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1. Bosphorus Regional Cooperation Summit

Turkey
“A Global Attraction Centre For Science and Technology”

Prof. Dr. Nüket YETİŞ, President

December 3, 2010, İstanbul

Outline

- Science, technology and innovation for prosperity and welfare
- Recent developments in science, technology and innovation in Turkey
- Triggering mechanisms and success factors
- Conclusion

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In our age

Science, technology and innovation,

is the **key** instrument for;

- **smart growth:** developing an economy based on knowledge and innovation
- **sustainable growth:** promoting a more resource efficient, greener and more competitive economy
- **inclusive growth:** fostering a high-employment economy delivering social and territorial cohesion*

* EUROPE 2020 A European strategy for smart, sustainable and inclusive growth

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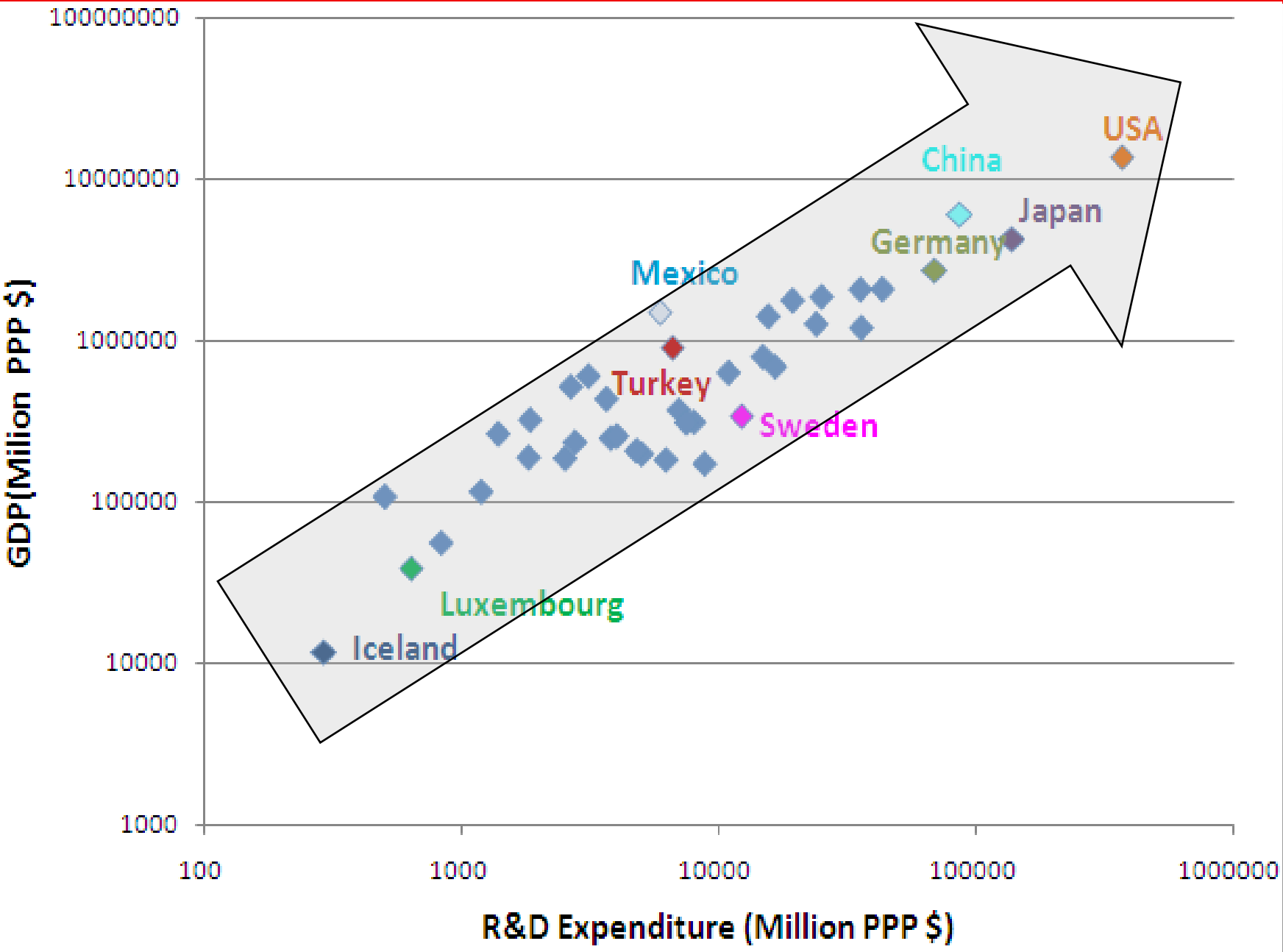
R&D Expenditure GDP Relation (2007)



