriendly.
- (v) Canada and Norway have extended duty free access to Bangladeshi garments w.e.f 1 January 2003. This has a serious impact on Indian garments export. Canadian buyers are looking for Bangladeshi garments of Indian fabrics. This will result in exports of fabric from India to Bangladesh, rather than export of garments from India to Canada and reduction in exports of value added products from India. Similar agreements have also been signed by EU, which would give better market access to other competing countries at the cost of exports from India.
- (vi) Social accountability SA 8000 is a recently announced international standard for Management Systems primarily dealing with working conditions. Further, the developed countries are forcing supplier countries to adapt to newer technologies like on-line transmission of exports, export allocation and on-line tracking of the export cargo. On the face of it this seems to be a friendly adjustment benefiting the supplier, but it is apprehended that it would remain within the administrative control of the importing country as it could be withheld at various ports at the behest of data being not available.
- (vii)Export of marine products is also facing some problems. EU regulations are not clear, e.g. the use of bacterial inhibitors is not banned and is permissible up to specified limits. Amino glycosides, macrolides, tetracyclines and all other antibiotics are bacterial inhibitors. Therefore, the presence of bacterial inhibitors cannot be cited as the reason for rejecting the consignment. In another such example, the seafood consignments exported to Italy and France were rejected for the presence of Vibrio parahaemolyticus- a microorganism commonly found in coastal and estuarine waters. The EU specification requires that a 25g sample, on analysis, should not test positive for the presence of Vibrio parahaemolyticus.

All above referred instances emphasise the need to carry out the studies of impact of various notifications submitted by various WTO members. Therefore, all possible efforts are required to be made to send our comments within the stipulated period. It is also required to provide the feedbacks and details for negotiating against or for the notifications or trade barriers. For this, the involvement of all the concerned

– the manufacturers, exporters, federations & associations and government is required.

Role of R&D Institutions: In view of the need to produce exportable products meeting the technical standards and conformity requirements of importing countries, the export production units need to develop links with the concerned R&D institutes to seek their expertise and facilities, besides upgrading their own technical capabilities. R&D institutions should keep themselves abreast of the latest technological and other requirements of various importing countries in their respective areas.

Also, R&D institutes have an important role to play in evolving our own notifications and defending the same at WTO, and examining the notifications issued by other countries and offering our comments. The strong linkages of R&D institutions with export manufacturers, BIS, etc. would greatly facilitate our technology intensive or high value exports. CLRI seem to have played an important role in helping the leather exporters to meet various technical requirements of the importers.

Dispute Settlement

In cases where the notifications are established and our business interest are not properly taken care of and we feel that our rights under the agreement are being infringed, we should do our utmost to resolve the trade quarrels or disputes under the provisions of Dispute Settlement Board (DSB).

It is obvious – as trade expands in volume, in number of commodities, and the number of trading companies and number of nations trading increase, there is greater chance that dispute will arise. The WTO system helps to resolve these trade disputes peacefully and constructively. The various rules are an obligation for members to bring their disputes to the WTO and not act unilaterally. Since the inception of the WTO in January 1995, till October 2002, total 273 disputes have been registered. Out of these, 14 cases have been registered by India whereas other WTO members have registered 13 disputes against India.

There is a need to create awareness among all the concerned that how best our interest could be safeguarded under the prevailing circumstances and we can make the best use of theses TBT notifications, agreements, other strategies, dispute settlement board, etc. under the banner of the WTO.

Recommendations of the Workshop

(i) The information contained in the TBT notifications is not readily useable by the exporters most of the time, because of heterogeneous mix of contents and complex language. It is, therefore, necessary that the notices are analysed product-wise as well as country-wise and then disseminated widely to concerned exporters/manufacturers in a manner, which is easily understood by them.

BIS should make available all the information with regard to TBT notifications and related matters online for the benefit of exporters/manufacturers/R&D institutions and other concerned agencies.

