



## II-A. Industrial R & D Promotion Programme

### 1. OBJECTIVES

The broad objectives of the Industrial Research and Development Promotion Programme are to:

- Bring in-house R&D into sharper focus;
- Strengthen R&D infrastructure in industry and Scientific and Industrial Research Organisations (SIROs);
- Promote R&D initiatives of the industry and SIROs;
- Ensure that the contributions made by the in-house R&D centres and SIROs dovetail adequately in the overall context of technological and industrial development.

### 2. AREAS OF COVERAGE

The specific areas covered under the component scheme are:

- In-house R&D in Industry,
- Scientific and Industrial Research Organisations (SIROs), and
- Fiscal Incentives for Scientific Research

Activities and achievements in each of above areas are presented below:

### 3. IN-HOUSE R&D IN INDUSTRY

#### 3.1 Recognition of In-house R&D Units

A strong S&T infrastructure has been created in the country. This covers a chain of national

laboratories, specialised R&D centres, various academic institutions and training centres, which continuously provide expertise, technically trained manpower and technological support to the industry. Various policy measures have been introduced from time to time, to meet the changing industrial and technological requirements of the industry. The Government has been giving special attention to promotion and support to industrial research in industry. Several tax incentives have also been provided which encourage and make it financially attractive for industrial units to establish their own in-house R&D units.

A scheme for granting recognition to in-house R&D units in industry is operated by the DSIR. A number of incentives and support measures are made available to in-house R&D units. Ministry of Finance has issued notification amending the basic notifications under customs and excise. As per the amendments, all DSIR recognized in-house R&D units other than hospitals can avail customs and central excise duty exemption on their procurements for research purposes. Accordingly, all the eligible in-house R&D units recognized by DSIR have been issued certificates of registration during the year, to enable them to claim above benefits.

The in-house R&D units qualifying for recognition are expected to be engaged in research and development activities related to the line of business of the firm, such as, development of new technologies, design and engineering, process/product/design improvements, developing new methods of analysis and testing; research for increased efficiency in use of resources such as capital equipment, materials and energy; pollution

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control, effluent treatment and recycling of waste products.

The R&D activities are expected to be separate from routine activities of the firm, such as production and quality control. The in-house R&D units should have staff exclusively engaged in R&D and headed by a full-time R&D manager who would have direct access to the chief executive or to the board of directors depending upon the size of the unit. The in-house R&D units are also expected to maintain separate identifiable infrastructure and R&D accounts.

Number of in-house R&D units recognised by DSIR increased steadily from about 100 in 1973 to about 275 by 1975, to over 700 by 1980, around 925 by 1985, over 1,100 in 1990 over 1,200 in 1995 and thereafter is hovering between 1,200 to 1,250; and was 1,361 in March 2009. Of these, nearly 1,290 are in the private sector and the remaining units are in public/joint sector. A revised and updated 'Directory of Recognised in-house R&D Units' was brought out. This Directory lists 1,313 recognised in-house R&D units as on 31<sup>st</sup> December, 2009, giving registration number, name and mailing address of the company, location of the in-house R&D unit(s) and validity of DSIR recognition. The data on these R&D units has been computerised and updated.

For the purpose of recognition, the R&D units have to apply to DSIR as per a prescribed proforma. The proforma and other details about the scheme are provided to the interested companies on request. The proforma and details of the scheme are also available at DSIR website (<http://www.dsir.gov.in>). The applications received are scrutinised for their completeness in the DSIR and are then circulated for comments to various other departments/agencies such as concerned administrative ministries, MSME, CSIR, ICAR, ICMR, ICAS, DBT, DCPC, DoT, DRDO, DIT and NRDC. The units seeking recognition are visited, if need be, by expert teams comprising of representatives of DSIR, as well as outside agencies, like, administrative ministries, CSIR, NRDC, DBT, ICAR, ICMR, DRDO, DIT, DoT, IITs and local educational and Research Institutions before they are taken up for consideration. In order to obtain first hand information on R&D activities of the applicant firms,

discussions with the chiefs of the R&D unit and executives of the firm are also held in DSIR in many cases. During the discussions outside experts are invited and their comments are sought. The applications along with comments from outside agencies, visit reports, and the Department's own evaluation are considered by an Inter-Departmental Screening Committee constituted by the Secretary, DSIR. The Committee meets every month to consider the applications and makes recommendations to the Secretary, DSIR based on its evaluation of the R&D infrastructure and R&D activities of the applicant firms.