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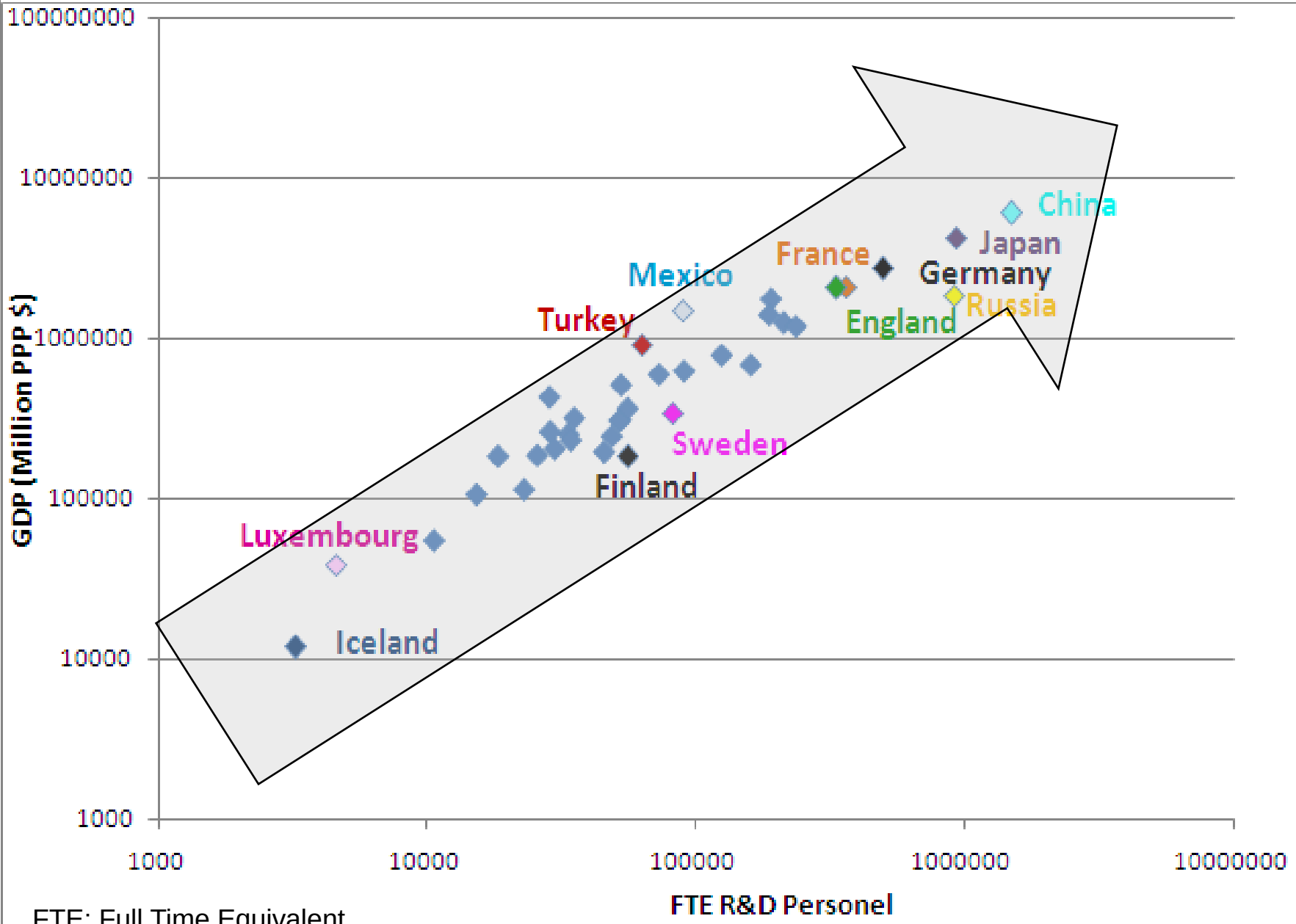
FTE R&D Personel GDP Relation (2007)



FTE: Full Time Equivalent

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R&D and Innovation

"Where R&D focuses on transforming money into knowledge, innovation is about transforming knowledge into money."

Esko Aho, Former Prime Minister of Finland

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Facts on Turkey for the year 2002

- Continuing effects of 2001 local economic crisis
- Low level of public R&D funds
- Low share of industrial R&D
- Low level of demand for innovation
- Increasing global competitive pressure on sectors with high export.

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There was an urgent need to make a leap forward in the area of STI in Turkey (2004)

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An impressively broad science and technology initiative was set in motion at the 2004 Meeting of the Supreme Council of Science and Technology.

