



Recent Developments in R&D in Turkey: Strategy, Policy, Funding

Ahmet Ademoglu, *Ph.D.*

TÜBİTAK &

Bogazici University, Istanbul

Evolution of the Turkish S&T System

Stage	Milestones
1st Stage (1963-1982)	<ul style="list-style-type: none">□ 1963: Establishment of TUBITAK□ 1972: Establishment of Marmara Research Center□ 1973: 3rd Five-year Development Plan mentioning the first time the term “technology policy”
2nd Stage (1983-1992)	<ul style="list-style-type: none">□ 1983: First national science policy document□ 1983: SCTC (the Supreme Council of Science and Technology) was established□ 1990: First National Steering Meeting on Science and Technology with participation of the President and Prime Minister.

Evolution of the Turkish S&T System

Stage	Milestones
3rd Stage (1994-2004)	<ul style="list-style-type: none"><li data-bbox="493 527 1764 649">□ 1993: A revised version of 1983's Science Policy document was published<li data-bbox="493 657 1827 779">□ 1995: TUBITAK launched the industrial R&D support programme<li data-bbox="493 787 1722 852">□ 2002: Turkish foresight study has been started.<li data-bbox="493 860 1722 982">□ 2003: Full participation to EU's 6th Framework Research Programme
4 th Stage (2004-...)	<ul style="list-style-type: none"><li data-bbox="493 1006 1711 1071">□ 2004: Establishment of Turkish Research Area<li data-bbox="493 1079 1774 1144">□ 2004: Re-starting the regular meetings of SCTC<li data-bbox="493 1153 1816 1339">□ 2004: Setting up S&T targets for 2010 in line with Vision 2023-National Foresight Strategy and EU's Lisbon Strategy<li data-bbox="493 1347 1732 1404">□ 2005: Reconstructing the R&D Funding System

The Supreme Council for Science and Technology (SCST)

- Established in 1983
- Highest policy making body for science, research and innovation
- Composed of representatives of the government, universities, industry and NGOs
- TÜBİTAK serves as the secretariat

The Supreme Council for Science and Technology (SCST)

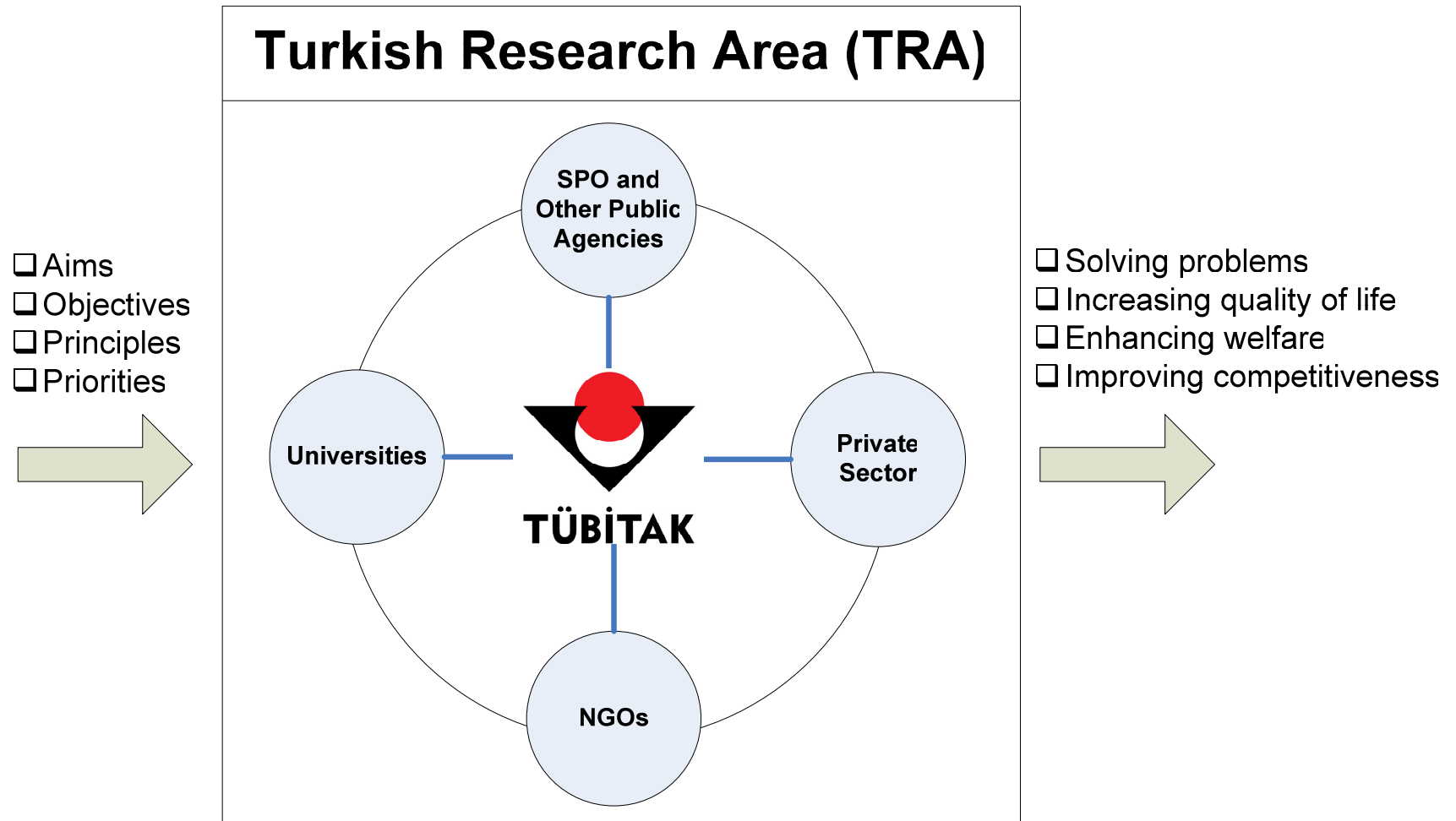
- Chaired by the Prime Minister.
- Meets twice a year. Regularly meeting since 2004.
- Decisions binding for the public agencies
- In the form of a Prime Minister's Circular.
- Coordinates activities by various agencies
- Reviews and evaluates science and research policies.

Challenges for Turkish STI System in 2003

- **No strategic approach**
- **Resource availability and allocation problems**
- **Inadequate demand for STI**
- **Quality and quantity of scientists**
- **Lack of result and performance orientation**

National
Science Technology
Innovation
Initiative
(2004)

September 08 2004
Supreme Council for Science & Technology Decrees



TRA was adopted at the 10th meeting of the SCST, 8 September 2004⁸

September 08 2004

Supreme Council for Science & Technology Decrees

Aims:

- Enhance the life quality of our citizens
- Find solutions to social problems
- Enhance national competitiveness
- Spread the Science & Technology awareness and make it immanent in the whole society

September 08 2004

Supreme Council for Science & Technology Decrees

Targets:

- Increase the demand for R&D
- Enhance the quality and quantity of scientists and professional skilled technical staff
- Increase the rate of R&D spending in GDP

September 08 2004

Supreme Council for Science & Technology Decrees

Principles:

- Strategic
- Goal oriented
- Based on Public-private cooperation
- Effective
- Participatory
- Accountable
- Compliant with the duty & responsibility
- Flexible

September 08 2004
Supreme Council for Science & Technology
Decrees

- TÜBİTAK will prepare an action plan for National Science & Technology Policies covering the span of 2005-2010 to be submitted to the SCforS&T

September 08 2004

Supreme Council for Science & Technology Decrees

The public spending for R&D will be increased steadily every year to attain the level 2% of GDP to be spent for R&D by the year 2010

September 08 2004

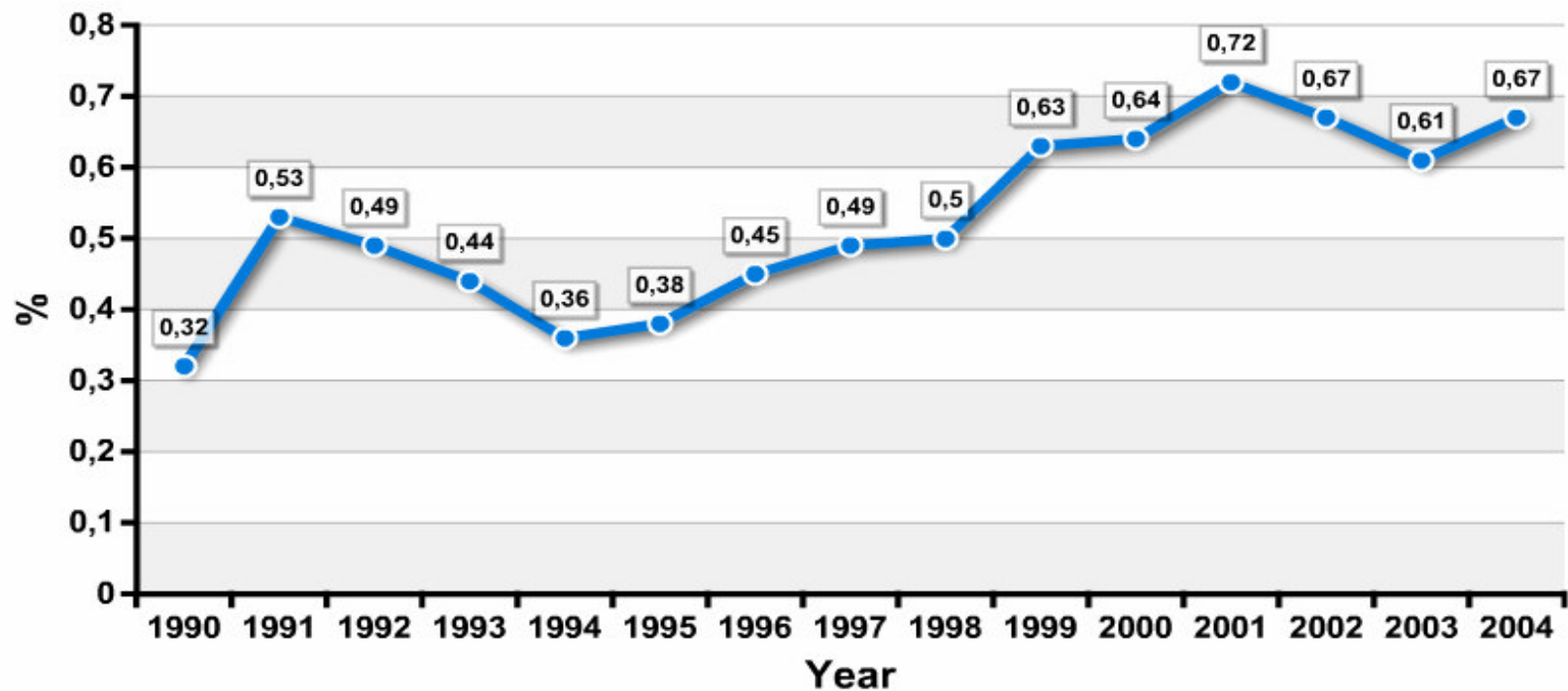
Supreme Council for Science & Technology Decrees

- The number of full time equivalent scientists (currently 33,000) will be raised to 40,000 by the year 2010 together with a proportional increase in the number professional and technical staff.

PUBLIC FUNDING

- **446 million YTL (279 million €) allocated as an additional amount to the 2005 Budget for the Turkish Research Area**
- **In 2006 this budget increased by 20%**