During the period under report, the Screening Committee met 9 times and considered 192 applications for recognition; 92 R&D units were granted fresh recognition and 55 applications were rejected. Recognition of balance R&D units is under process.

The pendency at the end of 31<sup>st</sup> December, 2009 was 45. A statement giving month-wise receipt, disposal and pendency of applications for recognition of in-house R&D units is given at **Annexure 1**.

During the period under report, over 125 discussions/meetings were held with heads/representatives of in-house R&D units. Also, expert teams visited a number of in-house R&D units.

### 3.2 Renewal of Recognition

Recognition to R&D units is granted for a period ranging from 1 to 3 years. The R&D units are advised to apply for renewal of recognition well in advance (3 months prior to the date of expiry of the recognition). Applications received for renewal of recognition are circulated to CSIR, NRDC and/or the concerned administrative department of Government of India for comments. The applications are examined in DSIR taking into account the inputs received from other agencies for taking suitable decision on their renewal. As of 1<sup>st</sup> April 2009, 550 in-house R&D units were due for renewal of recognition out of which 455 applications were received. Based on the evaluation of the performance of the R&D units, renewal of recognition was granted to 446 R&D units. Recognition granted to 4 companies could



not be renewed because their R&D performance was not up to the mark. Renewal of recognition of 5 cases are under process. A statement showing month-wise receipt, disposal and pendency of the cases of renewal of recognition of the R&D units is given in **Annexure 2**.

### 3.3 Zonal Distribution of In-house R&D Units

The in-house R&D units are distributed throughout the country. There are around 180 units in the Northern Zone (Delhi, Haryana, Punjab, Uttar Pradesh, Jammu & Kashmir), around 120 units in Western Zone (Rajasthan and Gujarat), around 440 units in the Central Zone (Maharashtra, Madhya Pradesh and Orissa), around 450 units in the Southern Zone (Andhra Pradesh, Karnataka, Kerala and Tamil Nadu) and around 90 units in the Eastern Zone covering Bihar, West Bengal, Assam and other North-Eastern states and remaining in other places.

### 3.4 R&D Expenditure

The expenditure incurred by in-house R&D units in industry has steadily increased. During 1980-81 it was of the order of Rs. 300 crores. In 1985-86, it was of the order of Rs. 500 crores. It is estimated that the present R&D expenditure of the 1,313 recognised R&D units is of the order of Rs.7,600 crores. The share of public and joint sector is about 20 per cent and that of private sector about 80 per cent. Of these 1,313 recognised in-house R&D units, 151 spent over Rs. 500 lakhs each on R&D, 296 spent between Rs. 100 lakhs to Rs. 500 lakhs each per annum on R&D. The list of these R&D units is given in **Annexures 3 and 4** respectively.

### 3.5 R&D Infrastructure

The in-house R&D centres have created impressive infrastructural facilities for R&D including sophisticated testing facilities, laboratory equipment and pilot plant facilities. Analytical facilities such as HPLCs, IR/UV-VIS spectrophotometers, NMR spectrometers, electron microscopes, particle size analyzers, portable particle counting systems; vibration test equipment, calorimeter and wind tunnel for complete evaluation of automobile air-conditioning system, ultra filtration

equipment, sonicator, spectro fluorimeter, protein purification set up, digital viscometer, high temperature test and evaluation facilities, CAD-CAM facilities, rapid prototype building machines, greenhouse and tissue culture laboratory facilities are available with many in-house R&D units.