A compendium may be made of TBT notifications with respect to our major trading partners to evaluate their impacts on our exports, to examine if they are WTO compatible, to assess if the Indian industry is in a position to fulfill those conditions and to find out what technical assistance is required if we are not able to fulfill the specifications/conditions.

- (ii) There is need to undertake awareness programmes about the importance and impact of various provisions of the TBT Agreement, for the exporters in different parts of the country.
- (iii) The R&D and related institutions have an important role in assisting the exporters to upgrade/modify their products and processes to meet technical specifications and other requirements of the various TBT notifications of member countries. Therefore, there is need to enhance interaction of R&D institutions with the export facility and making the technology related services available to the exporters more easily. DSIR indicated its willingness to support such programmes.
- (iv) Responding to the TBT notices issued by other countries, within the stipulated time period, is essential. Also, it is necessary to have a system approach for networking among BIS, Ministry of Commerce & Industry, export organisations/associations, R&D institutions and other concerned ministries/departments designated to issue notices.
- (v) Export promotion organisations (EPOs) and industrial associations should have technical wings. These organisations should periodically give their suggestions and views to BIS/Ministry of Commerce & Industry for discussions and negotiations in the triennial meetings of the WTO member countries and elsewhere. There is a need to have frequent consultation among Export Promotion Councils, BIS and Ministry of Commerce & Industry, since MOC is the nodal agency representing India at the WTO, BIS is the enquiry point and EPCs/ FIEO are bodies representing exporters/importers who need to be educated of recourse to TBT faced by them.

- (vi) Since the international standards are generally different than the national standards of the importing countries, it may be desirable to take up the issue at the ISO and the WTO platforms in order to have single standards for global marketing. Also, a mechanism for improving standards and meeting the quality of the products for exports need to be evolved.
- (vii)Comparative standards of the importing countries should be prepared for important products to help the exporters and manufacturers.
- (viii) Active participation at the TBT committee meetings and elsewhere is essential and also to retaliate against the provisions or notices considered to be disadvantageous to us. For this, enhancement of our capacities and capabilities are required on continuing basis.

A strong legal framework is also required to take up the issues related to TBT Agreement for redressal, when necessary.

- (ix) Efforts should be made to make member countries of the WTO to accept the test reports by the approved testing agency/agencies of the exporting country by the importing country.
- (x) Studies should be undertaken to identify TBT measures which are:
 - (a) Not based on scientific and technical evidence.
 - (b) Higher than the agreed international standards.
 - (c) Unnecessary obstacles to international trade.

These studies would help the government to take up the matters at bilateral or multilateral platforms. All research work should be coupled with practical experience of the exporting fraternity.

- (xi) In order to lessen the burden of extra costs to be incurred by exporters, specially the small-scale industry and to make them competitive in price, it would be appropriate if the government shares their testing, certification, inspection and other costs.
- (xii)Efforts are required to be made on bilateral basis to remove the discriminatory non-tariff barriers introduced by some member countries.

Advantage should be taken of the specific provisions included in Article 12 of the TBT Agreement which provides that developing country members should not be expected to use international standards as a basis for their technical regulation or standards, including test methods, which are not appropriate to their development, financial and trade means.

n

RECENT TECHNOLOGY EXPORT RELATED DEVELOPMENTS IN INDIA

Indian Bioinformatics Market to Touch \$20 mn by 2006: Report

According to a recent Report on the bioinformatics sector by Avendus Advisors, the Indian bioinformatics market is estimated to grow to approximately US\$15-20 million in 2006.

The Report states that the worldwide bioinformatics market was pegged at US\$697 million in 2001 and projected to increase at a compounded annual growth rate (CAGR) of 20 per cent between 2001 and 2006, reaching an overall market size of US\$1.7 billion by 2006.

Avendus, an investment bank, focuses on IT-enabled services & technology, as well as high growth areas like fast moving consumer goods (FMCG), pharmaceuticals and the media.