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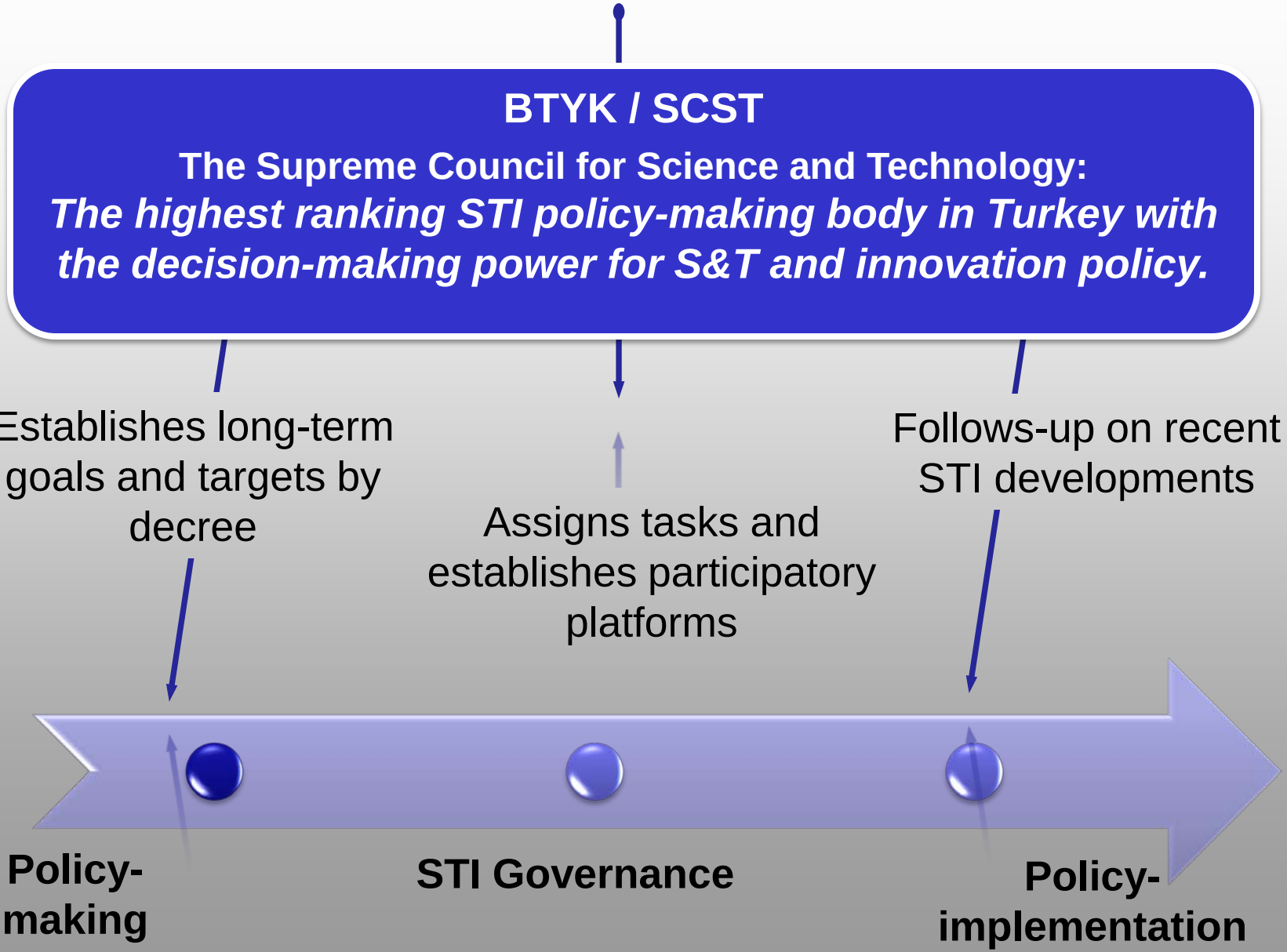
Supreme Council for Science and Technology



Supreme Council for Science and Technology

Supreme Council for Science and Technology started to convene **regularly** since 2004.

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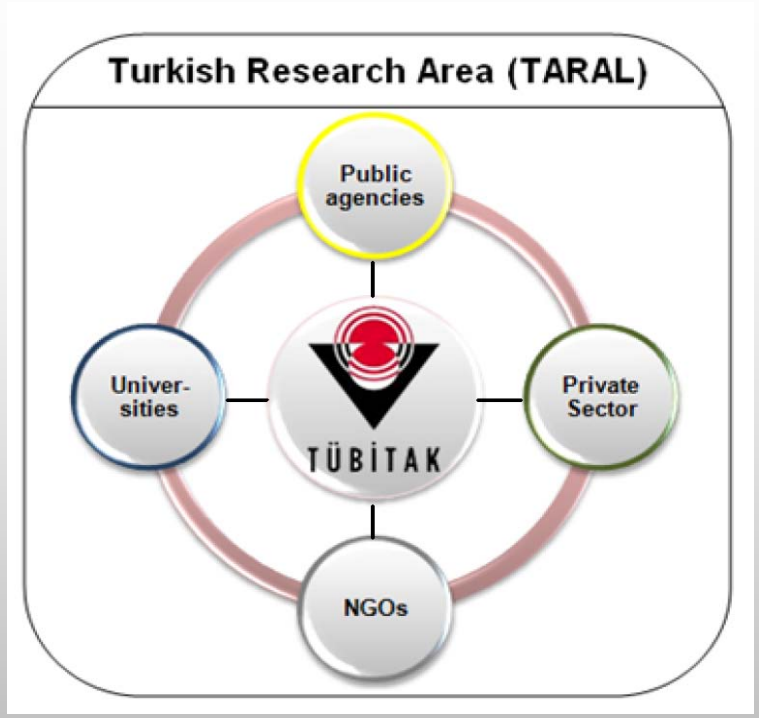
National Science ve Technology Initiative