### 3.6 R&D Manpower

There has been a steady increase in R&D manpower employed by the in-house R&D units. By 1975-76, about 12,000 R&D personnel were employed by recognised in-house units, and by 1981-82, the figure was over 30,000. The present estimated manpower for the 1313 in-house R&D units is around 68,000, out of which around 21,000 R&D personnel are employed in public sector in-house R&D units and around 47,000 R&D personnel are employed in the private sector in-house R&D units. Of the total 68,000 R&D personnel, around 3,500 are Ph.D's, 22,000 Post Graduates, 22,000 graduates and the rest are technicians and support staff.

### 3.7 Sectorwise Break-Up of In-house R&D Units

A broad sector-wise break-up of the recognised in-house R&D units is as below:

Chemical and Allied industries including Drugs, Pharmaceuticals and Biotechnology	567
Electrical and Electronics industries	272
Mechanical Engineering industries	185
Processing industries (Metallurgical, Refractories, Paper, Cement, Ceramics, Leather and others)	155
Agro including Biotechnology and food processing industries and others	134

### 3.8 Achievements of In-house R&D Units

Some of the R&D achievements reported by the recognised in-house R&D units are listed below:

## Physical and Biological Sciences

- Development of carrier for bio-fertilizers.
- Development of protocol for liquid inoculants.
- Development of C4 olefins cracking in FCC riser and improving propylene recovery using stripped main column overhead distillate as absorber oil in primary absorber.
- *Development of a novel process for the extraction of furostanolic saponins from fenugreek seeds in India.*
- *Development of bio-degradable resins for blown film applications and injection moulding applications.*
- Development of limbal stem cell culture.
- Development of PCR assay kits for Indian strains of mycobacterium tuberculosis, hepatitis B virus, HSV – 1 and 2.
- Development and commercialization of technologies namely, HPV detection from urine, EGFR Mutation analysis by PCR and sequencing and Triple test software.
- Development of process for production of bio-organic fertilizer from goat dung and process to isolate goat mild lactoperoxidase, which will help in curing cancer, TB, lungs, skin and eye diseases.
- Development of new molecules such as alfuzosin hydrochloride, atorvastatin calcium.
- Development of novel modulators of protein kinases.
- Development of process related to storage and transportation of fresh tumor samples and Isolation of RNA, DNA and micro RNA from tumor tissues.
- Development of novel enantiomerically pure compounds for the treatment of proliferative disorders.
- Isolation and large scale up scaling of bone marrow derived mesenchymal stem cells.
- Development of system and methods for quantification, morphological analysis and feature extraction of immunohistochemistry images etc.
- Development of hybrids and varieties of different field crops like maize, cotton, sunflower, rice, bajra, jowar, pigeon pea and vegetables viz. tomato, chillies, bhindi, watermelon, cluster beans, gourds.
- Improvement in existing production process of high yielding hybrids/ varieties with tolerance to pest, disease and drought genotypes.
- Development of jatropha curcas stem cuttings, agronomical practices for jatropha cultivation.
- Development of seaweed based formulation for tea crop biozyme tea.
- Development of liquid formulation for cotton crop BT biozyme.
- Development of darkroom technology for banana T.C. plants.
- Development of technologies for liquid formulations of nitrogen fixing bio-fertilizers and liquid formulations of phosphate solubilising bio-fertilizers.
- Development of hybrids of tobacco and Eucalyptus products.
- Development of technologies for Enzyme application in molasses storage and Enzyme application in fermentation of yeast.
- Development of a Novel method for assembling DNA meta-segments to use as substrates for homologous recombination in a cell
- Cloning, expression and purification of restriction enzymes EcoRI, Sma I, PvuI, cloning of DNA ligase, cloning and expression of B-galactosidase, Green fluorescent protein (GFP), Red fluorescent protein (RFP) genes.



- Development of technology of mutant population in cereals, vegetable and ornamental crops.