GERD as Percentage of GDP



In 1967,

US : 3.31 %

UK : 2.93 %

USSR : 2.42 %

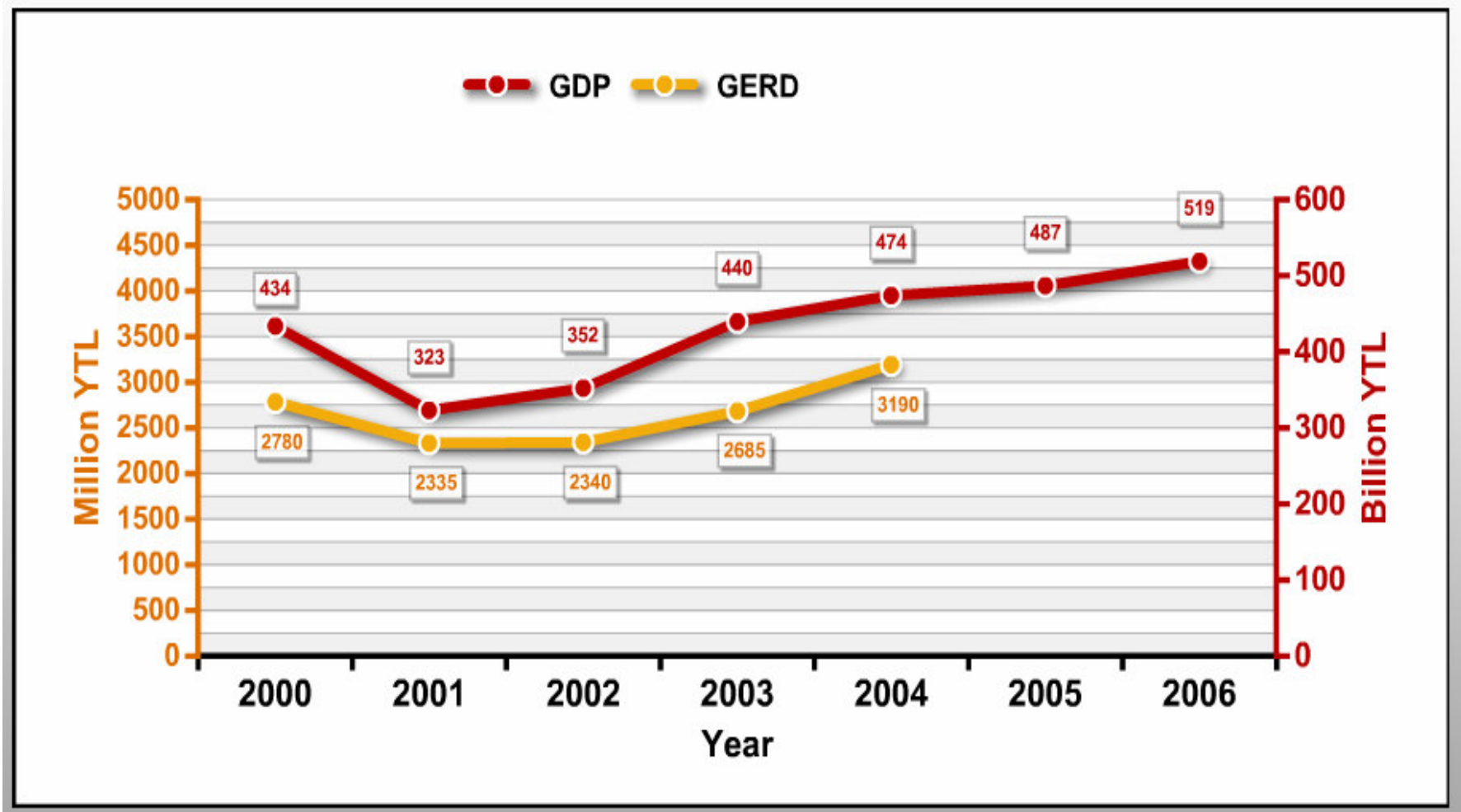
In 2003,

EU-25 : % 1.81

In 2010,

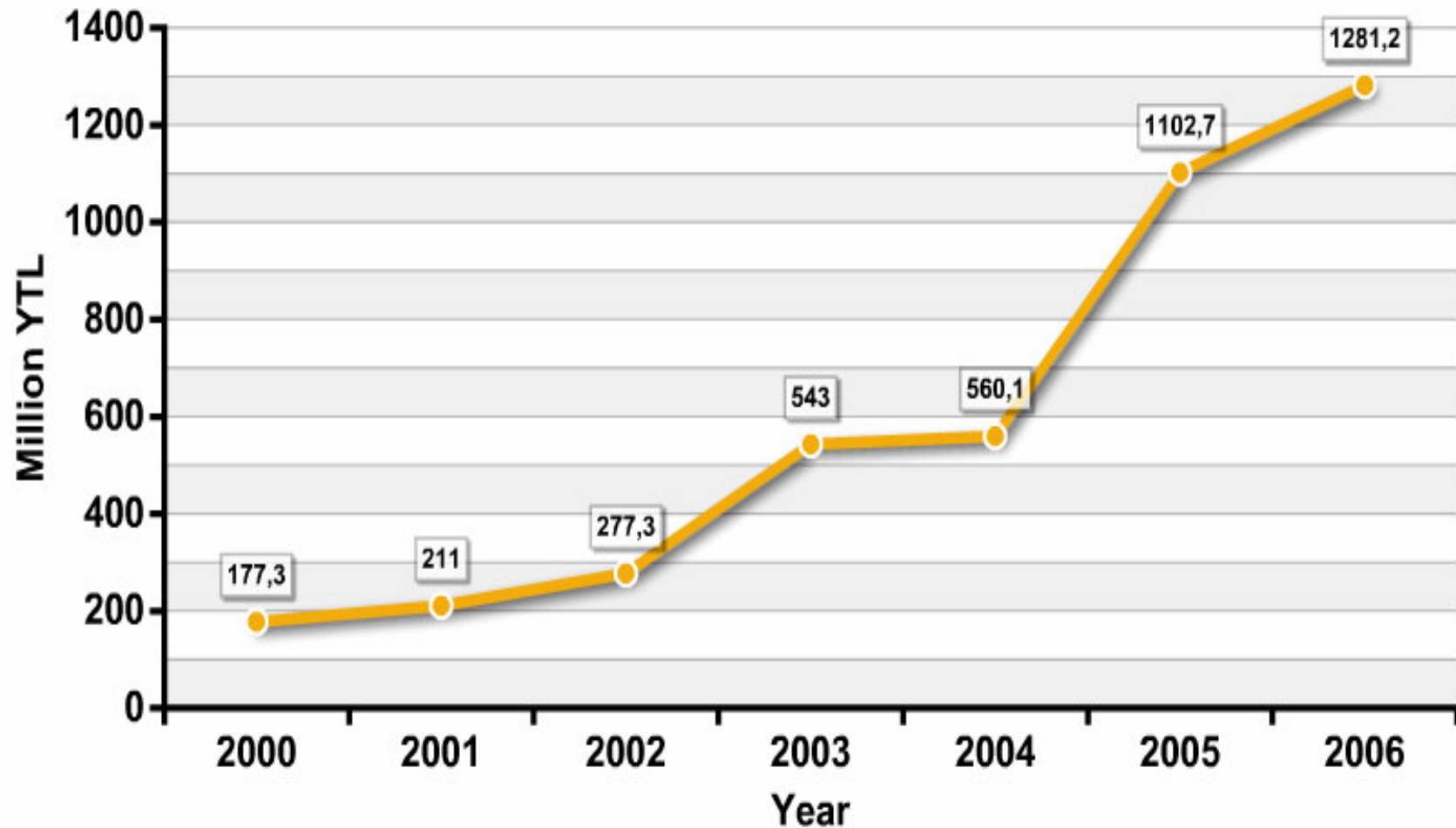
AB-25 : % 3

R&D Expenditures*



*2005 constant prices

Direct Public R&D Funds*



* State Planning Organization, University Research Funds, Undersecretariat of Foreign Trade, TUBITAK, TTGV, KOSGEB, FP6, 2005 constant prices

Actions

Preparing the TÜBİTAK Glossary for the terms and definitions in Sci&Tec

Publicizing the definitions by translating and webinizing and publishing the Handbooks (Frascati, Oslo and Canberra)

Actions

Preparing the catalogue for funding instruments/programs

Updating the TÜBİTAK website to make it more interactive and customer oriented

Actions

Scanning the Sci&Tech supports and activities in Turkey

Organizing Brain Storming Meetings

Organizing Expert Group Meetings

with STAKEHOLDERS:

- State Planning Organization
- Universities
- Turkish Foundation for Technology Development
- Small & Medium Industry Development Organization
- Ministries
- Treasury
- Undersecretary for Foreign Trade
- Foundation for Economic Development
- Turkish Patent Institute
- Companies
- Banks
- Chambers of Industry and Commerce

Actions

A guidebook for applications is prepared

Application forms and Guidelines are updated

More than 70 different application forms are reduced to 3 covering the fields of:

Grants

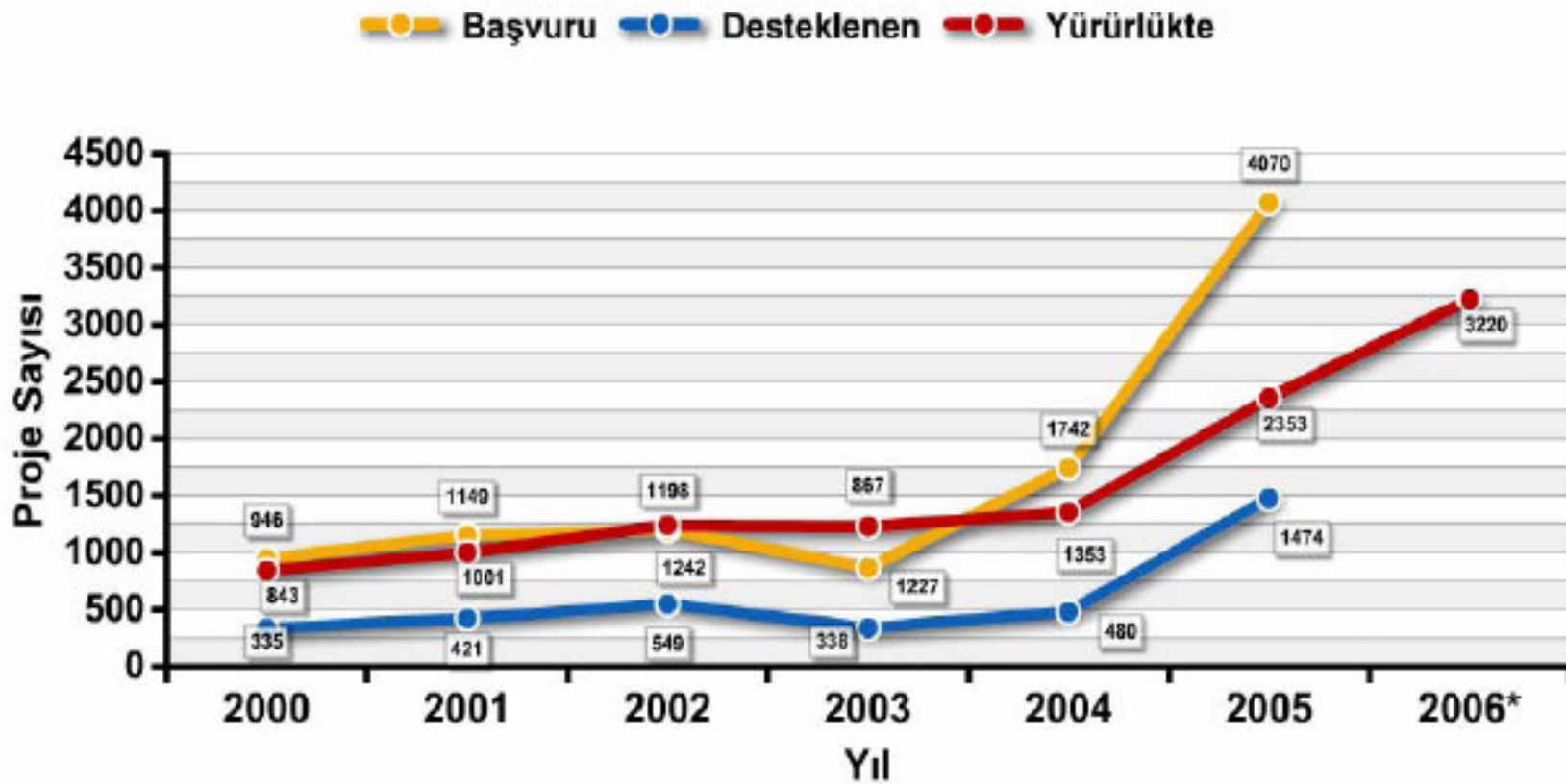
Fellowships & Awards

Contests & Examinations

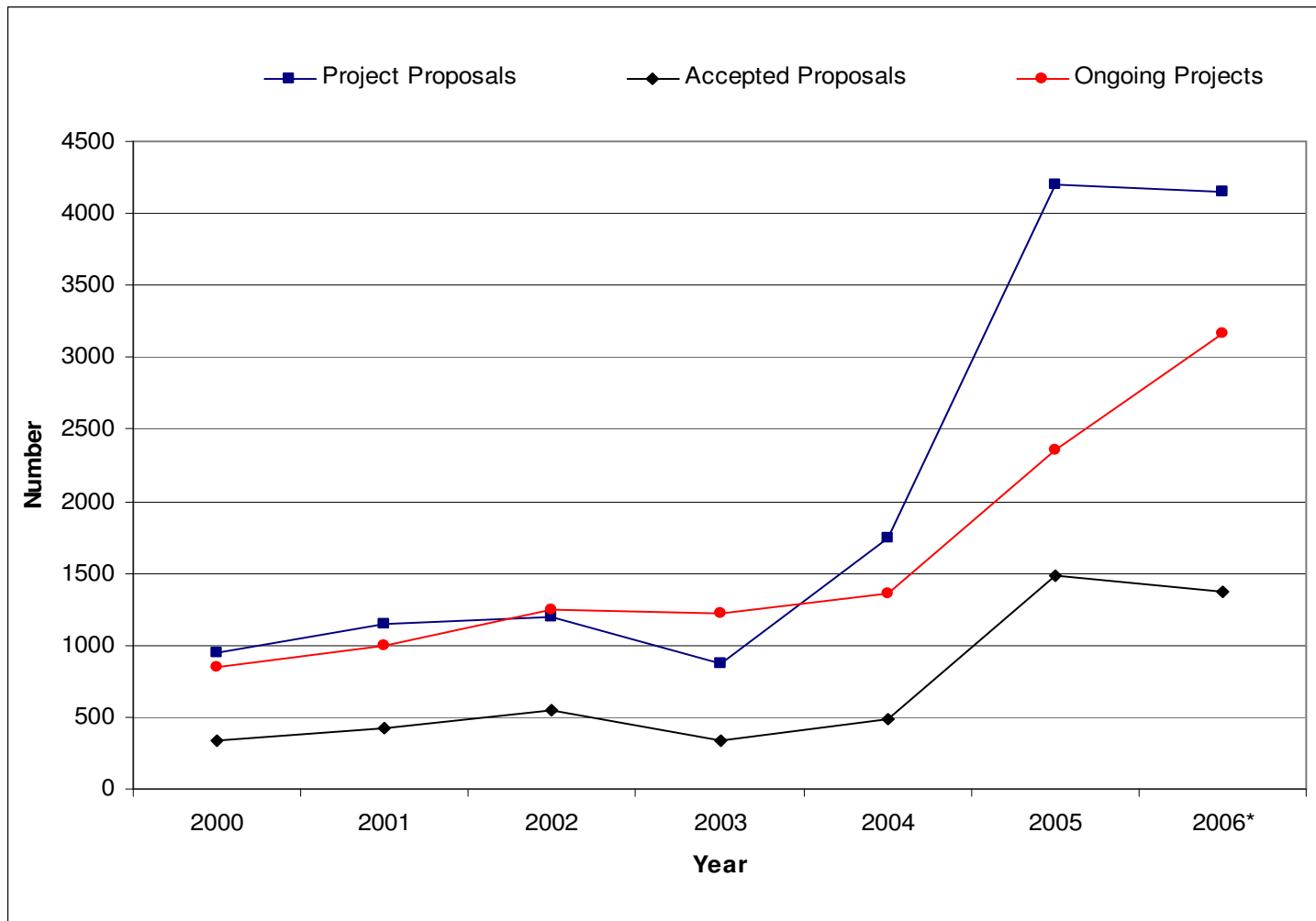
Actions

- Peer reviewing System is upgraded
- Panel System is adopted for the grant applications