Principles

Objectives

National Priorities



TARAL Aims

1. To enhance **the quality of life**;
2. **Find innovative solutions** to societal problems;
3. Increase the **competitiveness** of the nation;
4. Foster and **diffuse** S&T awereness in society

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Political Support and Strategic Approach

- SCST, chaired by the Prime Minister, started to convene **regularly**
- Devoting **financial resources** to this area
- Developing the necessary climate
  - Governance and legal infrastructure
- Areas under the **Prime Minister's Initiative**
  - R&D Human Resources Program (2005)
  - Defense Research Program (2005)
  - Aerospace Research Program (2005)
  - Science and the Society Program (2005)
  - Energy, Water and Food Research (2011)

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Setting Concrete Objectives (2013)

Shared National Vision and Concensus
GERD as a Percentage of GDP (2%)

R&D Personnel (150 000 FTE)

Demand for R&D (Current deficit , foreign procurement as a percentage of public procurement)

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Milestones of Recent STI Policy & Strategy

- 2005-2010 National Science, Technology and Innovation Implementation Plan complemented by:
  - International STI Strategy and Action Plan (2007-2010)
  - National Innovation Strategy (2008-2010)
  - *National HRST Strategy and Action Plan (in progress)*
- 2011-2016 National Science, Technology and Innovation Implementation Plan – in progress

