The institutional basis of the research based innovation: Industry, Government and University

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Industry-Science (University) Cooperation Summits

- First Industry- Science Cooperation Regional Summit- 22 November 2012, Istanbul
- Second Industry- Science Cooperation Summit-03 February 2013, Kocaeli
- Third Industry-Science Cooperation Regional Summit, 09 March 2013 Izmir
- Fourth Industry-Science Cooperation Regional Summit, 23 March 2013 Antalya

Institutional Basis of Research Based Innovation

- Ministry of Science, Industry and Technology
 - Previously Ministry of Industry and Trade (Decree Law No. 635 of 03.06.2011)
 - General Directorate of Science and Technology
- The Scientific and Technological Research Council of Turkey (TUBITAK)
- Small and Medium Enterprises Development Organization (KOSGEB)
- Development Agencies

Ministry of Science, Industry and Technology General Directorate of Science and Technology Support Programs

- Technology Development Zones(TDZs)
- Industrial Thesis Supporting Program (SAN-TEZ)
- exemptions, supports- incentives under the framework of Law No:5746 are executed by General Directorate of Science and Technology

Technology Development Zones(TDZs)

- The Law on Technology Development Zones, (No:4691) entered into force in 2001.
- Fosters the establishment of Technology Parks(Techno parks) in higher education institutes and/or research centers to enhance knowledge circulation.
- Promotes the use of high/advanced technologies and the development/production of technology or software in Technology Development Zones through cooperation between universities, research institutions, and production sector.

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 The main financial support mechanism for TDZs is provided by the Ministry of Science, Industry and Technology. Financial support is granted for land procurement, infrastructure and construction of management building.

TDZs continued

Foreign firms can also take part in TDZs and become shareholders of the managing company and can benefit from tax exemptions as domestic firms. Tax Exemptions and Incentives provided with the law (till the end of 2023) are:

- Grant support for construction of infrastructure and management and incubation building,
- Income and corporate tax exemptions for the managing company
- Income and corporate tax exemptions for the incomes obtained from software development and R&D activities of the companies operating in these zones,
- Income tax exemptions for the salaries of the researchers, software engineers, and R&D personnel working at the zone
- •Value added tax (VAT) exemptions for the software development activities,
- •Half of the employer share of the Insurance Premium for the R&D&I and support personnel is covered by Ministry of Finance.

As of March 2013;

- 49 TDZs were established
- 2138 firms, 65 of which are foreign companies
- 18.462 R&D staff and 2.522 technical support personnel
- 5599 R&D projects being carried out,
- 322 patent (applied/accomplished)
- Main Sectors: Software & IT, Electronic, Defense, Telecommunication, Medical and bio-medical, Advanced materials, Industrial design and Environmental sectors

Law on "Supporting R&D Activities" (Law No: 5746)

- This Law provides a range of fiscal incentives for R&D and innovative activities by the private sector. (As well as for projects supported by public agencies and international institutions).
- Support and incentives are as follows: R&D allowance, incentive for income tax withholding, incentive for employer's social security contribution, stamp duty exclusion and incentive for "Techno-Initiative Capital Support".
- Some of the mechanisms under this Law;

*R&D Centers

 Units of capital companies that are located in Turkey and organized as a separate unit within the organizational structure, exclusively in R&D and innovative activities at least fifty full-time equivalent R&D personnel employed with sufficient experience and capabilities. As of 2011, 107 enterprise were found eligible to establish R&D Center under this Law.

Minimum required conditions for an R&D Center certification:

- Employment of at least 50 full-time equivalent R&D personnel
- Implementation of R&D activities in Turkey
- Enterprises should have R&D management capability and capacity regarding to technological assets, R&D human resources, intellectual property, project and information resources.
- Enterprises should have facilities which physically control the working time of R&D and support staff in R&D Center.
- Enterprises should have R&D and innovation programs and projects with the issue, time, budget and personnel needs being defined.

Incentives and Exemptions Provided to Enterprises with R&D Center Certification

- R & D allowance: All R&D and innovation expenditures are exempt from income tax.
- Incentives for withholding of income tax: For R&D and support staff working in R&D and innovation projects, income tax is reduced by 90% for those with PhD and by 80% for the others.
- Insurance premium support: Half of the employers share for insurance premium of R&D and support staff is provided by the Ministry of Finance for five years.
- Stamp tax exemption: Papers related to R&D and innovation activities are exempt from stamp tax.
- Techno-initiative Capital Support: One-time grant is provided up to 100.000
 Turkish Liras (55.000 \$) for senior undergraduate students, graduate and PhD
 students and for graduates of last 5 years to support their technology oriented
 business ideas.
- Law No. 193 and Law No. 5520: Exemption percentage of R&D expenditures is increased from 40% to 100%.
- The duration of support: Valid until 31 December 2023.

As of March 2013

- 138 enterprises from 13 different sector were found eligible to establish R&D Center
- 14837 R&D staff and technical support personnel are working in current R&D Centers
- 1079 Patents

Techno-Initiative Capital Support Program

- People who have an R&D project as well as certain qualifications (doctoral and master's students) are provided with donations of as much as 100.000 TL (55.000 \$)
- Entrepreneurs are expected to establish their own company and encouraged to locate in the technology development zones.
- So far 4878 applications and 1045 supported

Industrial Thesis Supporting Program (SAN-TEZ)

- SAN-TEZ projects stimulate co-operation between firms and universities by providing support to graduate students developing new, technology-based products and processes during their graduate (M.S. and PhD) studies.
- In particular, it seeks to transform graduate research into innovative products and processes that engages in and addresses the needs and requirements of the industry.
- This program sponsors graduate studies based upon requests by industry and stimulates the "transmutation of invention" into innovation through innovation-oriented SMEs.

SAN-TEZ

- With this concept, financial support (grant) up to 75% of the project budget is provided by Ministry of Science, Industry and Technology, the rest of the budget is being covered by the company that will commercialize the output of the project.
- The test and laboratory services are covered by the universities where the projects are being carried out.
- Foreign investor firms that display activity in Turkey can also apply for SAN-TEZ Program.
- So far
 - 1566 eligible projects out of 1667 projects
 - 102 million TL public budget has been allocated for years 2006-2011.