The Academic R&D Grants

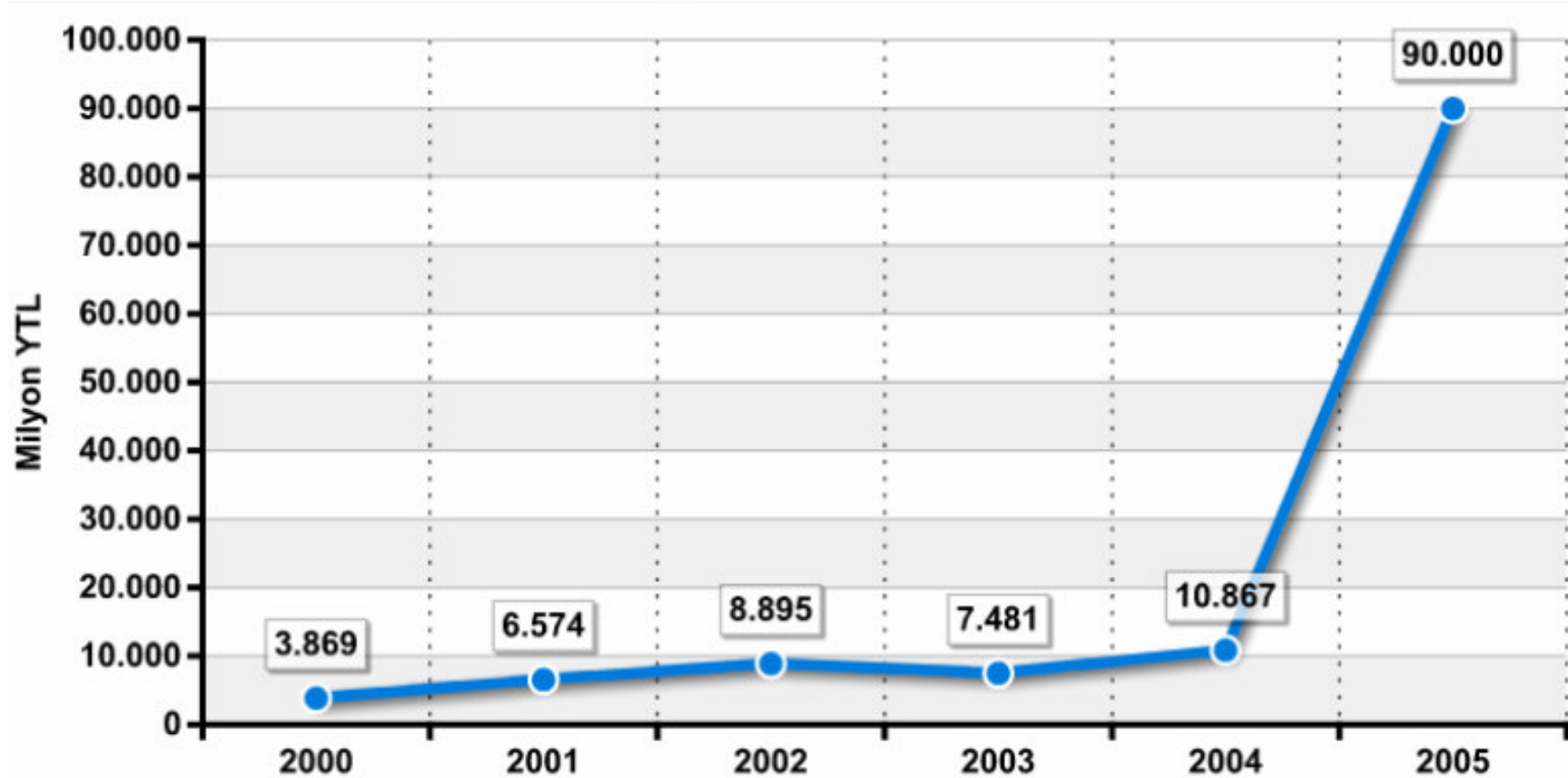


The Academic R&D Grants

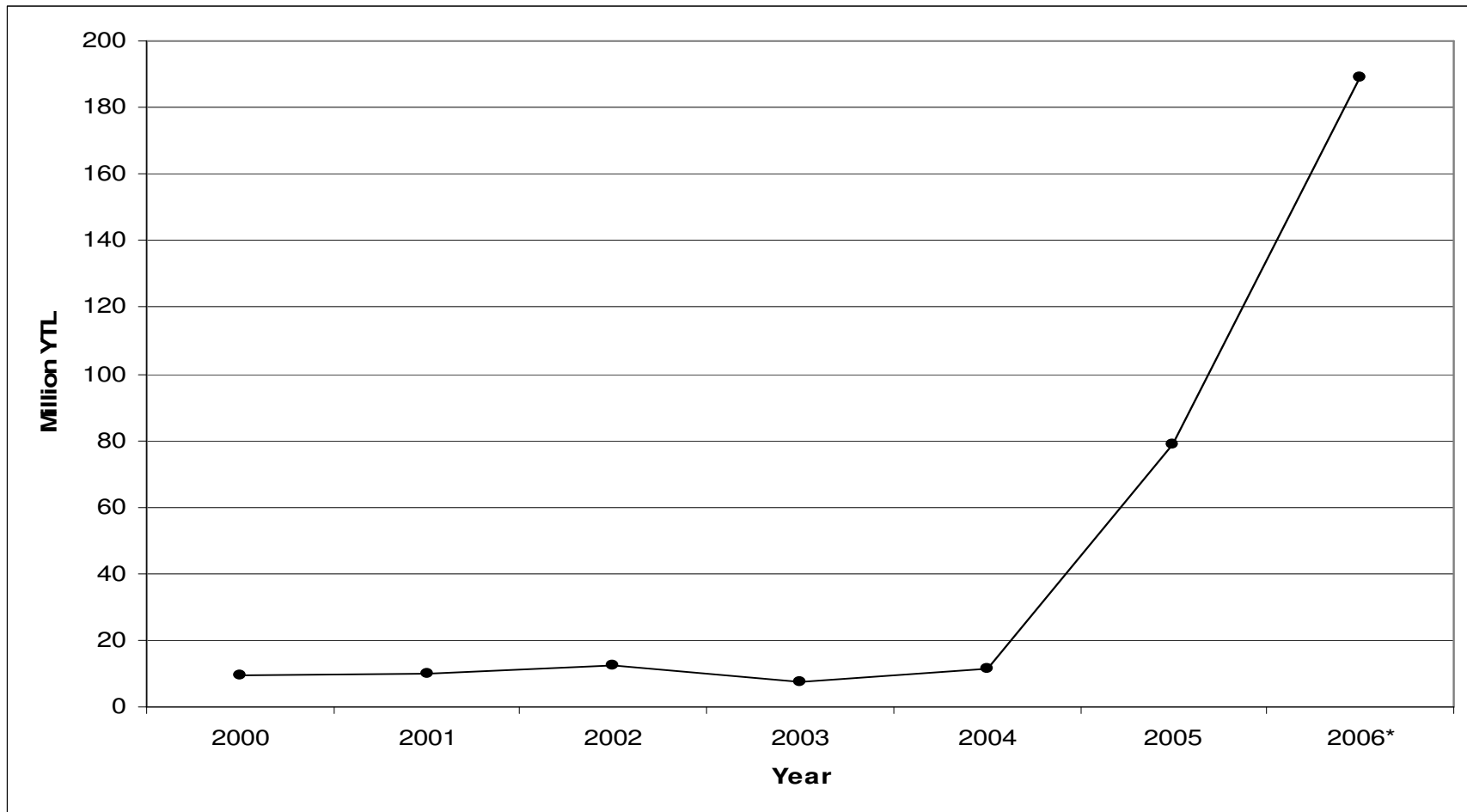


(*) As of 31 December		2003	2006
Number of Project Proposals	:	867	4145
Number of Accepted Proposals	:	338	1371
Number of ongoing projects:		1227	3161

The Academic R&D Grants



The Academic R&D Grants



* As of 31 December 2006

** 2005 constant prices

Improved Project Review

Expert panels*

Process

	2004	2005	2006	Total
Number of Panels	71	286	389	746
Number of Panelists	423	1722	2329	4474
Number of Proposals Evaluated by the Panels **	980	3364	2715	7059
Average number of Proposals per Panel	13,8	11,8	7,0	9,5

* Expert panel system started in 2004

** Small budgeted projects were started to be evaluated by ad hoc reviewers in 2006.

New Programmes

Technology and Innovation for Public Institutions

- Public Institutions Research Programme
- National Defense Research Programme
- National Space Research Programme



Public Institutions Research Programme

	Number Of applications			Total Budget (Million YTL)
Proposed Grants	162			322
Reviewed Grants	152			304
Supported Grants	33			102
Resubmitted Grants	10			28

New Programmes

- **Funding for Social Sciences and Humanities**
- **Early research career programme**
- **Young research career programme**
- **Evrena (Universal Research Programme)**
- **Techno-entrepreneurship programme**
- **National and International Networks programme**
- **Global-Mega R&D Centers programme**

Science Fellowships and Grant Programmes

Recently Announced Science Fellowships and Grant Programmes

National MSc and Ph.D. Scholarship Programme for Senior Undergraduate Students

To encourage senior students to attend national MSc or Ph.D. programmes

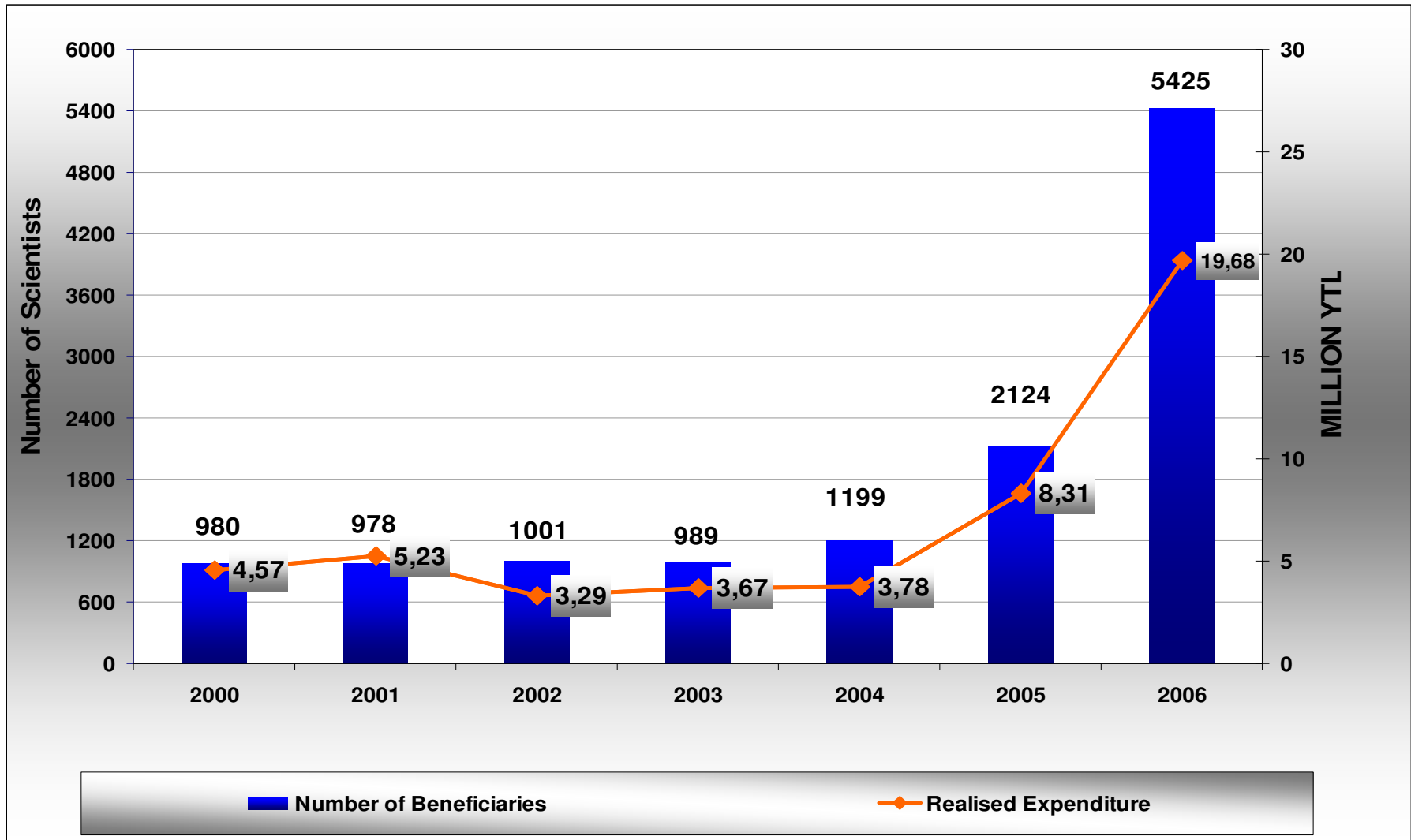
642 students supported in 2006

“Training the Trainers” Programme

To introduce such tools as science camps, theoretical or applied summer or winter courses, scientific consultancy to the student and teacher education programmes

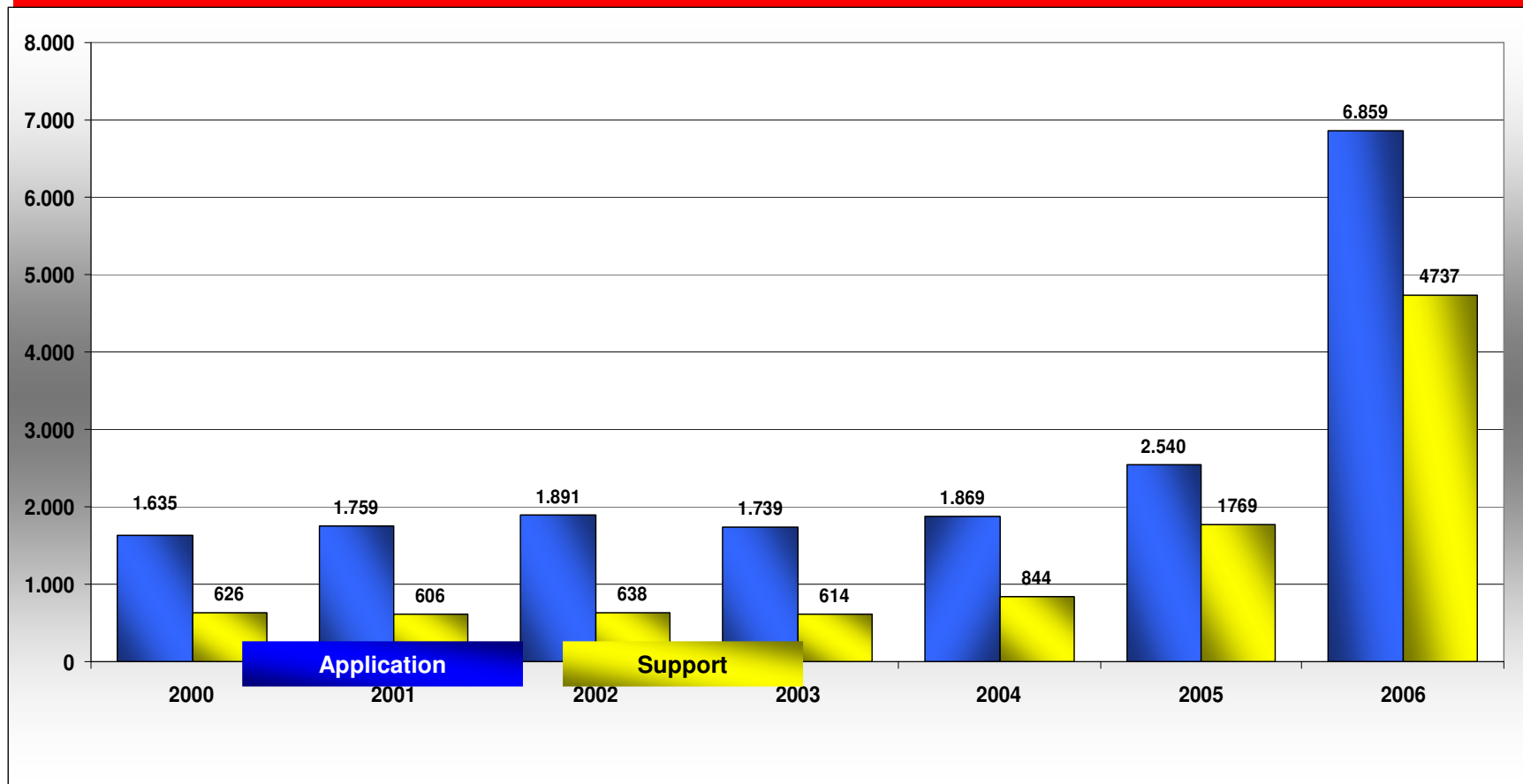
The programme also includes seminars organised for primary and secondary school teachers.