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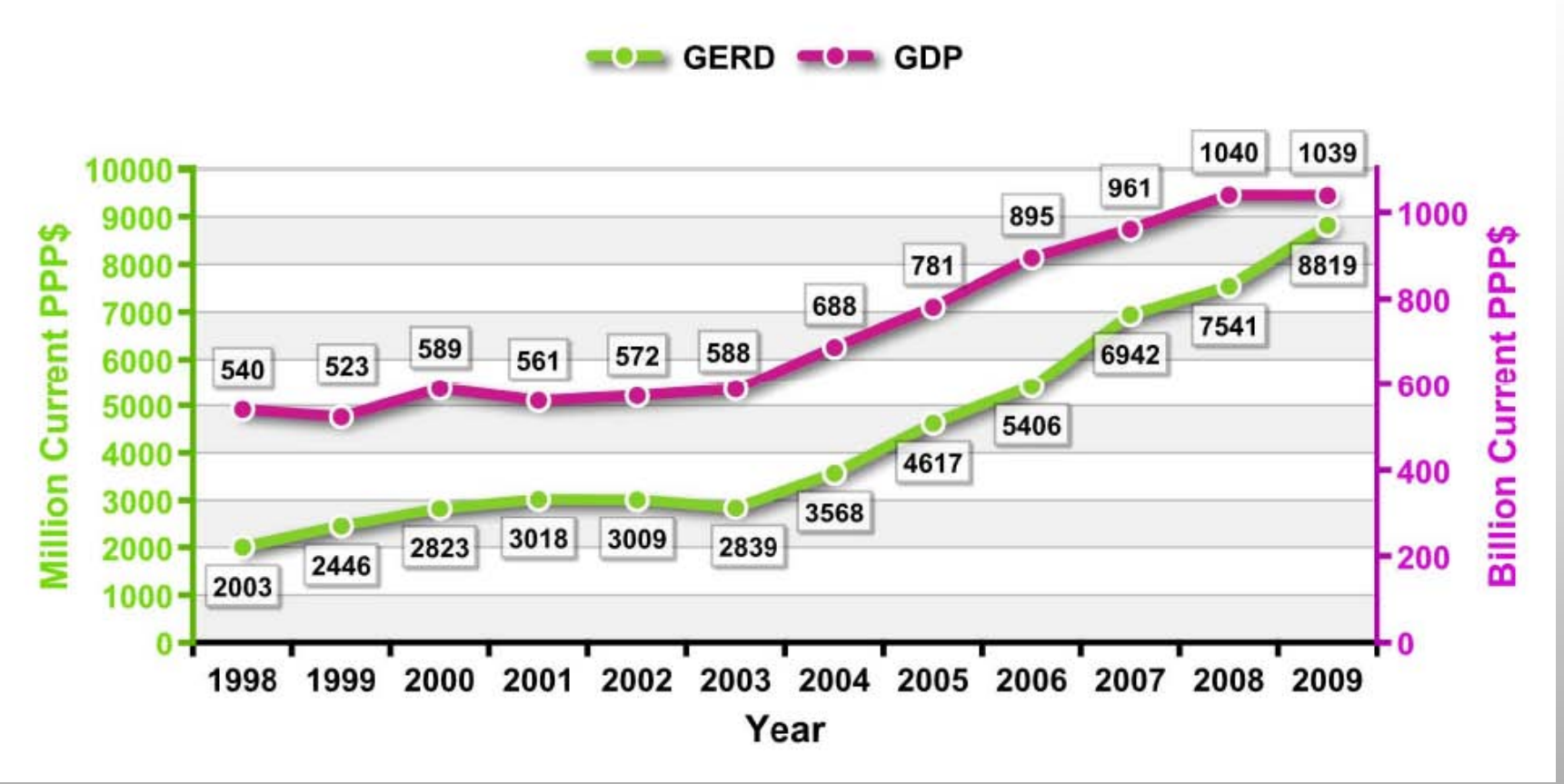
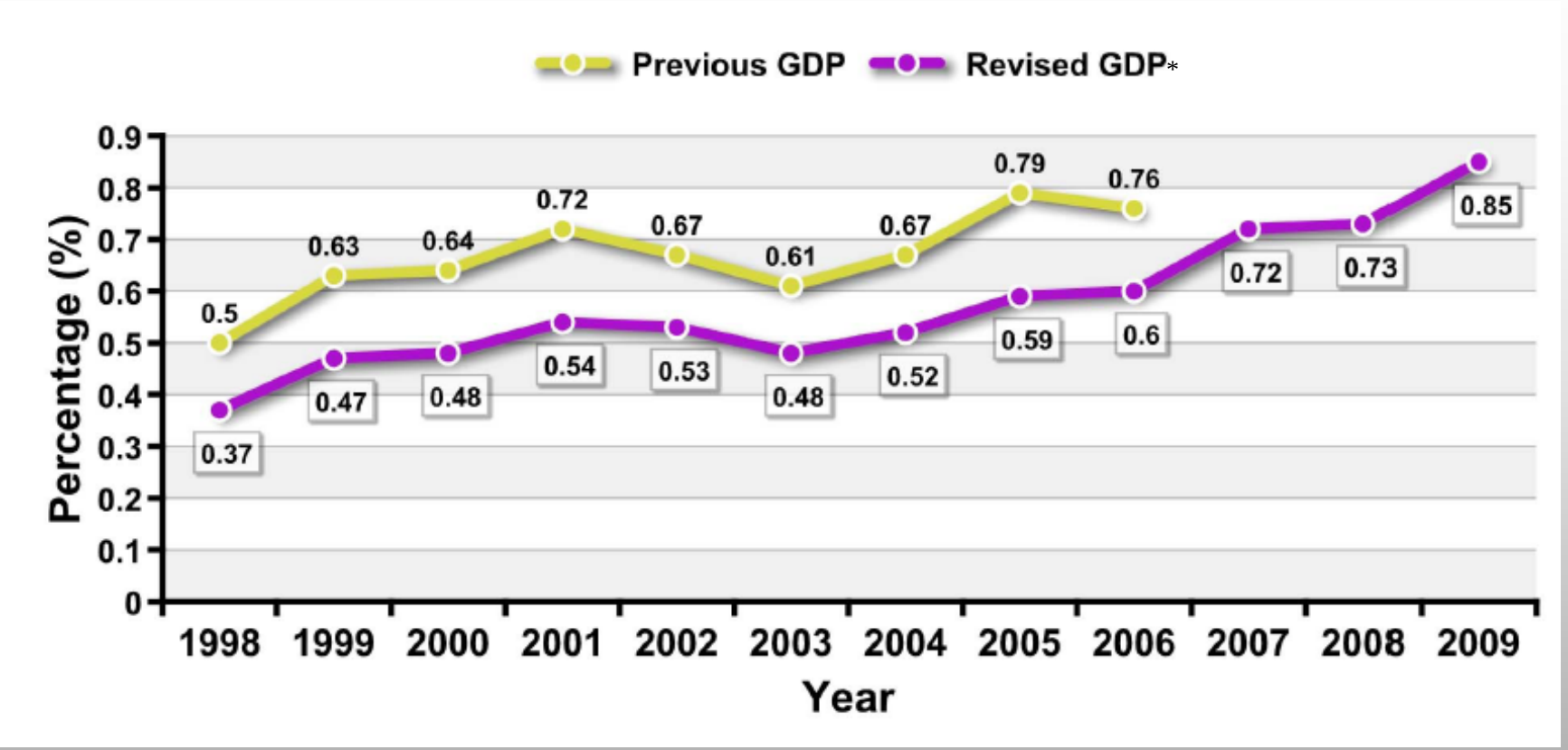
R&D Expenditures*