Bioinformatics, explains the Report, is the use of computer technology to store, organise, generate, retreive, analyse and share genomic, biological and chemical data to support the drug discovery process. India has the potential to become a key player in the bioinformatics market due to its large, trained pool of IT manpower.

According to Avendus, Indian companies can play a significant role in areas such as data handling, data-mining, genotyping and fingerprinting, DNA sequencing, etc. The Report estimates that currently up to 10 per cent of investment in R&D is IT-related, and there is huge potential for Indian biotech and IT companies to enter into collaborative bioinformatics research with global pharma majors in the near future.

The Report further indicates that despite India's IT capabilities, it may be difficult to replicate this success in biotechnology as biotechnology differs from IT in many ways. Avendus suggests Indian players to leverage upon the lower costs of infrastructure and human resources. The cost of setting up and running a bioinformatics company in India is a fraction of the cost in USA. Indian companies will have to target pharmaceutical and biotechnological companies, as well as agribiotech and industrial biotech companies.

According to Avendus, a major challenge for new players is standardisation of services as there are hundreds of vendors in the informatics space combined with varying standards and platforms. Vendors, explained the Report, will have to offer more modular systems or welldocumented APIs (application program interface) in an effort to garner a bigger chunk of this market. The challenge also includes finding the right team, as a lack of biological understanding can result in sophisticated computational methods being applied naively.

Auto Component Exports to Cross US\$2 bn by 2005-06

As the outsourcing story gains momentum, exports of auto components are set to reach US\$2 billion mark by 2005-06, up from US\$800 million during the last fiscal. There is a wave among the OEMs in North America and Western Europe to outsource components from India.

India offers the best mix of low-cost and high-quality engineering skills, and global tier I and OEMs have no option but to outsource from India.

The auto component exports from the country have grown from US\$300 million in 1998-99, to US\$800 million in 2002-03 registering an increase by 30 per cent.

While in the past, the export growth came mainly from aftermarket sales, the future growth is expected to come from global OEMs and tier I suppliers. Last fiscal saw global tier I suppliers such as Visteon and Mico Bosch emerging as the largest exporters of components from the country, together accounting for 15 per cent exports. During the current year, they are expected to be joined by Cummins and Delphi.

Meanwhile, large Indian companies including Bharat Forge, Ricoh Industries, Motherson Sumi Systems, Sundaram Fasteners and Hi-Tech Gears have started landing multi-million dollar outsourcing deals from companies in North America and Western Europe.

Bharat Forge has reported over 150 per cent jump in its export sales during 2002-03 to Rs 271 crore against Rs 110 crore during the previous fiscal. The company expected repeat of last fiscal's export performance during the current year as well.

In the last five years, auto component exporters have gradually reduced their dependence on aftermarket in favour of OEM exports.

Poppy Plant Gets US Patent

The Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow, have recently got a US patent for developing a disease-resistant and high straw and seed yielding variety of poppy plant. The plant known as "Rakshit" took about seven years to develop a long process of hybridisation both in the laboratory as well as in the fields. The plants were artificially infected with fungal

diseases to test their resistance capability. It was also seen that the variety produced high seed and straw. They had been successful in developing, for the first time, a poppy plant resistant to all the three major diseases – downy mildew, damping off and collar rot – affecting the plant. All the diseases were fungal with collar rot rotting the portion between the stem and root of the plant, downy mildew destroying the leaves by making them off white in colour and damping off attacking and killing the plants in the seedling stage itself, mostly in moist soil.

The latex obtained by the incision of unripe green seed capsules is collected and dried from which opium and alkaloids like morphine, codeine, thebaine, narcotine and papervine are isolated to be used by the pharmaceutical industry to develop a variety of analgesics, anti-tussives and anti-spasmodics.

India is one of the largest producer of opium for the world's pharmaceutical industry. India and Turkey are reported not only to share 80 per cent of the US pharmaceutical market's annual purchases of morphine but also share about half of the global market.