Science Fellowships and Grants



*in 2005 constant prices

More Scientists Supported

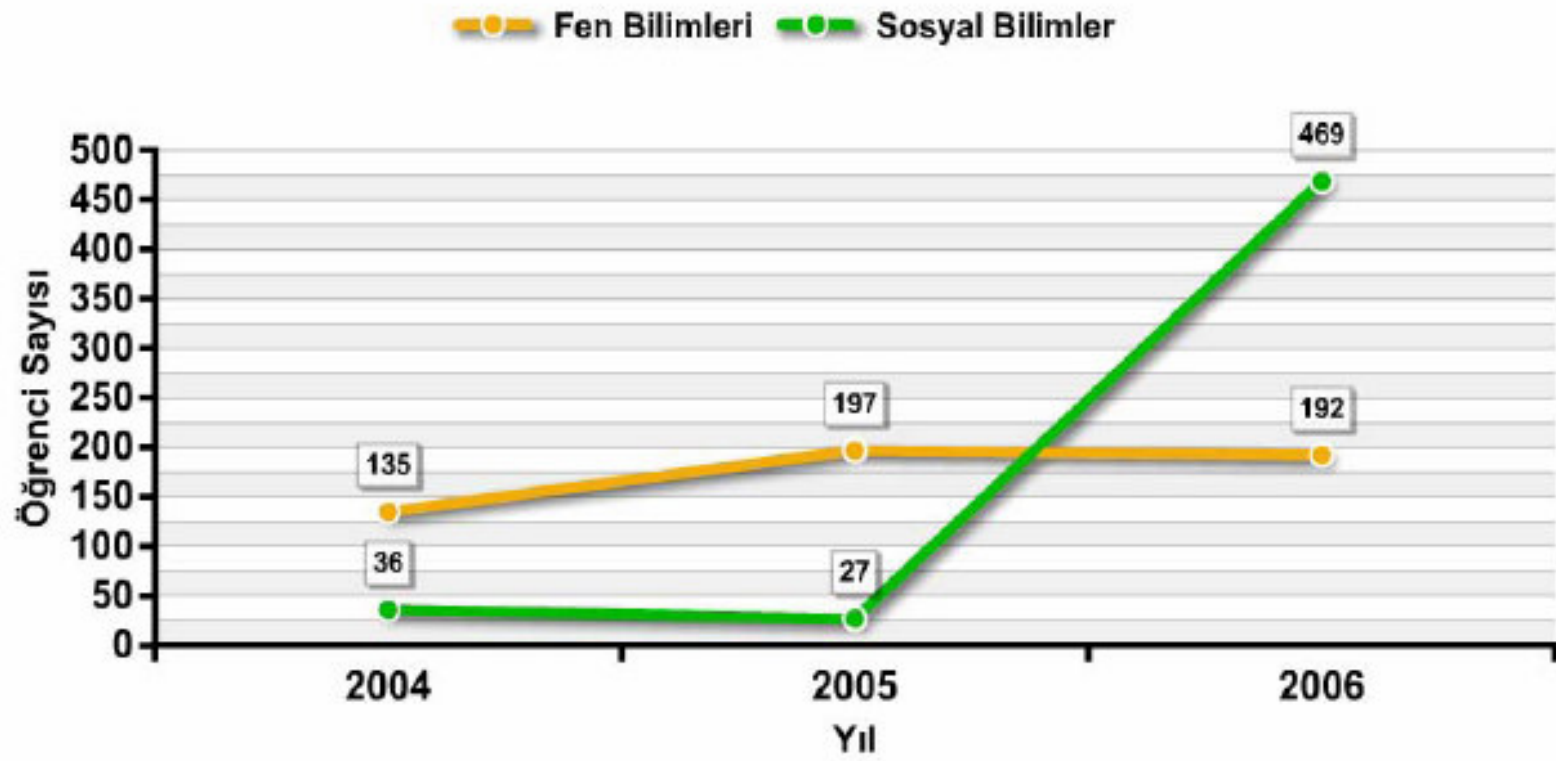


****The number of primary and secondary school students supported under the programmes is excluded**

Basic Sciences and Humanities Fellowship Program

**To attract bright students to the basic
sciences and humanities**

**Offering fellowships to those students who
rank in the top 5000 at the University
Entrance Exams for their entire
undergraduate and graduate life**



International Graduate Scholarship Programme by The Ministry of National Education

1000 students in 2006 .

5000 students as targeted in 5 years.

in the fields

- Lacking in Turkey,
- At the highest level of which is needed by both academy and industry in 10 years within the frame of current strategies of Turkey
- Meeting the anticipated needs of the world in the coming 10 years

TÜBİTAK provides assistance for this programme in the evaluation stage.

Technology and Innovation Grant Programmes

Technology and Innovation Grant Programmes

- Technology and Innovation Grant Programmes provide grants for innovative research and development projects proposed by industrial companies
- Industrial R&D Grant Programme: Project expenditures are reimbursed semi-annually up to 60%
 - Substantial increase in funding budget 75% from TUBITAK's funds, 25% from Under-Secretariat of Foreign Trade (USFT)'s funds

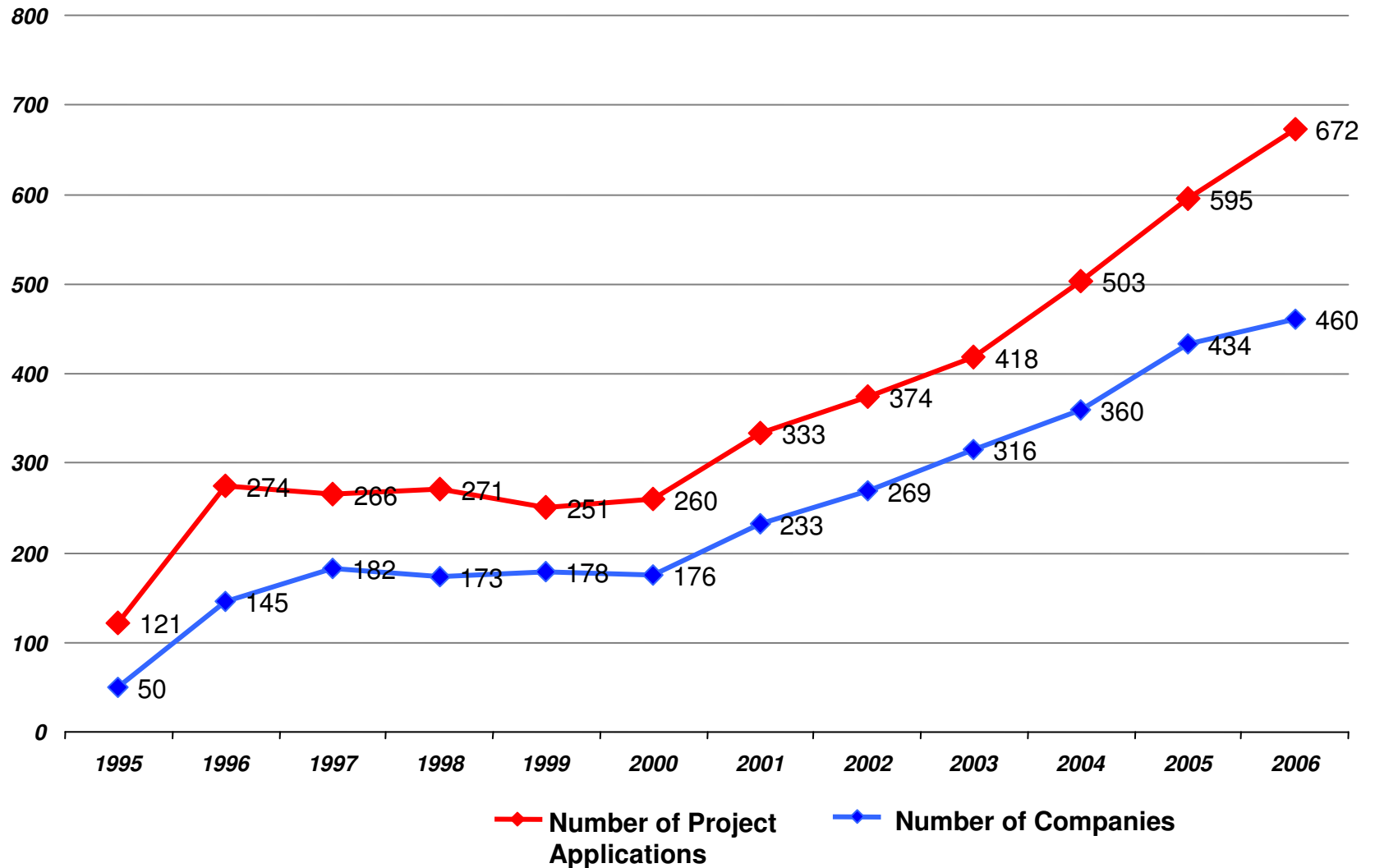
Technology and Innovation Grant Programmes

- R&D tax credits (started in 2005): Allows 40% tax rebate on R&D expenditures of companies
 - Ministry of Finance in charge of the programme; TUBITAK and universities qualify the applications as R&D
 - Some 90 companies submitted 180 projects in 2006
- R&D Brokerage Event Grant Programme
 - Aims to facilitate R&D collaboration between university and industry
- EUREKA activities
 - Turkey's participation (1985-2006): 43 completed projects, 81 participant organizations, 36 Million €
 - Companies' EUREKA labeled projects granted highest support without time restrictions

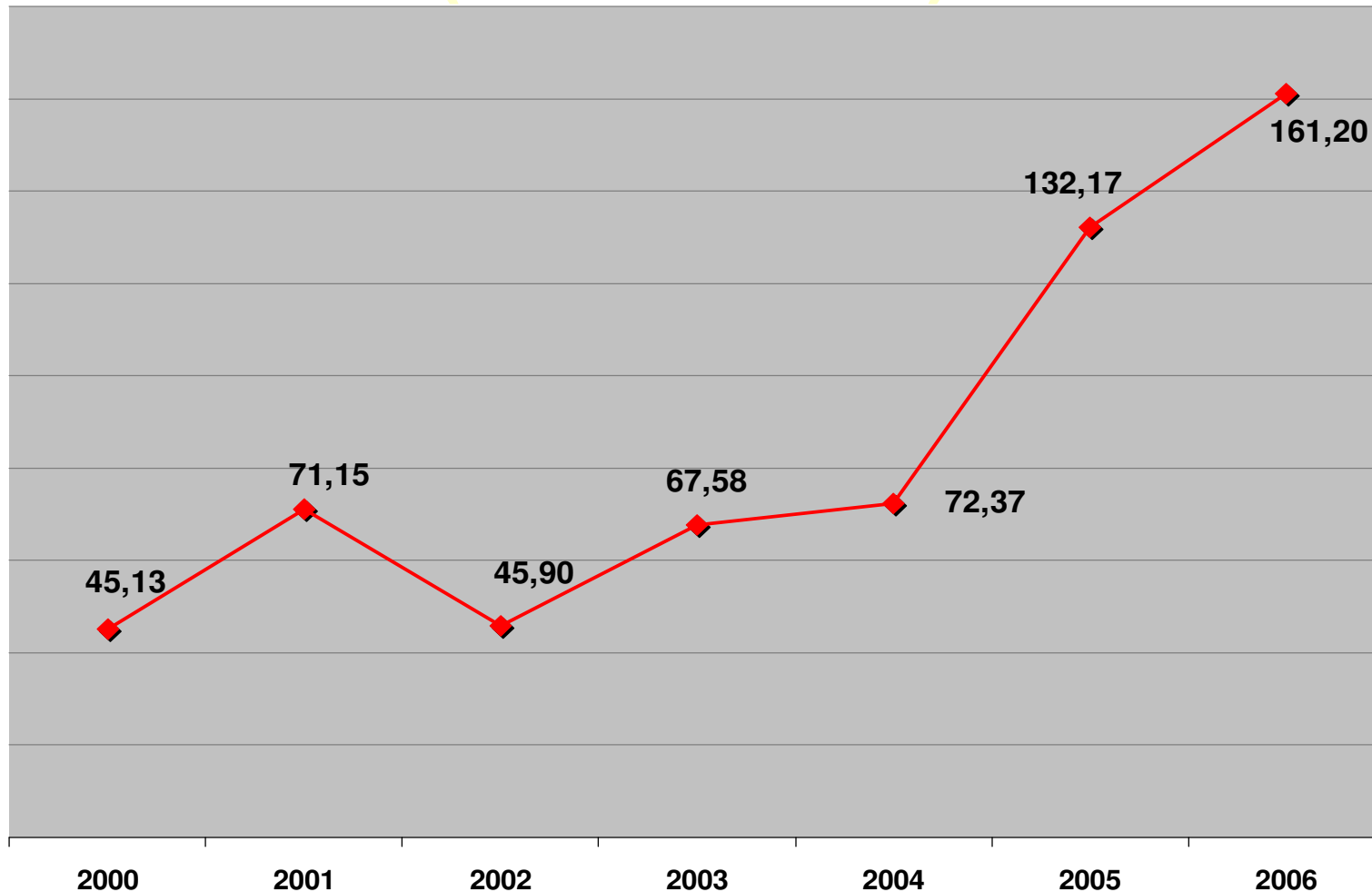
New Technology and Innovation Grant Programmes for 2007