### Electronics and ICT based Industries

- Development of a hardware/software parallelized implementation of the elliptic curve digital signature algorithm.
- Development of software like Natas, multimedia explorer and automated real time visual surveillance.
- Development of new products like Bio-suite™ 2.0; E-passport and smart card.
- Development and commercialization of technologies namely, natural language processing engine, mobile based agro advisory system and mobile based innovative applications.
- Development of IPs in technologies related to bluetooth, ultrawide band and video surveillance, multiple frameworks and components related to different software and hardware technologies e.g. test automation framework, element management system, data warehousing framework.
- Development and commercialization of technology for tactical air navigation system (TACAN) and VHF omni range/ instrument landing system.
- Development of ultra low floor city buses – diesel and CNG.
- Development of single antenna radio altimeter (NETRA).
- Development of modem IP phone with LCD.

### Engineering Industries

- Development and commercialization of technology for Thin wall casting, Omnidirectional Luminance Control.
- Development of new process for manufacturing of flywheel by centrifugal

process and manufacturing of crankshaft in S.G. Iron.

- Development of Power conditioner for dairy bulk milk chiller.
- Development of collapsible pallets – Euro 2 and Euro 3
- ECG machine with thermal recorder for capturing ECG for diagnostic purpose
- Development of solar based home lighting system, solar based street light for rural application.

### 3.9 Imports Made by In-house R&D Units

The recognised in-house R&D units have imported a variety of equipment, raw materials and samples for their R&D activities. These include: GCMS, UPLC, GC system, Varian BIO-DIS dissolution apparatus, HPLC system, Particle Size analysers, Vibration and noise mapping equipment, Nano homogenizer, Incubator shaker, Microplate reader, Medical photography equipment, Nitrogen generator, Reference standards for chemical raw material testing purpose, Load cell, LC/MS/ system package, Universal testing machine, Smoke meter, Spares for Rota vapor chiller and extraction system, Polymer microscope, Oscillation granulator, Automatic potentiometric titrator. etc

### 3.10 Other Benefits Availed by the Recognised R&D Units

The Department provides assistance to recognised in-house R&D units in a number of ways, such as cases of industrial R&D units requiring allotment of special controlled materials for R&D, permission to export of specialised products reserved for small scale industries by medium scale industries for test marketing in other countries and disposal of imported R&D equipment/instruments and pilot plant produce are examined for making suitable recommendations to concerned agencies.

A few cases regarding locational clearance with respect to expansion of R&D have been dealt with. A number of applications regarding disposal of R&D equipment and also, pilot plant produce; and permission for allotment for controlled materials

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required for R&D were examined and the decisions of the Department conveyed.

### 4. SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATIONS

#### 4.1 Recognition of Scientific and Industrial Research Organisations (SIROs)

A programme granting recognition to SIROs has been in operation since 1988. SIROs recognised by DSIR are eligible for Customs Duty Exemption and Excise Duty Waiver in terms of notification Nos. 51/96-Customs dated 23<sup>rd</sup> July, 1996 and 10/97-Central Excise dated 1<sup>st</sup> March, 1997 respectively.

The Department has brought out Guidelines for Recognition of SIROs, which give procedural details and application proforma for seeking recognition under the SIRO Scheme. Functional SIROs having broad based governing council, research advisory committee, research personnel, identifiable infrastructural facilities for research, well defined, time bound research programmes and clearly stated objectives of undertaking scientific research, are considered eligible for recognition by DSIR. The investments of surplus funds not needed for immediate research should be in accordance with the Income-tax Act, 1961.

Applications for seeking recognition under the SIRO scheme are considered by an Inter-departmental Screening Committee with members from Council of Scientific and Industrial Research (CSIR), Indian Council of Medical Research (ICMR), Indian Council of Agricultural Research (ICAR), Indian Council of Social Sciences Research (ICSSR) and University Grants Commission (UGC). The recommendations of the Screening Committee are put up for approval of Secretary, DSIR. The recognition is effective from the date of approval by Secretary. Retrospective approval is not granted.

During the period under report, the Screening Committee met 8 times and recommended 16 cases for recognition as SIROs under 1988 Scheme of DSIR. These include cases in the natural and applied sciences, agricultural, medical sciences and social sciences. List of these SIROs is furnished at **Annexure 5**.