New Tech for Efficient Silicon Light Emission

A Hyderabad-based company STMicroelectronics has developed a new technology that allows silicon-based light emitters to match the efficiency of traditional light-emitting compound semiconductor materials such as gallium arsenide (GaAs). This opens up many potential applications in which optical and electrical functions are combined on a single silicon chip. This was previously not possible because though silicon is ideal for building memories, microprocessors and other complex circuits, it could not be made to act as an efficient light emitter. The ability to combine optical and electronic processing on the same chip presents enormous opportunities for the company to develop many new types of semiconductor products, as the technology is compatible with existing volume production process flows and equipment.

The company's new silicon-based light emitting technology sets a world record for efficiency. It is based on an innovative structure in which ions of rare-earth metals such as erbium or cerium are implanted in a layer of silicon rich oxide (SRO), i.e. silicon dioxide enriched with silicon nanocrystals of 1-2 mm diameter. The quantum efficiencies achieved are about 100 times better than has previously been possible with silicon and are, for the first time, comparable to those obtained from GaAs and other compound semiconductors traditionally used to make light-emitting diodes (LEDs). The frequency of the

emitted light depends on the choice of rare-earth. The company has patented key techniques for implanting the rare-earth ions into the silicon.

Morepen Files for Fluvastatin Sodium Patent

Morepen Labs Ltd. has filed a patent for Cholesterollowering drug Fluvastatin Sodium. This blockbuster molecule would give quick entry into statins market resulting in good revenue in near future. The drug which has an estimated global market of US\$500 million and growth rate of 25 per cent by end of 2003-04 would facilitate the product's entry into the Canadian and European markets. Morepen has already started supplying the product to Latin American countries and has tied up with major European and Middle East pharmaceutical companies. The drug is widely used in the treatment of hyperlepidemi and hypercholesterolemia. Development of non-infringing processes and new polymorphs with patent protection would provide Morepen a competitive edge to capture major generic market share.

Awareness-cum-Training Programme on

"Competitive Advantage Through Design"

Being organised by National Institute of Design, Ahmedabad with the support of Department of Scientific and Industrial Research in October 2003

Broad Contents of 5-day Programme

- Gaining Competitive Edge through Design
- Better Design for Manufacturability
- Product Differentiation through Design
- Design for Masses
- Design Case Studies from SME Sector

Overseas Nominations Invited

Contact

Department of Scientific & Industrial Research

Technology Bhawan New Mehrauli Road New Delhi-110016

Tel: 0091-11-26866123, 26567373 Fax: 26960629, 26868607 Email: ashwani@alpha.nic.in

RECENT POLICY INITIATIVES

Term of Patents Goes Up to 20 Years

With the Government of India notifying the Patents (Amendment) Act of 2002, and the Patents Rules of 2003, the term of every patent has now gone up from 7-14 years to 20 years.

Earlier, the term of patents was seven years for food, medicines and drugs, whereas it was 14 years for the rest of the items. The notifications prepare the ground for the 2005 deadline when the product patents regime would come into being.

As per the notifications issued recently, a new definition of "invention" has come into force. Now it means "a new product or process involving inventive step and capable of industrial application." Further, "a method or process of testing during the process of manufacture will now be patentable." A process defined in the case of plants is now patentable, while a process for diagnostic and therapeutic has now been considered as non-patentable.

The Government has notified a list of 34 authorised depository institutions (ADIs) for depositing biological materials mentioned in the specification at the time of filing a patent application. These institutions analyse and store a database of characteristics of micro-organisms. This provision will be helpful for inventors.

The 34 ADIs are based in a number of countries – USA, Australia, Britain, Belgium, the Netherlands, China, Italy, France, Germany, Spain, Japan, Canada, Russia, India, the Czech Republic, Slovakia, Poland, Korea, Latvia, Bulgaria and Hungary. As per the government notifications, the source of geographical origin of the biological material used in invention is required to be disclosed in the specification.