- Two new programs stated for 2nd quarter:
 - SME Funding Program (easier application, evaluation and funding)
 - Technopreneurship Funding Program (for recent university graduates with innovative ideas to start new businesses)

Project Applications to Technology and Innovation Grant Programmes

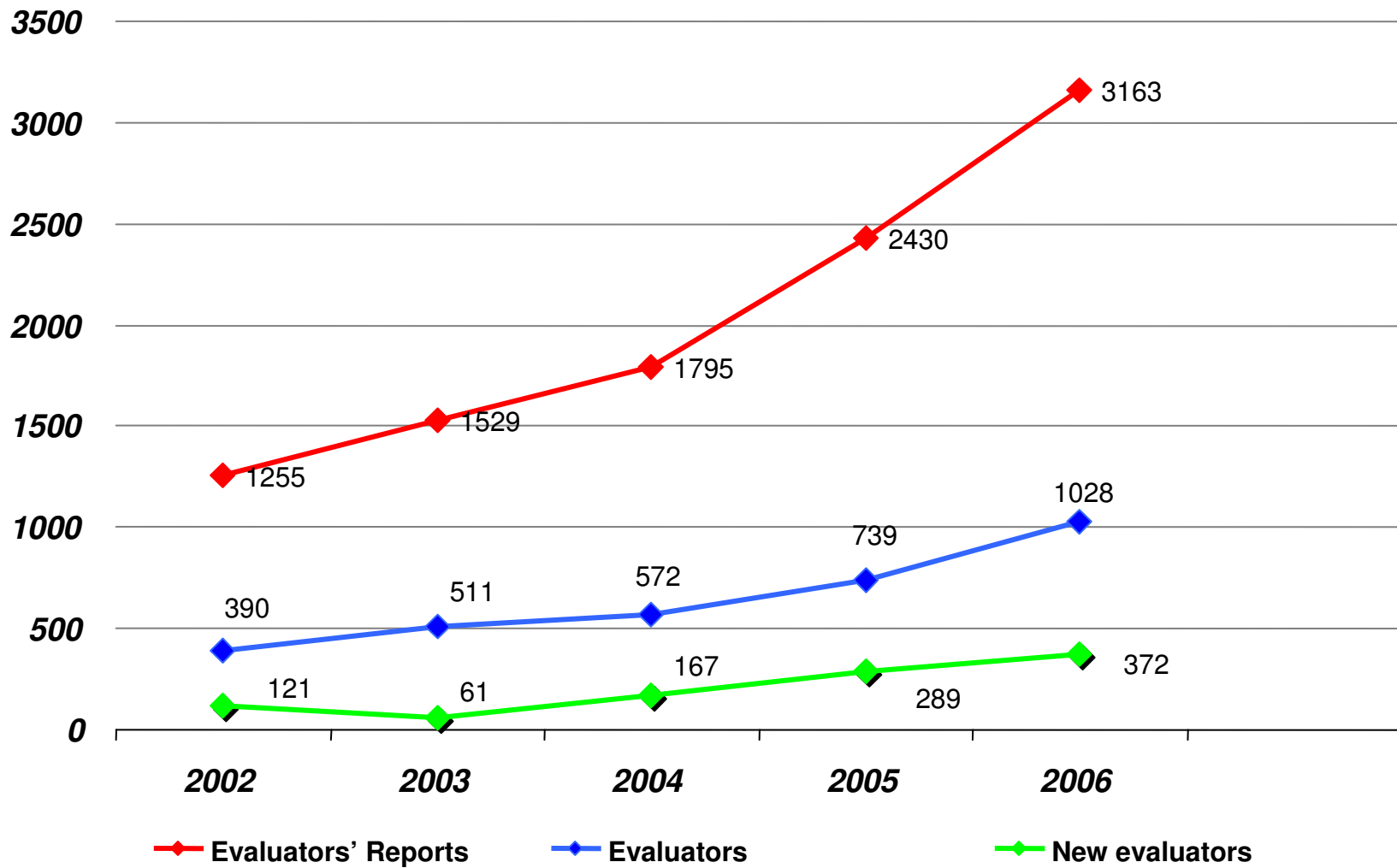


Technology and Innovation Grants (Million YTL)



In 2005 constant prices

Technology and Innovation Grant Programmes Project Evaluators



Legal Affairs

The Amendments to In-house Regulations in 2006

- Online submission system was initiated under the Promotion Program for International Scientific Publications in March, 2006.
- The ownership of the movable assets was transferred from TUBITAK, to the institutes or organisations running the projects since April, 2006.
- Three main support programmes for the academic and industrial scientific projects have been harmonised and brought under a unified process.

The Amendments of In-house Regulations in 2006

- The Support Programme for the Initiative to Build Scientific and Technological Cooperation Networks and Platforms was launched.
- A novel support programme was drawn up to facilitate the operations of the Science in Society Programme in October 2006.

Patent Incentment Programme

- A Patent Incentment Programme has been initiated in September 2006 with the cooperation of the Turkish Patent Institute,
 - to boost the number of Turkish patent applications in Turkey and abroad,
 - for local patents the applicant is provided a non-reclaimable grant
 - for international patent applications, TUBITAK provides a grant of up to 100.000 YTL, which the applicant undertakes to return if the patent fails to gain registration

International Cooperation
&
Bilateral and Multilateral
Relations

Countries Visited By TUBITAK Delegations

- **UNITED KINGDOM, 19 - 23 March 2006**

Visit to the Office of Science and Technology, BNSC, Royal College of Defence Science, RAL

- **USA, 24 March - 1 April 2006**

Visit to the NSF, Council for International Exchange of Scholars, NIST, OSTP, ACE, CGS, NIH, Participation in TASSA and Turkish-American Council Annual Conferences



- **FRANCE, 7 - 10 June 2006**

Participation in the EuroHORCs meeting, contacts with the authorities of OECD

- **SLOVENIA, 27 – 29 September 2006**

Participation in the International Conference and High Level Round Table with the subject of “Why Invest in Science in SEE?” and visit to Slovenian research institutions.



- **USA, 27 October – 4 November 2006**

Participation in the ASTC (Association of Science-Technology Centers) Annual Conference, visit to science centers.

- **JAPAN, 5 – 12 November 2006**

Participation in RIHN First International Symposium: “Water and Better Human Life in the Future”, Meetings with the authorities of Tokyo science institutions, visit to science centers around Kyoto and Tokyo.

- **TAIWAN, 2 – 7 December 2006**

Visit to Taiwan science institutions

Visits of Foreign Delegations to TUBITAK



H.E. U. ENKHTUVSHIN,
Minister of Education,
Culture and Science
of Mongolia
(23 June 2006)



Dr. G. ATKINSON,
Science and Technology
Advisor to the US
Secretary of State
(27-31 May 2006)



Prof. Dr. Atta-ur-RAHMAN,
Federal Minister of Pakistan
and President of Higher
Education Council of Pakistan
(6 November 2006)

Meetings Organised in TURKEY (1)

- **Preparatory Meeting for the Turkish –German Cooperation Council Science, Research and Technology Working Group First Meeting**
(6 March 2006, Ankara)
- **Turkish-Ukrainian Joint Workshop**
(13-16 March 2006, Gebze)
- **Turkish-German Cooperation Council, Science, Research and Technology Working Group First Meeting**
(27-28 April 2006, Ankara)
- **TUBITAK-Korea Research Foundation (KRF) Joint Committee 1st Meeting**
(8-9 May 2006, Gebze)
- **TUBITAK-TASSA Joint Workshop**
(28-31 May 2006, Gebze)
- **TUBITAK- National Academy of Sciences of Belarus Joint Committee 2nd Meeting**
(20-22 November 2006, Gebze)



Meetings Organised in TURKEY (2)

- **Turkey- United Kingdom Space Sciences and Technologies Cooperation Workshop**
(22-24 November 2006, Gebze)
- **International Science, Technology and Innovation Strategy Workshop**
(4 December 2006, Ankara)
- **TUBITAK-JULICH Workshop**
(13-15 December 2006, Gebze)
- **TUBITAK-ESA Meeting**
(18-19 December 2006, Ankara)
- **Info Days**
 - COST : 5 May – Ankara
 - ESF : 9 May, 11 May, 1 June - Gebze
 - EMBO: 17 May, 18 May – Ankara and İstanbul
 - TUBITAK 2nd International Science and Research Day : 8 November – Ankara
 - 1st Industrial R&D and Innovation Day : 28 November 2006-Ankara
 - EUREKA : 28 November 2006-Ankara



New Memberships to the International Organisations and programmes

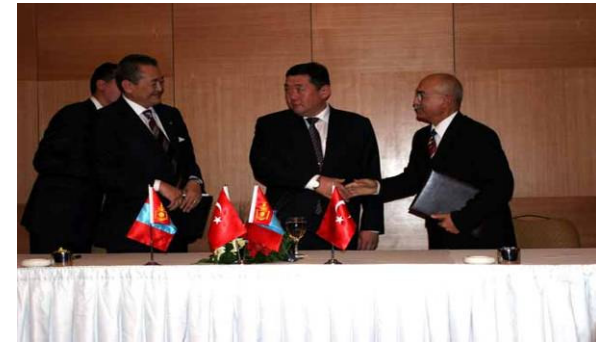
- APSCO (Asian-Pacific Space Cooperation Organization)



- ESF-EURYI (European Young Investigator Awards)
- ASTC (Association of Science-Technology Centers)
- ECSITE (European Network of Science Centers and Museums)

Recently Signed Agreements

- **First Executive Programme of the Agreement Between the Government of the Republic of Turkey and the Government of the Republic of Italy on Scientific and Technical Cooperation for the Years 2006-2009** (26 June 2006, Rome, Italy)
- **The Scientific and Technological Cooperation Agreement Between TUBITAK and the Mongolian Academy of Sciences**
(2 November 2006, Ankara)



AGREEMENTS UNDER CONSIDERATION

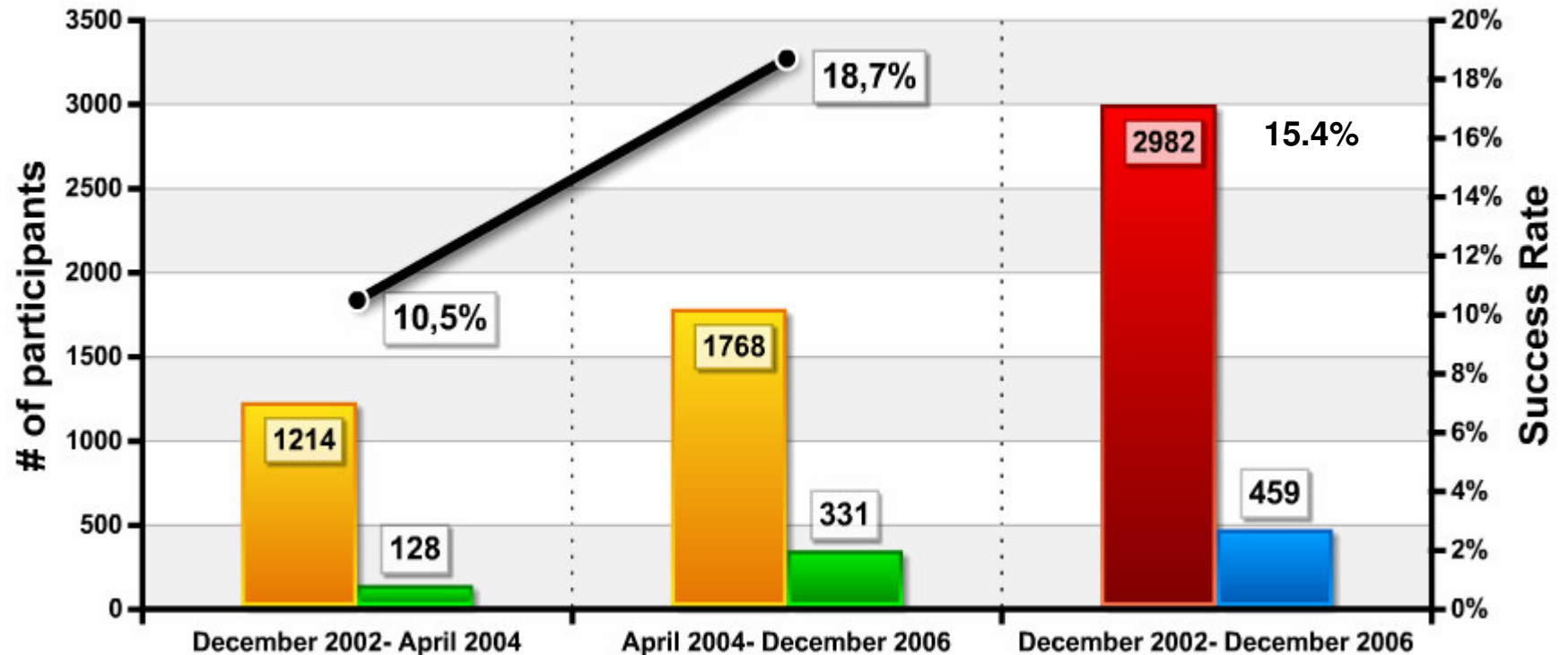
- The Agreement on Cooperation in Science and Technology Between TUBITAK and the Ministry of Education and Science of **Albania**
- The Agreement on Cooperation in Science and Technology Between TUBITAK and the Ministry of Science and Technology of **People's Republic of China**
- Memorandum of Understanding on Scientific and Technological Cooperation Between TUBITAK and **Russian Foundation for Basic Research**
- Executive Programme on Scientific and Technological Cooperation Between TUBITAK and The National Authority for Scientific Research of **Romania**
(ANCS)

Number of International Projects

YEARS	NUMBER OF PROJECT PROPOSALS	NUMBER OF INITIATED PROJECTS	NUMBER OF COMPLETED PROJECTS	NUMBER OF ONGOING PROJECTS
2000	37	13	6	15
2001	78	41	11	50
2002	154	54	20	98
2003	151	60	62	137
2004	126	65	85	187
2005	147	64	113	210
2006	118	36	53	226

International Cooperation & EU Framework Programmes

Performance of Turkey in FP6



Based on December 2006 data compiled by TUBITAK National Coordination Office for EU Framework Programmes

Evaluation of EU Framework Programmes

Advantages of Participation

- Contribution to EU Integration process
- Access to new technologies
- Opportunity for SMEs to enter external markets
- Opportunity of technology transfer
- Involvement in the process of setting new standards

The Cost of Non-Participation

- To fall behind technological developments.