Recognition granted to SIROs is for a duration ranging from 1 to 3 years. The SIROs are advised to apply for renewal of recognition well in advance (3 months prior to the date of expiry of recognition). Such applications received for renewal of recognition are examined by Research Review Groups by involving representatives from ICAR, ICMR, CSIR and ICSSR depending on the area. Based on the evaluation made by the Research Review Groups, renewal of recognition is granted to SIROs.

At present there are 587 SIROs duly recognised by DSIR; of these, 196 are in the area of natural and applied sciences, 200 are in the area of medical sciences, 38 are in the area of agricultural sciences, 103 are in the area of social sciences and 26 are universities/colleges. Of these 587 SIROs, the renewal of recognition beyond 31<sup>st</sup> March 2009, of 24 SIROs is under consideration for want of further information/ clarifications.

The SIROs have employed qualified scientists and researchers and have also established good infrastructural facilities for research. They have developed new processes, procedures, techniques and technologies and also filed several patents. They have also organised seminars/symposiums/workshops and published research papers/reports/books.

### 5. FISCAL INCENTIVES FOR SCIENTIFIC RESEARCH

Government has evolved, from time to time, fiscal incentives and support measures to encourage R&D in industry and increased utilisation of locally available R&D options for industrial development. New incentives to encourage investments in R&D by industry are announced in the Union Budget.

Fiscal incentives and support measures presently available include:

- Income-tax relief on R&D expenditure;
- Weighted tax deduction U/s 35 (2AA) of IT Act 1961 for sponsored research programs in approved national laboratories, universities and IITs;



- Weighted tax deduction u/s 35(2AB) of IT Act, 1961 on in-house R&D expenditure for any company engaged in the business of biotechnology or in any business of manufacture or production of any article or thing not being an article or thing specified in the list of the eleventh schedule of IT Act having R&D facility approved by Secretary, DSIR.
- Customs duty exemption on capital equipment, spares, accessories and consumables imported for R&D by approved institutions/SIROs;
- Customs duty exemption on specified goods (comprising of analytical and specialty equipment) for use in pharmaceutical and biotechnology sector;
- Excise duty waiver on indigenous items purchased by approved institutions/ SIROs for R&D;
- Ten year tax holiday for commercial R&D companies approved upto 31.03.2007
- Excise duty waiver for 3 years on goods produced based on indigenously developed technologies and duly patented in any two of the countries out of India, European Union (one country), USA and Japan;
- Accelerated depreciation allowance on plant and machinery set-up based on indigenous technology;
- Customs duty exemption on imports for R&D projects supported by Government.

Information on some of these fiscal incentives is given in the following paragraph.

### **5.1 Depreciation Allowance on Plant and Machinery Setup Based on Indigenous Technology**

Secretary, DSIR, is the Prescribed Authority to certify expenditures where higher rate of depreciation is to be allowed for the plant and machinery using indigenous know-how as per provisions of rule 5(2) of IT Rules. Guidelines have

been issued for making applications for obtaining the aforesaid certificate. All such applications received are examined in the Department, discussions held and visits by experts are made to the plants to verify the claim. Based on a detailed examination, certificates are issued for eligible expenditure in deserving cases.

During the period under report, no certificate was issued by DSIR.

### **5.2 Reference under Section 35 (3) of Income-Tax Act, 1961 Regarding Scientific Research**

In the implementation of various incentive schemes for the promotion of research and development, the Income-tax Act, *inter-alia*, provides that expenditure made on capital equipment and related to research activities are allowed to be written off 100 per cent in the year in which the expenditure are incurred. The Government has provided that if a question arises under section 35 of Income-tax Act, 1961 as to whether and, if so, to what extent any activity constitutes or constituted or any asset is or was being used for scientific research, the Central Board of Direct Taxes would refer the question to the Prescribed Authority. Director General Income-tax (Exemptions) in concurrence with Secretary, DSIR is the Prescribed Authority for deciding such cases.