Every patent (except in which a secrecy direction is given) will now be published just after every 18 months from the date of filing/priority and will be open for public on payment. Further, the applications for patent will now be examined in serial order in which the request for examination is filed.

The notifications will help inventors as well as corporates by bringing down the filing expenses. In a security-related stipulation, they have prohibited the filing of patent applications outside India in inventions in the fields of defence and atomic energy.

The time for restoration of a ceased patent has now been increased from 12 months to 18 months. There is also a provision for allowing Paris Convention priority, which now extends to groups or unions of countries.

JOINT VENTURES

VSNL Floats US Subsidiary

Videsh Sanchar Nigam Ltd. has set up a wholly-owned subsidiary in USA under the name VSNL America Inc. It is the third international venture of VSNL which recently received certificate of incorporation. The company will be providing internet Protocol-Virtual Private Network Solutions.

VSNL's presence in USA will give the company significant advantage in providing superior quality service to its Internet consumers. The company currently has over 1 GB of Internet bandwidth capacity, the larger part of which connects to USA.

Gulf Oil in JV Pact with Oil Bangladesh for Lube Blending

Gulf Oil Corporation Ltd. (GOC) has entered into a joint venture with Oil Bangladesh Ltd (OBL). Both the companies would promote a new company called Gulf Oil Bangladesh Ltd. (GOBL).

As per the agreement, GOC will hold 51 per cent in the new company, while Oil Bangladesh will hold 49 per cent. The new company will be headquartered at Dhaka.

With this joint venture, Gulf Oil Corporation Ltd will become the first Indian lubricant company to invest in the international market. In order to take advantage of duty differentials between raw materials and finished products, GOC has proposed to start lube blending operation in Bangladesh through this joint venture company.

The lubricant market in Bangladesh is estimated at 70,000 mt per annum, and estimated to grow at a rate of 6-8 per cent annually. As a sole distributor of GOC, Oil Bangladesh sells about 200 kl per month, a market share of 3.5 per cent. After the joint venture, the company targets a market share of 7.1 per cent in the first year of operation.

The new company will blend and exclusively market GULF branded lubricants in Bangladesh. It will import 25 per cent of the base material from India and Italy, and plan to import some of the finished products, which cannot be blended in Bangladesh.

During the nine months ended December 2002, the Gulf Oil Corporation recorded a turnover of Rs 273.35 crore and a net profit of Rs 9.73 crore. Gulf Oil Corporation Ltd is a part of Gulf Oil International, a global organisation with operations in over 83 countries.

NTPC to Venture Abroad with Sri Lanka, Bangladesh

National Thermal Power Corporation, the state-run national power company is planning to spread its wings and establish its presence in foreign lands.

The company which has built 20 per cent of the total installed capacity in the country (21,000 mw), is now drawing up plans and has begun informal discussions to set up operations abroad. To start with, the company is planning to set up generation plants in neighbouring countries like Sri Lanka and Bangladesh.

On the other hand, it has formalised its joint venture with US-based company Black and Veach to take up consultancy contracts abroad. The two companies have recently signed a Memorandum of Understanding to this effect.

The company's new strategy to expand globally by setting up generation plants is a part of its overall corporate strategy. It has already established itself domestically and expanding its operations and business abroad.

The Sri Lankan government has indicated to the MEA in India that they would welcome a generation plant to be set up by an Indian power company in Sri Lanka.

Sources said that MEA officials have sounded NTPC in this regard and preliminary enquiries are being sought. However, a clear picture will only emerge after the project has been finalised.

In the case of Bangladesh which has rich gas reserves, NTPC has planned to take up a 450 mw plant some time earlier this year. NTPC, however, will explore possibilities of putting up thermal projects in Bangladesh.

The MoU signed with Black and Veach is also expected to generate some significant consultancy contracts for NTPC which will help in improving its bottom lines. The company plans to achieve a total installed capacity of 40,000 mw by 2012.

Mastek in BPO JV with US Co.

A Mumbai-based software services company Mastek has formed a joint venture through its wholly owned subsidiary in the UK, Majesco Software, with US-based IT services firm Carreker Corporation.