Barriers for Effective Participation

- Low capacity for project production
- Intense competition between the countries
- Lack of experience in doing business with the EU bureaucracy
- Visa problem (Especially for SMEs and Industry)

Caveats

- Guiding Human Resources
- Transformation of knowledge into competitive power
- Enhancing industry participation
- Participation of universities and industry in joint projects

Preparations for 7th Framework Programme

Outline for Preparations of 7th Framework Programme

- ❑ Strengthening the administrative capacity
- ❑ Awareness raising and training activities
- ❑ Strengthening the collaboration with stakeholders
- ❑ More enhanced networking and international linkages
- ❑ Technical execution of FP7 negotiations

Strengthening the Administrative Capacity

National Coordination Office (NCO)

To increase the participation of Turkish researchers in EU Framework Programmes

Main activities of National Coordination Office:

- Informing
- Awareness raising
- Training
- Match-making
- Representing
- Supporting

National Coordination Office

- ❑ **34** full time staff
 - ❑ 20 graduate,
 - ❑ 11 MSc.,
 - ❑ 3 PhD.
- ❑ Experienced team on EU Research and Technology Development Programmes.



Extended Network

FP6

- Institutional contact points
 - From 134 institutions
 - Over 500 people

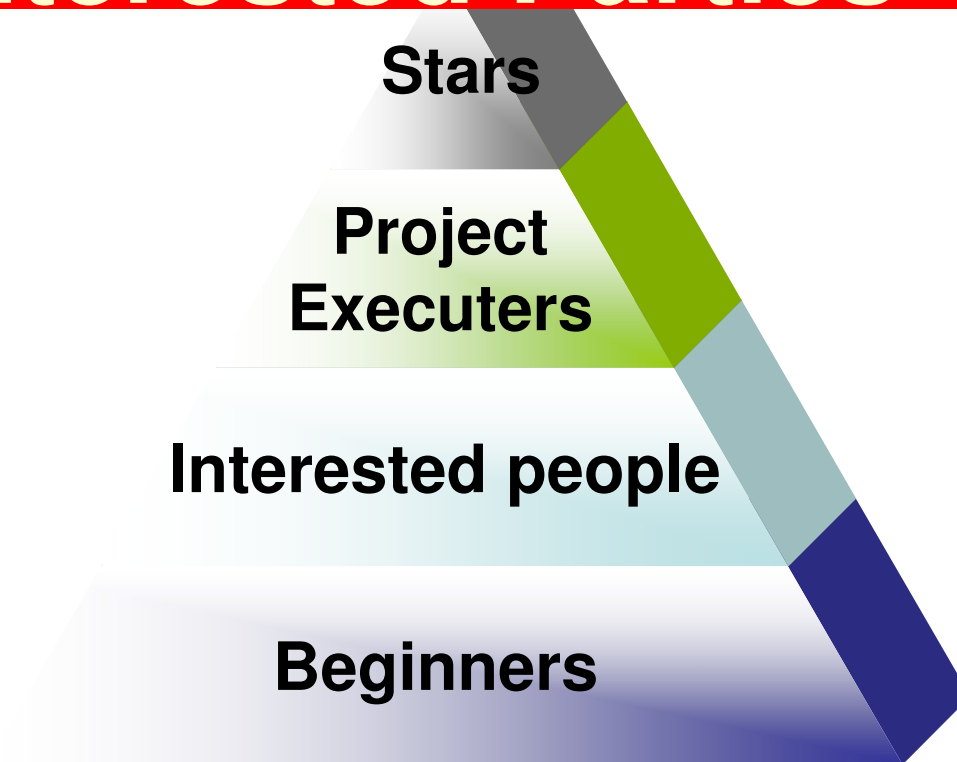
FP7

- Institutional contact points
- National delegates and experts from 38 institutions
- Over 30 multipliers
- Strategic partners
 - Regional organizations
 - Umbrella organizations
 - Major private sector institutions and their partners/stakeholders



Awareness Raising and Training Activities

Segmentation of EU FPs Interested Parties



Different Modules for Different Segments

For researchers competent in FPs

- Experience sharing
- Success Stories
- Promoting for Advisory Groups and Technology Platforms

For researchers executing projects in FP

- Practical application of FP project management process with case studies
- SME site visits

Module 4:

Information Sharing

Module 3:

Project Management

Module 2:

Project Proposal Preparation for EU Framework Programmes

Module 1:

Step by Step 7th FP

For researchers whose FP experience is open for improvement

- Practical applications of project proposal preparation cycle via homogeneous groups
- Partner search

For beginners in FPs

- Information Days and Thematic Conferences
- Public Organisations Awareness Programme
- Industry Awareness Programme
- Web / E-learning tools



TÜBİTAK
AB Çerçeve Programları
Ulusal Koordinasyon Ofisi

Haberler

Bilgi ve İletişim Teknolojileri (ICT) Konferansı 29-30 Ocak 2006'da İstanbul'da !
Sağlık Alanı Tematik Konferansı 12.01.2007 tarihinde İstanbul'da düzenlenecektir.
Ocak Ayı Etkinlikleri
Diğer haberlerimiz için lütfen tıklayınız...



Size nasıl yardımcı olabiliriz?

Avrupa Araştırma Alanı	Adım Adım 7.ÇP	Çağrılar	Ortak Bulma	Eğitimler
<ul style="list-style-type: none">Çerçeve ProgramlarıTeknoloji PlatformlarıFikri Mülkiyet HaklarıCIPIRCMükemmeliyet Merkezleri	<ul style="list-style-type: none">7.ÇP Nedir?Özel Programlar<ul style="list-style-type: none">-İşbirliği-Fikirler-Kişiyi Destekleme-Kapasiteler-JRC-EURATOMFinansal Konular	<ul style="list-style-type: none">AÇIK çağrılarKAPALI Çağrılar	<p>ORTAK BULMA ve ORTAK OLMA önerileri</p>	<ul style="list-style-type: none">Yeni Başlayanlar İçin ÇPProje Teklifi HazırlamaProje YönetimiBilgi Paylaşım Toplantısı

National Media Coverage for FPs (number)

2002	2003	2004	2005	2006
3	27	20	25	80

Araştırmacıların 6. Ç.P'ye katılımı TR-Access projesi ile destekleniyor

TÜBİTAK Avrupa Birliği Altın Çerçeve Programı (AB 6.ÇP) Ulusal Koordinasyon Ofisi Türkiye'deki araştırmacıları AB 6.Çerçeve Programı ile katkılarına ilişkin TR-Access projesi ile destekleniyor.

2005 bütçesinden Ar-Ge faaliyetleri için ayrılan 500'e yakın milyon TL, Türkiye'nin AB 6.ÇP'ye katılımını desteklemek için kullanılmaktadır. Araştırmacıların AB 6.ÇP'ye katılımını destekleyen TR-Access projesi, Türkiye'nin AB 6.ÇP'ye katılımını desteklemek için ayrılan 500'e yakın milyon TL, Türkiye'nin AB 6.ÇP'ye katılımını desteklemek için kullanılmaktadır.

High hopes for 7th framework after experience of the 6th

"There is an increasing trend in our performance under FP6 in our 6th year, if we have a look at the last four years," Hilaryn Cullen, deputy national coordinator of EU framework programs at TÜBİTAK says.



TÜBİTAK Avrupa Birliği Altın Çerçeve Programı (AB 6.ÇP) Ulusal Koordinasyon Ofisi Türkiye'deki araştırmacıları AB 6.Çerçeve Programı ile katkılarına ilişkin TR-Access projesi ile destekleniyor.

'2010'da AR-GE'ye ayrılan kaynak GSMH'ye Küresel rekabet, AR-GE harcamalarını patlattı

2005-2006 döneminde harcamalar yüzde 7 yükseldi, ABD'nin AB'ye üstünlüğü arttı

2005 bütçesinden Ar-Ge faaliyetleri için ayrılan 500'e yakın milyon TL, Türkiye'nin AB 6.ÇP'ye katılımını desteklemek için kullanılmaktadır.



7. ÇERÇEVE PROGRAMI İÇİN PROJE ÇAĞRILARI OCAKTA Avrupa Birliği'nden 54 milyar euroluk fon fırsatı kapıda

54 milyar euroluk fon fırsatı kapıda

Avrupa Birliği'nin (AB) 54 milyar euroluk fon fırsatı kapıda



Antalya'da "Gıda, Tarım ve Biyoteknoloji" konulu toplantı yapılacak

RIS (Regional Innovation Strategies) Mersin Projesi kapsamında, Antalya'da "Gıda, Tarım ve Biyoteknoloji" konulu toplantı yapılacağı bildirildi.

Mersin Valiliği Basın ve Halkla İlişkiler Müdürlüğü'nden yapılan yazılı açıklamada, Mersin ve Sanayi Odası, TÜBİTAK ve Antalya Ticaret Odası işbirliğinde gerçekleştirilecek toplantının, RIS Mersin Projesi kapsamında yapılacağı bildirildi.

54 milyar euroluk fon fırsatı kapıda

Avrupa Birliği'nin (AB) 54 milyar euroluk fon fırsatı kapıda



Ayşe Dinçkök

'TÜBİTAK AB'ye hazır'

TÜBİTAK AB Çerçeve Programları Ulusal Koordinatörü Doç. Dr. Nilay Başaran, 6. Çerçeve Programın üç ay sonra sona ereceğini bildirdi. 6. Çerçeve Programı kamu ve üniversitelerin yüzde 21, sanayiden ise yüzde 10 katılımını sağlandığını, sanayiden katılımların ise arttığını kaydetti. 6. Çerçeve Programı katılımın beklendenden az olduğunu belirten Doç. Dr. Başaran, 7 yılda tamamlanacak 7. Çerçeve Programın da "Teknoloji Platformları" oluşturulacağını kaydetti.

"Eğer bunu Türkiye olarak kendimiz yapmış olsaydık 2 milyar avro harcamış olurduk. TÜBİTAK, çerçeve programlarına katılan KOBİ'lere önemli hizmetler veriyor. yabancı ortaklar buluyor. Ayrıca AB'ye proje ürettiyor. TÜBİTAK, çerçeve programlarına katılacak KOBİ'lere ve her kuruma yardımcı oluyor. TÜBİTAK AB'ye hazır 2007-2013 yıllarını kapsayacak 7. Çerçeve Programına projelerle katılım yoğun şekilde sağlayalım." Başaran, teknoloji bakımından Japonya ve ABD'nin gerisinde olan AB'nin çerçeve programlarıyla ekonomik siyasi, teknolojik ve bilimsel alanda dünya büyük bir güç olmayı amaçladığını sözlerine ekledi.

DAHA FAZLA PAY ALMAK İÇİN SEMİNERİ DÜZENLİYOR

DAHA FAZLA PAY ALMAK İÇİN SEMİNERİ DÜZENLİYOR

1st Stage (May 2006 – Oct 2006)	2nd Stage (Nov 2006-...)
<ul style="list-style-type: none">• General info on EU Framework Programmes• FP7 Specific Programmes	<ul style="list-style-type: none">• Training courses on Project Preparation and Management.• Workshops with focus groups• Partner search

**Over 500 participants
from 16 different public
institutions...**

Aile ve Sosyal Arařtırmalar Genel M¼d¼rl¼g¼

Bayındırlık Bakanlıđı

Çalıřma ve Sosyal Güvenlik Bakanlıđı

Denizcilik M¼steřarıđı

DPT (Ulusal Ajans)

DPT (AB ile İliřkiler GM)

Dıř Ticaret M¼steřarıđı

Emniyet Genel M¼d¼rl¼g¼

Enerji Bakanlıđı

Genel Kurmay Bařkanlıđı

Milli Eđitim Bakanlıđı

Sađlık Bakanlıđı

Sanayi ve Ticaret Bakanlıđı

Tarım Bakanlıđı

T¼rk Telekom

Aim of the programme:

- Presenting the FP7 specific programmes
- Improvement of project proposal preparation and management competency of Universities
- Sharing the best practises

In 33 different cities over 20.000 participants



Aim of the programme:

- ❑ Increase participation of industry in FP
- ❑ Create awareness
- ❑ Improve project proposal preparation and management competency
 - ❑ In 2006 **14** Project Proposal Preparation Trainings and **2** Project Management Seminars
 - ❑ **1400** participants



Increasing Industrial Awareness

- ❑ Conference on European Technology Platforms (TÜBİTAK – TOBB, Ankara, 400 participants)
- ❑ Conference on Science and Research on the Way to EU Membership (TÜBİTAK – TÜSİAD, İstanbul, 300 participants)



Aim

Increasing the R&D and innovation capacity of industrial institutions and contributing to reach Vision2023 targets

First Five Technology Platforms (Start: 11 January 2007)

- Electrics-Electronics
- Metal
- Textile
- Marine sciences
- Automotive

Studies

- Long term research targets
- Strategic research plan
- Pathway for the application of the strategic research plan

- ❑ For SMEs executing projects in 6th FP:
 - ❑ General information on FP legal and financial issues
 - ❑ Information on VAT exemption
 - ❑ Identifying the problems and advising on how to deal with financial challenges in FPs



Visited Corporations

- Intro
- ORME JEOTERMAL
- IRC ANATOLIA
- ODTÜ TEKNOKENT
- TEPE TEKNOLOJİ
- GOLDAŞ
- İleri Tıp Teknolojileri
- LuckyEye
- MERKAT
- MOBİLERA
- SETAŞ KİMYA
- SEBİT TAGES



Publication of “Success Stories” in order to promote participation of industry and to give information about successful ongoing projects

Proje Adı Fonksiyonel Genomik ve Epilepsi Nörobiyolojisi: Yeni Tedavi Stratejileri için Bir Temel Yaklaşım
(Functional Genomics and Neurobiology of Epilepsy: A Basis for New Therapeutic Strategies)

Proje Akronimi	EPICURE
Kontrat No	(Ağustos 2006 itibarıyla imzalanma sürecindedir.)
Tematik Alan	Yaşam Bilimleri, Genom Bilim ve Sağlık için Biyoteknoloji – LIFESCIHEALTH
Proje Türü (IP NoE, STREP, Call, CRAFT)	Bütünleştirilmiş Projeler - IP
Proje Süresi (Ay)	48 ay
Toplam Desteklenen (€)	(Henüz finalize edilmemiştir)
Ortak Olarak Desteklenen (€)	528.750 € (Toplam) - 268.875 € (EC katkısı)
Proje Web sitesi	Henüz açılmamıştır.

Proje Nasıl Ortak Oldunuz ve Bu Süreçte Karşılaştığınız sorunlar nelerdir?