On receipt of the reference in DSIR, the department collects information/background regarding the description of the activity claimed as scientific research, date of commencement of the relevant projects, date of completion of research work as also the results obtained from the specific project. After obtaining all these details, the matter is examined in DSIR. In case where it is considered necessary, a team of technical experts is constituted for on the spot appreciation of the research work done at the premises of the company. After receiving the technical assessment report from the visiting team, a discussion is also normally held so that the point of view of the Company is taken into account before arriving at a decision. After completing the processing of the case in the above fashion, the case file is placed before the Secretary, DSIR for giving a decision. The Secretary, DSIR gives his decision by setting

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out a reasoned order duly signed by him, which is communicated to Director General (Income-tax Exemptions).

During the period under report, request of one company has been under consideration.

### 5.3 Approval of Commercial R&D Companies

In order to promote research and development activities in the commercial research and development companies, the Finance Act, 2000 provided for a ten-year tax exemption from income-tax under section 80-IB(8A) of the Income-tax Act, 1961, to approved companies, whose main objective is scientific and industrial research. Secretary, DSIR is the Prescribed Authority vide Gazette notification no. S.O.85 (E) dated 31 January, 2001, issued by Department of Revenue, Ministry of Finance for granting approval under section 80-IB(8A) of the IT Act. The notification was valid upto 31<sup>st</sup> March, 2007 and this scheme was not extended further by the Government.

The approval to commercial R&D companies is given initially for a period of 3 years, which can be extended up to 10 years based on evaluation of its performance.

The tax exemption is available to a company, which is accorded approval by the Prescribed Authority at any time after the 31<sup>st</sup> day of March 2000 but before the 1<sup>st</sup> day of April 2007.

Out of 45 companies approved till 31<sup>st</sup> March 2007, six companies are not availing benefit under the section at present. The list of 39 companies is given at **Annexure 6**.

### 5.4 Customs Duty Exemption to Recognised SIROs

All SIROs recognised by DSIR are eligible for Customs Duty Exemption on the import of scientific equipment, instruments, spares, accessories as well as consumables for research and development activities and programmes.

The department was issuing the essentiality certificates to SIROs for obtaining the customs duty exemptions. As per the notification No. 24 /2007

dated 1<sup>st</sup> March, 2007 the Director or Head of the institute/organization is empowered to sign the essentiality certificate.

### 5.5 Central Excise Duty Exemption to Recognised SIROs

All SIROs recognised by DSIR are eligible for Excise Duty Exemption on purchase of scientific and technical instruments, apparatus, equipment (including computers); accessories and spare parts thereof and consumables; computer software, Compact Disc - Read Only Memory (CD-ROM), recorded magnetic tapes, micro films, microfiches; and prototypes for research and development activities and programmes.

This provision was introduced by Ministry of Finance (Department of Revenue) vide notification No. 10/97-Central Excise dated 1<sup>st</sup> March, 1997. The department was issuing the essentiality certificates to SIROs for obtaining the central excise duty exemptions. As per the notification No.10/2007 dated 1<sup>st</sup> March, 2007 the Director or Head of the institute/organization is empowered to sign the essentiality certificate.

### 5.6 Customs and Central Excise Duty Exemption to Recognised in-house R&D Units

Ministry of Finance has issued notification no. 24/2007 – Customs dated 01/03/2007 and 16/2007 – Central Excise dated 01/03/2007 amending the basic notifications under customs and excise. As per the above amendments all DSIR recognized in-house R&D units other than hospitals can avail customs and central excise duty exemption on their procurements for research purposes. Secretary approved the issuance of certificate of registration to the recognized R&D units in June 2009 and at present all the eligible in-house R&D units recognized by DSIR have been issued the certificates of registration.

### 5.7 Registration of Public Funded Research Institutions, Universities etc.

Public Funded Research Institutions (PFRI), universities, IITs, IISc. are eligible for availing customs duty exemption on import of equipment,





spares and accessories and consumables for research purposes through a simple registration with the DSIR. The head of the public funded research institutions/organisations duly registered with DSIR can certify the R&D goods for duty free import as per the notification No. 51/96-Customs dated 23<sup>rd</sup> July, 1996. As per the Government notification No. 10/97-Central Excise dated 1<sup>st</sup> March, 1997; the above PFRIs registered with DSIR are also eligible for central excise duty waiver on purchase of indigenously manufactured items for scientific research purposes.