Mastek's new JV company will be called Carreker LLC. Carreker will own 51 per cent while Majesco will retain the remaining 49 per cent.

The new entity will enable financial institutions and their processors to realise the benefits of business processing outsourcing (BPO) and offshore IT.

Carretek will initially focus on payments-related business processes and IT services such as customised software development and application management. Within this area of expertise, the Carretek will provide offshore outsourcing services to financial institutions, global sourcing, strategy development services (consulting, methodology, and tools) to help banks understand their offshore outsourcing opportunity. Selected payment processes will be outsourced to India through a range of business models to suit needs of different banks.

Mastek is mid-sized software services company which is also struggling for growth like its venture partner Carreker. It had posted a net profit of Rs 5.4 crore for the quarter ended 31 March 2003 as compared to Rs 7.52 crore for the quarter ended 31 March 2002. The net profit came down despite a moderate increase in sales. The company has been witnessing a continuing decline of margins.

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

GLOBAL DEVELOPMENTS

Wockhardt Buys UK Company

The Rs 742-crore Indian drugmaker Wockhardt has acquired UK-based off-patent drugs manufacturer CP Pharmaceuticals for Rs 83 crore (£10.85m) in an all-cash deal.

Taken together with Wockhardt's existing UK subsidiary, Wallis, the acquisition is expected to catapult Wockhardt into the league of UK's top 10 generics (offpatent drugs) companies with a turnover of over £50m, or Rs 382 crore, in that country. Wockhardt will fund the buyout through internal accruals.

CP Pharma will be Wockhardt's vehicle for growth not just in the UK but in other key markets of Europe.

CP Pharma has an employee strength of around 430. It is a leading supplier of injectibles like animal insulin and anti-clotting drugs called heparins to the UK government's National Health Service (NHS).

Three More Join Group of Seven on Tech Transfer Issues

Jamaica, Nigeria and Venezuela have joined the Group of Seven countries, including India and Pakistan, which have demanded operationalisation of the technology transfer provisions in various World Trade Organisation (WTO) agreements. The other members are Cuba, Zimbabwe, Indonesia, Kenya and Tanzania.

In a submission made to the Working Group on Trade and Transfer of Technology, the three countries expressed their decision to co-sponsor the Paper submitted by the seven countries on the issue.

The Paper, being considered by the Working Group, has pointed out that in most cases, technology transfer provisions contain only "best endeavour" commitments and are not mandatory rules. Because of the non-operational and non-mandatory nature of almost all the provisions relating to transfer of technology, the developing countries have not derived any meaningful benefit from these provisions.

The paper points out that reports received in response to a request by the Working Group from various WTO bodies on the work they may have done or that they plan to carry out in relation to trade and transfer of technology, have not been encouraging. Further, it says that there should be a detailed examination of the various provisions contained in the WTO agreements relating to technology transfer with a view to making these provisions operational and meaningful.

On the issue of multinational enterprises (MNEs), the Paper says that the Working Group should examine the restrictive practices adopted by the MNCs in the area of technology transfer and come up with recommendations as to how to prevent them from taking recourse to such restrictive practices.

Pointing out that the continued existence of tariff peaks and tariff escalation in developed countries limit the scope for technology transfer and reduce opportunities for learning and innovation in developing countries, the Paper suggests that the Working Group should study this and come up with recommendations to remove the adverse impact.

World Bank Hails India's IT Success

The World Bank has lauded India's success in the information technology sector. In its latest Development Policy Review, the World Bank says India has emerged as a leader among developing countries in providing cross-border IT services.

The Bank says that IT sector has grown from US\$1 billion or 0.3 per cent of GDP in 1990-91, to US\$9.6 billion or 2 per cent of GDP in 2001. The share of IT, mainly software, in exports has jumped from one per cent in early 1990s to 18 per cent in 2001.