İleri Tıp Teknolojileri'nin (ITT) projeye dahil olmasında İstanbul Üniversitesi Deneysel Tıp Anlaşma Enstitüsü (DETAE), Genetik Anabilim Dalı önemli rol oynamıştır. Projenin fikir aşamasından itibaren içinde olan DEAE, projeye dahil olması için Avrupa'da KOBİ'lerin ve yüksek kapasiteli genetik analiz laboratuvarlarının arandığı bir aşamada ITT'yi konsorsiyuma tanıtmıştır. Yapılan görüşmeler ve çalışmalar sonucunda ITT hem bir KOBİ, hem de yüksek kapasiteli genetik analiz laboratuvarı olarak proje ortakları arasına kabul edilmiştir. Bu, 2005 yılında kurulmuş olan ITT'nin ilk 6. Çerçeve Programı projesidir. Bu bağlamda hikayesinde, Türkiye'den bir akademi kuruluşunun ve özel sektör kuruluşunun işbirliği büyük önem taşımaktadır.

Proje yürütürken Karşılaştığınız sorunlar nelerdi ve bu sorunları gidermek için neler yaptınız?

6. Çerçeve Programı projesi kapsamında, KOBİ olarak bütçenin %50'sinin karşılanması kuralı, Türkiye şartlarında önemli bir yük yaratmıştır. Ancak ITT, Ar-Ge kapasitesini geliştirmek ve Türkiye'yi böyle bir ortamda yüksek teknolojik bir platform ile temsil etmek için projeye girmiştir. Operasyonel açıdan tahmin edilen olası sorun alanlarından biri, genetik analizlerle ilgili olarak yurt dışından alınması gereken reagentlerin günlük işlemlerdir.

Proje Çıktıları Olarak Neler Bekliyorsunuz?

EPICURE projesi daha etkili antiepileptik stratejilerin geliştirilmesini, epilepsilerde farmakoresistansın biyolojik temellerinin anlaşılmasını ve bazı inovatif terapötik yaklaşımların potansiyelinin değerlendirilmesini sağlayacaktır.

Siz Bu Çıktılardan Nasıl Yararlanmayı düşünüyorsunuz?

ITT bünyesindeki TOGEN – Toplum Sağlığı Genomik Merkezi, genetik ve genomik araştırma sonuçlarının sağlık profesyonelleri ve bireyler tarafından kullanılabilir bilgileri ve hizmet paketine dönüştürülmesi konusunda uzmanlaşmış bir kuruluş olup, bu alanda Türkiye'de ve dünyada çalışan sayılı isimler arasındadır. Proje sonucunda ortaya çıkacak bilgiler TOGEN tarafından, epilepsi tedavisi üzerine çalışan klinisyenlerin tedavi planlarında doğru ilaç seçimi yapmalarına yardımcı olarak genetik analiz panellerinin geliştirilmesi için kullanılacaktır. Ayrıca TOGEN, bu bilgilerin toplum sağlığı genomik perspektifi ile halk sağlığı uygulamalarına katkıda bulunacak bilgilere dönüştürülmesi hususunda çalışmalarını sürdürecektir.

Projein Hedefi Nedir?

EPICURE projesi epilepsi tedavisinde daha etkili antiepileptik stratejilerin geliştirilmesi, epilepsilerde farmakoresistansın biyolojik temellerinin anlaşılması ve bazı inovatif terapötik yaklaşımların potansiyelinin değerlendirilmesini amaçlamaktadır.

Projein Konusu ve İçeriği Nedir?

Kronik ve multifaktöryel bir hastalık olan epilepsilerin dünyada ve Avrupa'da görülme sıklığı yaklaşık %1'dir. Epilepsi, hastaların yaşam kalitesini çok olumsuz etkilemektedir ve bu durum özellikle vakaların üçte birini oluşturan ilaca dirençli epilepsilerde ön plana çıkmaktadır. EPICURE projesi

- Epilepsi genlerini ve nasıl epilepsiyeye yol açtıklarıyla ilgili fonksiyonel değişiklikleri belirlemek
- Kararıcı stratejiler ve yeni tedavi hedeflerini belirlemek için edinilmiş yeni kanal bazlı ilaçların tanımlanması ve temporal lob epilepsileri modelleri üzerinde çalışmak
- Beyin gelişiminde bozukluk olan çocuklarda yaşla gelişen epilepsilerin mekanizmasını anlamak için hazırlanmıştır.

Projedeki Rolünüz Nedir?

İleri Tıp Teknolojileri, EPICURE'ın ilaca Dirençli Epilepsilerin Farmakogenetiği konulu bejinci alt projesinde görev almaktadır (Pharmacogenetics of refractory epilepsy, mechanisms of drug resistance and new therapeutic strategies). ITT'nin GENAR Laboratuvarları proje kapsamında Avrupa'daki merkezlerinin topladığı genetik materyallerdeki genotipleme çalışmalarını yürütecektir. Bu çerçevede GENAR'da yaklaşık 2.000 kişiye 400 polimorfizmin analizi (800.000 genotipleme) yapılması planlanmaktadır.

DİĞER ORTAKLAR

FİRMA / KURULUS	ÜLKE	ORGANİZASYON TİPİ
1 Istituto Nazionale Neurologico "Carlo Besta"	İtalya	Akademik
2 Institut National de la Sante Et de la Recherche Medicale	Fransa	Akademik
3 University of Verona	İtalya	Akademik
4 Friedrich Alexander University of Erlangen-Nuremberg	Almanya	Akademik
5 The Institute of Experimental Medicine, Hungarian Academy of Sciences	Macaristan	Akademik
6 IRCCS Stella Maris Foundation and University of Pisa	İtalya	Akademik
7 University of Bonn Medical Center	Almanya	Akademik
8 Charité Universitätsmedizin Berlin	Almanya	Akademik
9 University of Lund	İsveç	Akademik
10 University Medical Center Utrecht	Hollanda	Akademik
11 University of Helsinki	Finlandiya	Akademik
12 Universitätsklinikum Ulm	Almanya	Akademik
13 University of Mainz	Almanya	Akademik
14 University of Istanbul	Türkiye	Akademik
15 IRCCS Neurological Institute "Casimiro Mondino"	İtalya	Akademik
16 University of Kuopio	Fineandiya	Akademik
17 University Hospitals Marburg	Almanya	Akademik
18 Fundación Jiménez Díaz	İspanya	Akademik
19 University of Ferrara	İtalya	Akademik
20 Medizinische Universität Innsbruck	Avusturya	Akademik
21 University College London	İngiltere	Akademik
22 Istituto di Ricerche Farmacologiche "Mario Negri"	İtalya	Akademik
23 Istituto Giannina Gaslini - Ospedale Pediatrico	Fransa	KOBİ
24 OZ Biosciences	Türkiye	KOBİ
25 ITT – Advanced Medical Technologies, GENAR Biotechnology and Molecular Genetics Laboratories	Danimarka	KOBİ
26 Ns gene	Fransa	KOBİ
27 Neurokin SARL	İsveç	KOBİ
28 International Bureau for Epilepsy	İsveç	Uluslararası Organizasyon
29 CF consulting Finanziamento Unione Europea	İtalya	KOBİ

PROJE ORTAĞI BİLGİLERİ

Firma / Kuruluş Adı	ITT – İleri Tıp Teknolojileri (Advanced Medical Technologies) GENAR Bioteknoloji ve Moleküler Genetik Laboratuvarları (GENAR Biotechnology and Molecular Genetics Laboratories)
Adres	Hacettepe Üniversitesi Teknokenti Ar-Ge Binası No:2 Beytepe 06800 Ankara
Kontakt Kişi (Ad/Soyad)	Dr. Tomris Cesuroğlu
Tel	(312) 299 21 40
Fax	(312) 299 21 42
e-mail	tcesuroglu@itt.gen.tr
Firma / Kuruluş e-mail	info@itt.gen.tr

KOORDİNATÖR BİLGİLERİ

Firma / Kuruluş Adı	INNCB – Istituto Neurologico Nazionale "Carlo Besta"
Adres	Via Celoria, 11 – 20133 Milano (MI) İtalya, 20133
Kontakt Kişi (Ad/Soyad)	Prof. Giuliano Avanzini
Tel	+39 02/23942253
Fax	+39 02/70600775
e-mail	avanzini@istituto-besta.it



06 - 07 Aralık 2006

AB 7. Çerçeve Programı Türkiye Forumu

İstanbul



Over 800 participants... EU Commission and Europe-wide experienced experts...

- Presenting the FP7 calls
- Success stories from Turkey
- Road map for the success in FP7
- How to turn ideas to Euro
- Sessions on promoting the industry participation

- Support for the Management of Financial Issues
 - Financial Help Desk
- Development of Legal and Financial Infrastructure
 - VAT Exemption
- Match-making
 - Partner Search
- Studies Conducted with EU's Science and Research Institutions
 - JRC, COST, ESF
- Contribution for the Mobility of Researchers
 - ERA-MORE Network

Strengthening The Collaboration With Stakeholders

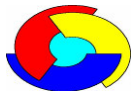
Strategic Partners, Collaborations



More Enhanced Networking and International Linkages

TURBO : RTD Liason Office in Brussels

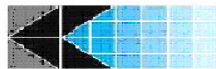
- Some examples from 2006 :
 - FP7 training programme with IGLO
 - Strategic partner in
 - Technology Platforms Conference
 - Information Communication Technology Conference
 - Turkish FP7 forum



TOBB



TÜBİTAK



KOSGEB



TESK

14 A, rue du Luxembourg - B 1000 Brussels - Belgium

Tel: +32 2 285 40 20

Fax: +32 2 285 40 25

E-mail: Info@turboppp.org

Web: www.turboppp.org

Date	Activity	Place	Activity Partners
2nd Quarter	Visit to DG Research with leading R&D directors of Turkish industry and joint workshop	Brussels	TÜBİTAK TURBO European Commission
2nd Quarter	Brussels visit with leading ICT SME representatives Brussels and awareness raising event	Brussels	TÜBİTAK TURBO European Commission
4th Quarter	TARAL (Turkish Research Area) Conference	Brussels	TÜBİTAK TURBO European Parliament

Workshop of EU Enlargement Countries

ISTANBUL AGENDA
FOR INCREASED PARTICIPATION IN FP7 OF
EU ENLARGEMENT COUNTRIES
(CANDIDATE AND POTENTIAL CANDIDATE)

(2007-2008)

- Participant countries:
Albania, Bosnia Herzegovina,
Croatia, Montenegro, Macedonia,
Romania, Serbia, Turkey

Output:

- “Istanbul Agenda” on increasing the participation of EU Enlargement Countries to FP7 was adopted.
- The paper will be presented to the EU Commission.



Joint Research Center (JRC) Activities



Visit with participation of 26 senior authorities:

- Project presentations by Turkish participants and JRC staff
- Round tables
- Defining areas for collaboration

21 Actions defined which include workshops, trainings, joint projects and staff exchanges

Participant Institutions

ASELSAN A.Ş.
Bilkent University
Boğaziçi University
Çanakkale 18 Mart University
Çevre ve Orman Bakanlığı
Enerji ve Tabii Kaynaklar Bakanlığı
Hacettepe University
Harran University
İTÜ
Koç Üniversitesi
Marmara University
Milli Güvenlik Kurulu Sekret.
Sabancı University
Tarım ve Köyişleri Bakanlığı
TURBO
TÜBİTAK



European ICT Conference
on Research and Technology Development

- FP7 – European ICT Conference
 - 29-30 January 2007, İstanbul
 - 20 countries (EU Member States, Candidate States, West Balkan Countries, India, Egypt, Israel)
 - 350 SME representatives
- European Commission, European Investment Bank, Technology Platforms, multinationals companies
- FP7 Project Ideas Presentations
- Network Sessions for SMEs

www.ictconference-istanbul.org

Contact: TÜBİTAK, TBV, TAGES

FP7 Action Plan

- Decision to participate in FP7 handed to the EU Commission
- Negotiations started on Action Plan in Brussels on December 13, 2006
- EU Commission working on MoU

Science in Society

TUBITAK's Science in Society Department's Organisation Restructured

Vice President

Science in Society Programme
Development Commission

- The department was completely restructured to streamline its management and widen its reach to the public with innovative new tools.
- A strategic plan was drawn up for activities of the department.

Science in Society Department

Popular Science Magazines Directorate

Popular Science Books Directorate

Academic Publications Directorate

Science and Society Programmes
Group

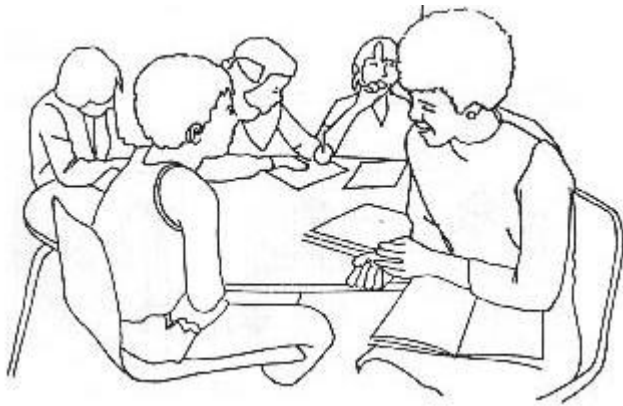
Magazines

Books

Activities

Support

Ground Laid For Project Support



A task group laid the ground for cash support to Science and Society projects undertaken by universities and public or private institutions.

Science Centre Nears

Preparations underway for the establishment of a world-class Science and Society Campus.

Delegations sent to ECSITE meetings to learn from the accumulated experience and know-how.

Top leadership toured centres worldwide for firsthand knowledge and benchmarking.