Increased to almost 3 fold during 2002-2009

* 2010 constant prices, Source: TURKSTAT

GERD as % of GDP

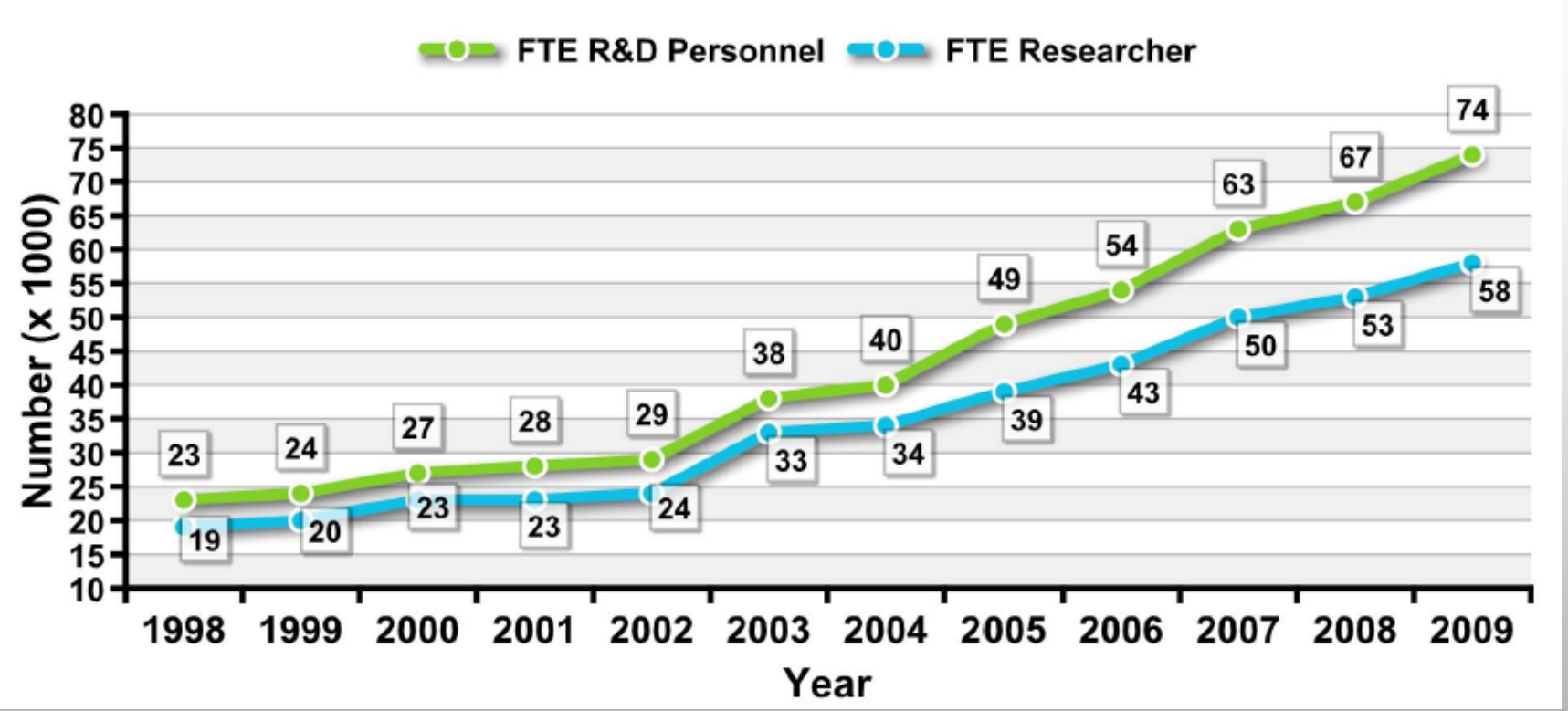


TR Target 2% by 2013

Previous GDP Calculations %1.1

* Revision in the methodology.
Source: TURKSTAT and EUROSTAT

FTE R&D Personnel



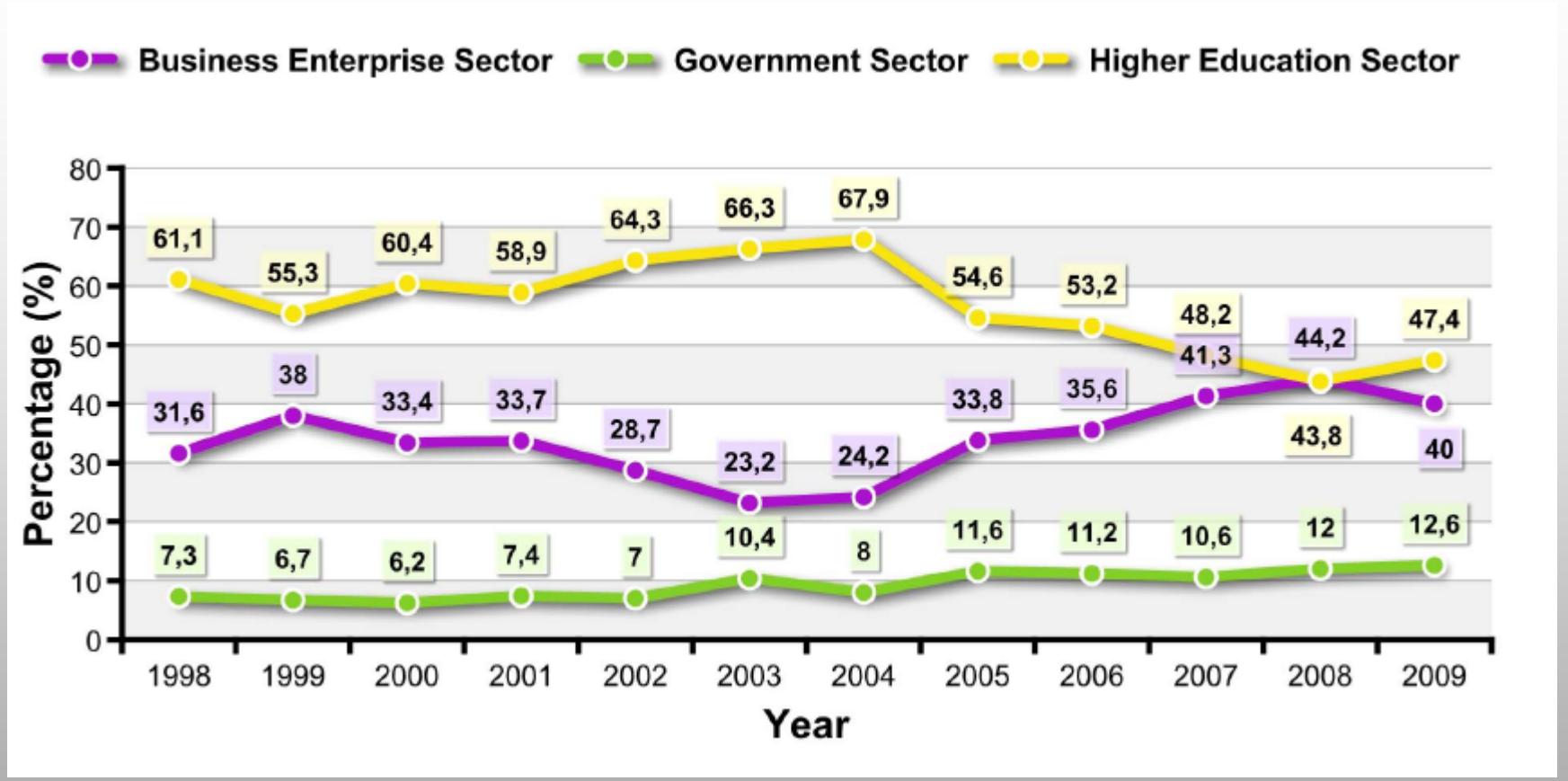
Increased to 2.6 fold during 2002-2009

TR Target 150 000 by 2013

TR Target 40 000 by 2010 achieved in 2006

Source: TURKSTAT

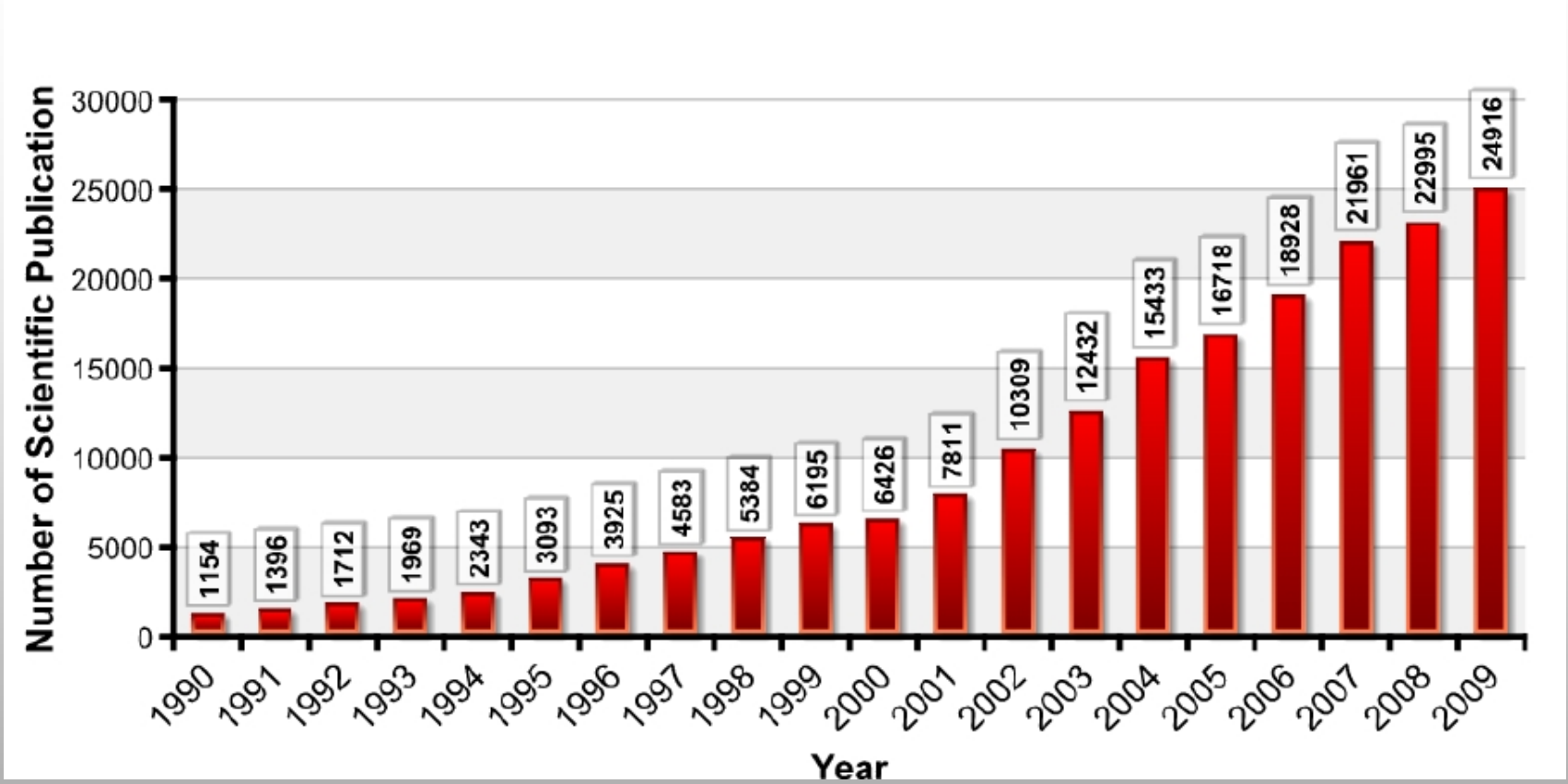
Percentage of GERD by Performance Sectors



TR Target 60% GERD performed by Business Enterprise Sector by 2013

Source: TURKSTAT

Scientific Publications from Turkey



Source: ISI

2003-08 Turkey Has Outpaced*

- **5 Countries in Terms of R&D Expenditure;**
  - **Belgium, Denmark, Finland, Norway, Mexico**
- **4 Countries in Terms of R&D Percentage**