Futher, it says that though the IT industry in India has more than three decades of history, its take-off into a major software business was a recent phenomenon, with Bangalore and more recently Hyderabad, Chennai, Mumbai and Pune emerging as competitive IT hubs.

Factors such as the existence of a skilled English-speaking workforce coming out of India's engineering schools and earning lower wages than the European and US counterparts, low dependence of IT on physical infrastructure, and introduction of current account convertibility and easing of controls and regulations in the early 1990s had contributed to the take-off of the IT sector.

IT-enabled services such as back-office operations, remote maintenance, accounting, public call centres, medical transcription, insurance claims, database, and other bulk standards processing, were also expanding rapidly in India.

TECHNOLOGICAL ACHIEVEMENTS IN THE COUNTRY

BHEL Bags Rs 40 cr Taiwan Order

Bharat Heavy Electricals Ltd. (BHEL) has bagged its first ever order for the supply of hydro turbine generators to Taiwan. Valued at around Rs 40 crore, the order entails commissioning of a 62.5 mw hydro turbine generator that will be set up at the Bihai hydroelectric plant of Taiwan Power Company. The company is executing the project as an associate of Taiwanese firm Tatung. Its scope of work in the project includes manufacture, supply and supervision of erection and commissioning of a 62.5 mw hydro turbine generator and auxiliaries including plant control instruments. It would also provide basic systems engineering for the hydro power plant.

Roots to Set Up Base in Malaysia

Roots Industries, the world's 11th largest manufacturer of automobile horns and part of the Rs 100 crore Roots Group, is setting up a manufacturing base in Malaysia.

The new set-up, called Roots Industries Malaysia (RIM), is technically a subsidiary of Roots with a Malaysian company tagging on as a marketing partner. RIM would predominantly cater to the OEM supply requirements of auto manufacturers in the Asean countries.

Incidentally, this facility was conceived after Roots bagged OEM supply orders to Hyundai, Honda, Toyota Daihatsu and Malaysian car maker Proton. Currently, Roots is servicing these auto companies by exports. Export of horns from India to these countries attract a 30-40 per cent import duty now, and Roots is trying to take advantage of the 2 per cent import duty prevailing in Asean countries for products made in the same region. The facility is expected to begin commercial production in November.

Circuit Breaker: Havell's Bags \$20 mn Euro Orders

Havell's India has bagged \$20 million outsourcing orders from two European companies for supply of miniature circuit-breakers (MCB) and electric meters.

While a British company has ordered 12.5 million MCBs valued at \$15 million, DZG of Germany would import \$5 million electro-mechanical meters in two years.

The order from the British company, whose name Havell's refused to divulge, is initially for five years. A recovery in European market, however, could result in the entire order getting executed in three years.

The DZG order is initially for two years, with a minimum guarantee of 200,000 meters per annum.

The two European companies have shut their plants for MCBs and electric meters, respectively, and would now source 100 per cent of their requirement from Havell's.

This was confirmed by Havell's India director Anil Gupta. "With the two companies shutting their plants, there is a large possibility of them renewing outsourcing order after the expiry of the initial agreement".

The company is also learnt to be negotiating a non-exclusive outsourcing deal with four other European companies for supply of MCBs, moulded case circuit breakers (MCCB) and electric meters worth another \$20 million. The negotiations with these companies are expected to be finalised by early next year.

This will result in Havell's exports increasing to Rs 60 crore in the fiscal against Rs 15 crore in 2002-03. The company expects group turnover to increase 30 per cent during 2003-04. The total group turnover during 2002-03 was Rs 630 crore, with Havell's India clocking sales turnover of Rs 300 crore. The rest comes from other group companies, including Standard Electricals (Rs 60 crore), TTL (Rs 140 crore), Duke Arnics Electronics (Rs 50 crore) and Crabtree India (Rs 30 crore).

To meet export demand, Havell's is setting up a greenfield facility to manufacture 6 million units of MCBs near Baddi (Himachal Pradesh) at a cost of Rs 16 crore. The commercial production is expected to commence in six months. This would increase Havell's production of MCBs from 15 million units per annum to 21 million units.