Coinciding with the presentation of Union Budget for the year 2004, Ministry of Finance amended the notification No. 51/96-customs vide notification No. 28/2003-Customs dated 1<sup>st</sup> March, 2003. As per the amendment, departments and laboratories of central government and state governments (other than a hospital) are not required to register with DSIR for availing the customs duty exemption. They can clear the consignments by producing a certificate from the head of the institution certifying that the said goods are required for research purposes only. Another significant change in the notification is that Regional Cancer Centres have been included in the list of institutions eligible for DSIR registration for importing goods for research purposes at a concessional rate of customs duty.

For the purpose of registration, the PFRIs/Universities etc have to apply to DSIR as per prescribed proforma. The proformae and other details about the registration scheme are available at DSIR website (<http://dsir.gov.in/>). The applications received are scrutinized for their completeness in DSIR by a sub-committee constituted by the competent authority. The complete applications are then considered by an Inter-departmental Screening Committee constituted by the department for considering the requests from various institutions. Presently the committee is chaired by a former Secretary of DSIR.

The Screening Committee met 2 times during the period under report and considered 32 applications received from various public funded research institutions.

During the period under report, 25 registration certificates were issued to such PFRIs for availing

customs duty exemption on import of scientific equipment, spares and accessories, consumable items and Central Excise Duty exemption on indigenous purchases for Scientific Research Purposes.

The Registration in respect of PFRIs and other institutions mentioned in the notification is granted for maximum period of five years. The registered institutions are advised to apply for renewal of registration well in advance of the date of expiry of the registration.

During the period under report, 111 institutions were due for renewal of registration. The department received 80 renewal applications. These were processed on individual files and approval of the Competent Authority was obtained and 76 renewal certificates were issued. The remaining 4 applications are under process.

#### **5.8 Approval of In-house R&D Centres under Section 35(2AB) of I.T. Act 1961**

In order to encourage R&D initiatives of industry, the finance bill 1997 introduced a sub section (2AB) in section 35 of the IT Act, 1961. The provision introduced initially was for select sectors of industry i.e. drugs, pharmaceuticals, electronic equipment, computers, telecommunication equipment, chemicals and provided weighted deduction of 125 per cent on expenditure on in-house research and development facility as approved by the prescribed authority i.e. Secretary, DSIR. Subsequently, a number of other sectors/articles had been added to the list of eligible sectors. These include helicopter or aircraft, computer software, automobiles including automobile components, seeds and agricultural implements. Rate of weighted tax deduction was also raised from 125 per cent to 150 per cent subsequent to the year ending March, 2000. Initially the provision was introduced up to 31<sup>st</sup> March, 2000. The provision was extended initially till 31<sup>st</sup> March, 2005 and then upto 31<sup>st</sup> March, 2007 and now the provision stands valid up to 31<sup>st</sup> March, 2012.

By the Finance Act, 2009, the provision has been extended to all sectors of industries with a small negative list. As on date the provision is applicable for any company engaged in the business of

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biotechnology or in any business of manufacture or production of any article or thing not being an article or thing specified in the list of the eleventh schedule of IT Act having R&D facility approved by Secretary, DSIR.

During the period under report, 42 new applications for approval in Form 3CM were received by the Prescribed Authority. Secretary, DSIR is designated as the Prescribed Authority under section 35(2AB) of Income-tax Act, 1961. Fresh approvals were accorded to 20 companies by the Prescribed

Authority. These approvals were communicated in Form 3CM, after Agreement of cooperation for research and development were signed with these companies on behalf of the Secretary, DSIR. Further, the detailed R&D expenditure of the approved companies valued at Rs. 2018.75 crore have also been examined by DSIR and 70 reports valued at 2018.75 crore have been forwarded to DGIT(E) in Form 3CL as required under the IT Act. A list of companies approved under Section 35(2AB) of IT Act, is furnished in **Annexure 7**.