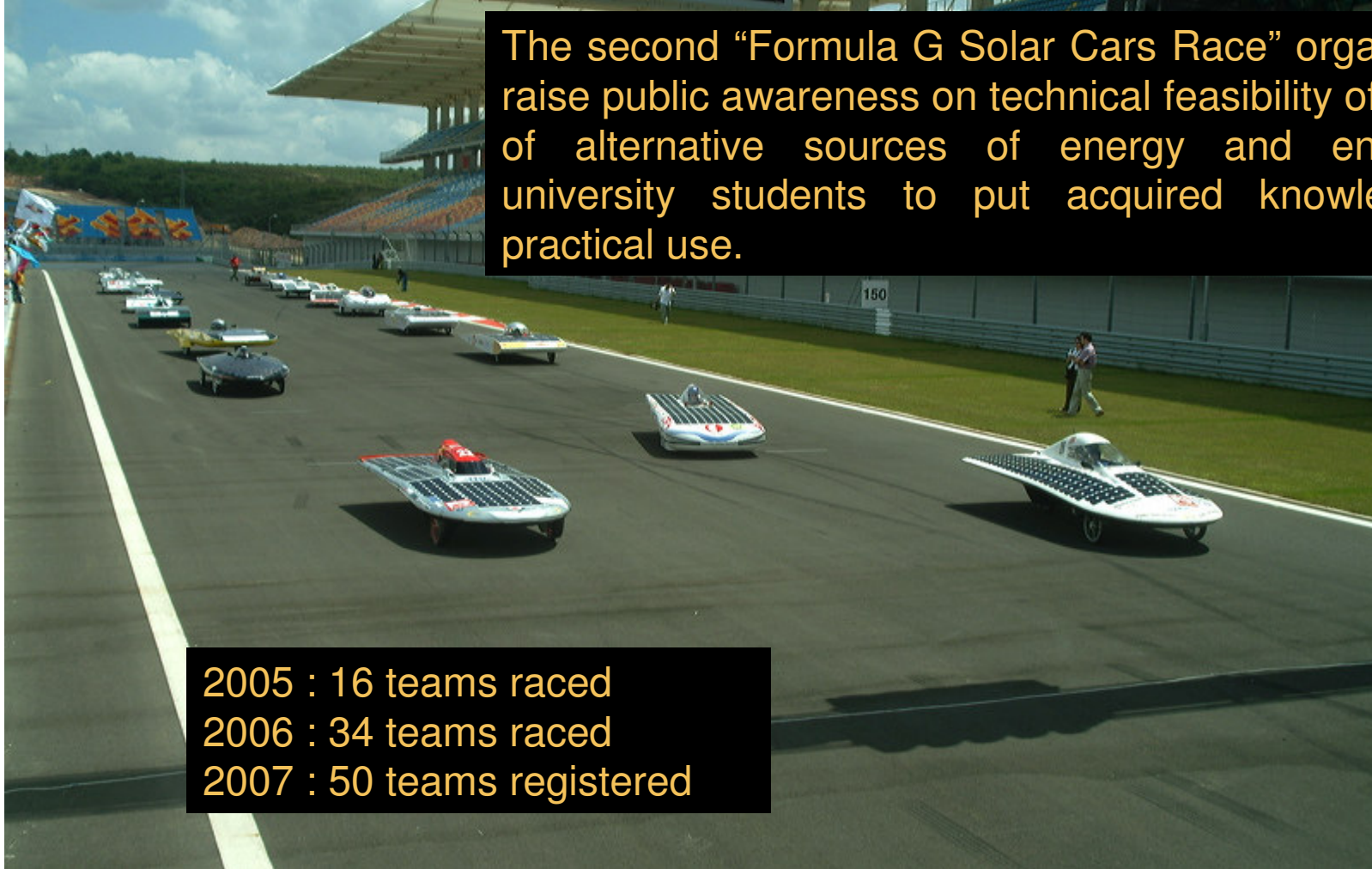
Studies conducted for acquisition of premium land, units of the complex, contents of science pavilions and exhibition halls.

Plans laid for a Science History Museum in Istanbul with the cooperation of the City Council, Turkish Academy of Sciences and the Ministry of Culture and Tourism.



TUBITAK Formula-G Solar Car Race

The second "Formula G Solar Cars Race" organised to raise public awareness on technical feasibility of the use of alternative sources of energy and encourage university students to put acquired knowledge to practical use.



2005 : 16 teams raced
2006 : 34 teams raced
2007 : 50 teams registered

To further raise the bar for the students, TUBITAK announced a fuel cell powered cars race for 2007. 40 teams rose to the challenge.



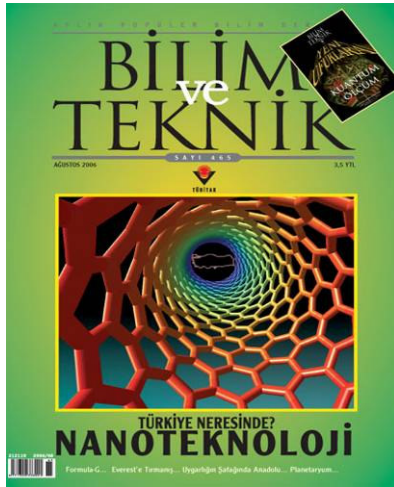
TUBITAK Science Camps For Children

First Science Summer Camps organised. 60 children enjoyed scientific workshops interspaced with games and sports activities in two consecutive 10-day terms supervised by department staff and education specialists.



Successful Year For Popular Science Magazines

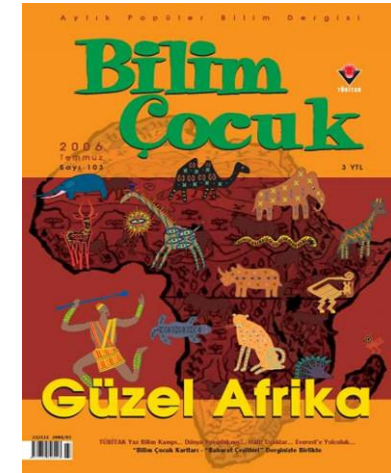
(Science and Technology)



MERAKLI MİNİK
(Curious Puppy)
NEW



(Science for Children)



In Demand For 40 Years

***Bilim ve Teknik* (Science and Technology) boosted its sales, completed preparations to further diversify its tools to reach the public with animated CD supplements.**

AVERAGE MONTHLY SALES:

2002: 47.000

2003: 41.000

2004: 35.000

2005: 36.000

2006: 56.000



A Popular Address

www.biltek.tubitak.gov.tr/

The magazine's website has become a major attraction for surfers.

Among many features:

- Q&A (over 5.000 queries answered)
- S&T News
- Animated thematic pages
- Health, sports, arts, hobby, fun pages
- Do it yourself
- Popular psychology
- Quizzes

The screenshot displays the Biltek website interface, which is a hub for science and technology information. The main navigation bar includes sections like 'Kendinizi Yapalım', 'Sonsuz Takvim', 'HAYALİ DÜNYA', 'Sınırsız Sayılar', 'Orada Saat Neş?', 'Psikoloji', 'Sana! Sergi!', 'Bilim İnsanları', 'Mesaj Panosu', 'Poster ve Kitapçıklar', and 'Teknoloziyah'. The central content area features a 'Formül '06' banner, a 'Merak Ettikleriniz' section with various questions and answers, and a 'EN ÇOK MERAK EDİLENER' section with colorful icons for topics like 'Boyum daha uzar mı?', 'Beynimin % kaçını kullanıyorum?', 'KENEden ne kadar korkuluyor?', 'Kuş gribi NEDİR?', 'Genel gözetlik', 'Özel gözetlik', 'Einstein'ın kütleçekim kuramı', 'Einstein'a göre ışık, zaman', 'Sürtünme kuvveti NEDİR?', and 'Devri-daim makineleri neden çalışmaz?'. Below this, there are sections for 'Bilgi Paketleri' (Digital Elektronik, Eran, Duyular) and a grid of various articles and posters. The right sidebar contains a 'Yeni Ufuklara Cilt-2 KİTAPÇILARDA!!' announcement, a 'BİLİM TEKNIK' logo, and a 'Şifre' field. The bottom of the page features a 'BİLETİŞİM' section and a 'SAYFA BAŞINA DÖN' button.

Science For Primary Education

Its sister publication “Bilim Çocuk” (Science for Children), tailored for the needs of primary school education, closed the year with similar gains, boosting its sales to over 40,000 monthly.

SALES

2002:	48.000
2003:	44.000
2004:	34.000
2005:	31.000
2006:	41.000

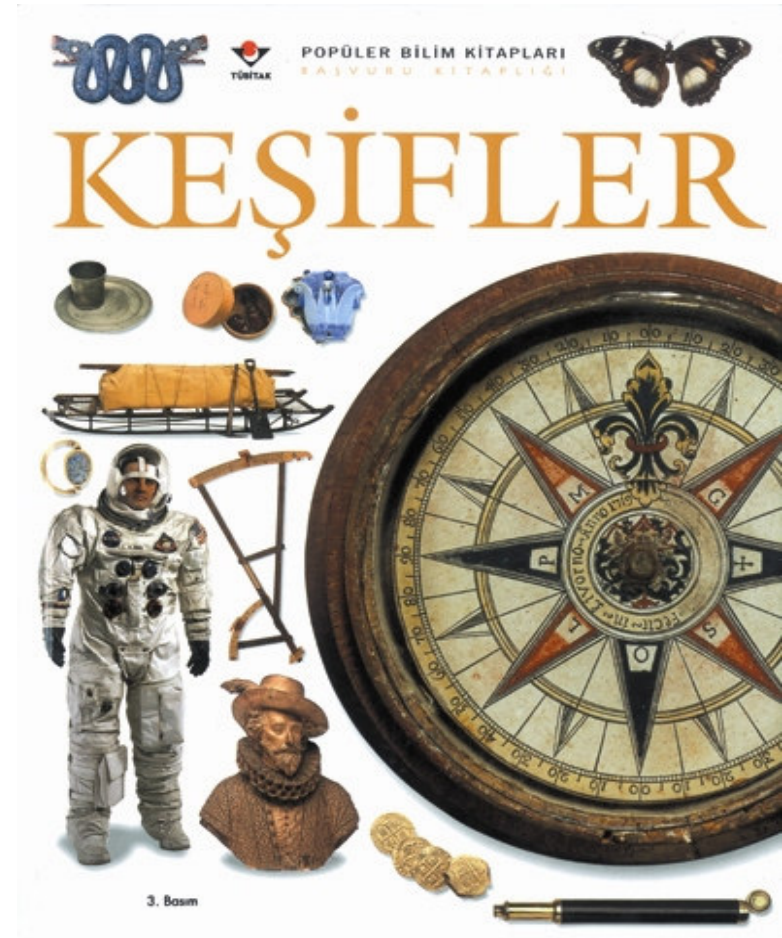
Pre-School Science

A success the Science and Society department especially wants to highlight has been the fruition of its preparations to reach the very young. To complete the chain of its popular science magazines, “Merakli Minik” (Curious Puppy), a richly illustrated magazine for pre-school children, hit newsstands on January 1, 2007 to a warm embrace by the public.



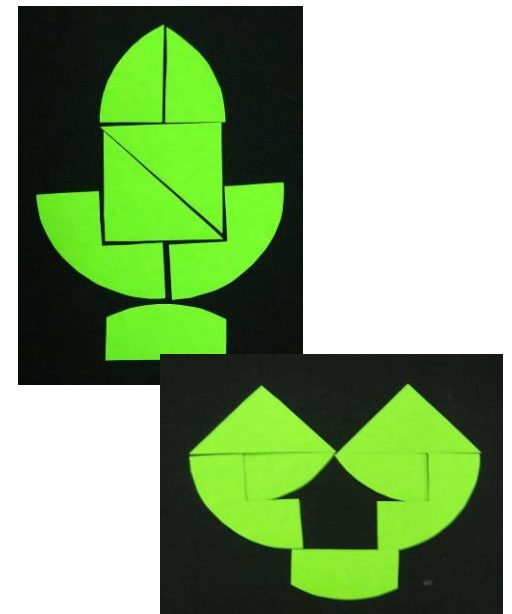
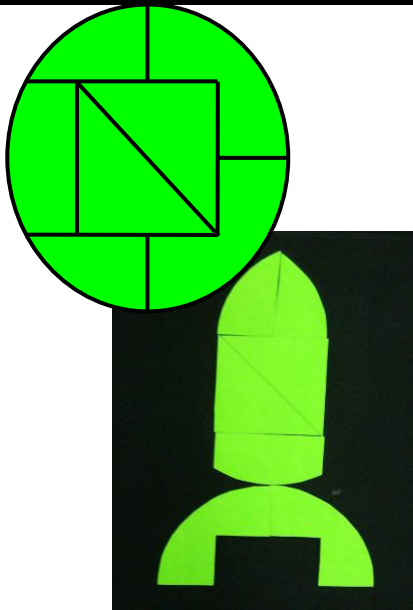
Hot Demand For Books

Popular Science Books maintained popularity. Sales topped 600.000 and the 2007 target was set at 1 million. The annual number of new titles climbed towards 30, with children's books increasing their share.



Kits For Kids

The department readied to vanguard design and production of scientific toys and experiment kits, recruiting the expertise of mainstream academics, school teachers and industrial designers. Mathematical toys, puzzles, optics, chemistry, botany, astronomy kits marked for 2007.



Strategic Management
&
Administrative Capacity
Improvement

There is always room for betterment!!

Ongoing Projects

- Strategic Planning
 - Developing Strategic Management System for TUBITAK
 - Implementation of Strategic Management System to
 - R&D Institutes of TUBITAK
 - Departments in TUBITAK Headquarters
 - Publication of TUBITAK Strategic Management Handbook
- Reorganisation & Process Improvement in Several Departments
- Activities concerning TUBITAK Institutional Information Management System

Completed Projects (1)

Strategic Management

- **Design of TUBITAK Strategic Management System**
- **Strategic Plans Prepared**
 - 13 R&D Institutes of TUBITAK
 - 7 Departments in TUBITAK HQ
- **First Draft of Strategic Planning Handbook**

Completed Projects (2)

Reorganisation

- Technology and Innovation Grant Programmes Department
 - Five technology groups formed for
 - processing more project applications
 - flexible organisation to deal with new programmes and activities
 - A technology committee for each group with external experts providing specialised and more objective rulings
- Science in Society Department
 - **A task group laid the ground for cash support to Science and Society projects undertaken by universities and public or private institutions.**

Completed Projects (3)

Process Improvement

- Technology and Innovation Grant Programmes Department
 - Improvements in application, evaluation and monitoring processes
 - More user-friendly technical and financial guide
- Research Grant Programmes Department
 - Substantial decrease in proposal evaluation duration
- Science Fellowships and Grant Programmes Department
 - Initiation of panel system
- Existing web sites are analyzed and redesigned according to the emerging needs of the researchers

Completed Projects (4)

Online Submission Enabled for

- Promotion Programme for International Scientific Publications
- Science Fellowships and Grant Programmes

TUBITAK Human Resources

	2003	2004	2005	2006
MANAGERS	63	52	50	49
R&D STAFF	1240	1261	1368	1733
OTHER	1222	1210	1208	1211
TOTAL	2525	2523	2626	2993

TUBITAK Human Resources

	2003	2004	2005	2006
BS&BA	769	771	820	1028
MS&MA	520	564	602	720
Ph.D.	278	256	285	323
OTHER	958	932	919	922
TOTAL	2525	2523	2626	2993

THANK YOU!!