Ranbaxy Gets Okay for Antibiotic Drug in USA

Ranbaxy Laboratories has received approval from the US Food and Drug Administration (FDA) to launch a new dosage of the amoxicillin antibiotic.

Ranbaxy had developed the product under its novel drug delivery system programme, where it finds different ways of delivering existing drugs to the body.

The product is a tablet for oral suspension, said the source, who declined to be identified. Ranbaxy's new form of amoxicillin is called DisperMox, according to the FDA website.

Ranbaxy, the country's largest drugmaker by sales, is already selling tablets of amoxicillin and clavulanate potassium – a generic form of GlaxoSmithKline's Augmentin antibiotic – in USA.

International Symposium in New Delhi (8-15 October 2003)

Call for Papers

International Academic Conference (8-10 October, 2003):

Under the EU Asia IT&C Project EDECAD@IIFT to Enhance Competitiveness of SMEs and less advantaged section of the society including women, through eapplications, an international academic conference and a practice workshop are being organised as per the following programme.

EU-ASIA CONFERENCE & WORKSHOP ON E-ENABLING FOR GLOBAL COMPETITIVENESS

(8-10 & 13-15 October 2003, New Delhi)

Date	Programme
	International Conference on Developing E-Businesses and E-Communities
8.10.03	Inauguration
	Session I: The Internet As An Enabler
9.10.03	Session II : E-Business Academic Perspectives
	Session III : E-Communities
10.10.03	Session IV: E-Women: Developing A Business
13.10.03	Practice Workshop E-Learning
	Venue: NSIC, Okhla, New Delhi
14.10.03	Practice Workshop Towards A Virtual Learning Network (VLN)
	Venue: IIFT, Qutab Institutional Area, New Delhi
15.10.03	E-Initiatives for SMEs in India
	Venue: Office of DCSSI, Nirman Bhawan, New Delhi

Working papers are invited which should contain 2,000 to 3,000 words and full papers between 5,000 to 7,000 words. The papers should reach Prof. S.P. Agarwal

by September 25, 2003 in electronic form, accompanied with hard copies.

Publication of Papers

A book containing abstracts will be published and selected individual papers will be considered for special editions of the international journals of Small Business Enterprise Development, Women in Management Review and the Journal of e-Business, by the University of Central England, Birmingham, UK. These publications would be widely circulated in Europe, Asia and elsewhere. In addition, it is also proposed to bring out the proceedings of the Symposium by IIFT for wider circulation.

Practice Workshops (13-15 October 2003)

The workshops would provide opportunities to SMEs and women in e-experiences in other countries and acquaint them with contemporary practices in various countries. They would also provide business opportunities and networking among SMEs in project partner and other countries. Sharing of experiences through presentations, case studies and discussions will be made by the experts, representatives of industries and industrial associations, etc. The participants would be primarily from the SMEs willing to learn and adopt modern e-practices for enhancing their capabilities and competitiveness for global markets.

Participation

As mentioned earlier, a large number of leading experts, academicians, representatives of industries including SMEs and Industrial Associations, social organisations, policy-makers, consultants, etc. from Europe and other project partner countries are expected to participate as lead speakers and participate in the academic conference as well as practice workshops. These events are expected to be of high standards, involving exchange of experiences and new methodologies/practices being followed or to be followed specially in developing countries such as India. A large number of case studies and presentations are expected to be made from Europe, China and other countries.

It would be possible to accommodate only 30 participants from India in each of the sessions of the academic conference and practice workshops.

Interested participants are advised to register themselves for the sessions of their interest at the earliest, with the IIFT at the following address:

Prof. S.P. Agarwal, Head

Centre for International Trade in Technology

Indian Institute of Foreign Trade

B-21 Qutab Institutional Area, New Delhi-110016

Telefax: 26522549 • Email: spagarwal@iift.ac.in