  - **Greece, Poland, Slovak Republic, Chile**

* OECD 2008, Thomson ISI, WIPO

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2002-08 Turkey Has Outpaced *

- **5 Countries in Terms of FTE R&D Personnel;**
  - **Switzerland, Denmark, Belgium, Finland, Austria**
- **4 Countries in Terms of FTE Researchers;**
  - **The Netherlands, Sweden, Finland, Mexico**

* OECD 2008, Thomson ISI, WIPO

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2002-08 Turkey Has Outpaced *

- **4 Countries in Terms of Scientific Publications;**
  - **Sweden, Belgium, Poland, Israel**
- **5 Countries in Terms of International Patent Applications (PCT);**
  - **Poland, Mexico, Hungary, New Zealand, Luxemburg**

* OECD 2008, Thomson ISI, WIPO

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Examples of Triggering Mechanisms

- R&D and Innovation-Based Public Supply
- R&D tax incentives
- Industrial R&D and innovation grants

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Future Directions

- Continuing investing in S&T
- Eliminating the barriers for the freedom of movement of researchers
- Establishing “Innovation in City Platforms”
- Enhancing International R&D cooperations

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Conclusion

- Leap forward in RDI
  - Concrete evidence with indicators
- Political Commitment and Systemmatic Approach
- Similar Policy Agendas
  - Public procurement for innovation
  - Innovation in City platforms
- Complementing strengths
  - Demographic Advantages
  - Innovative Policy Tools

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“Let’s take the opportunity

to create a synergy

by complementing strengths”

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