Research Use of Patented Inventions

Session 2: Perspectives from the Public and Private Research Sectors

José Luis de Miguel
Director Office for Technology Transfer, CSIC

Madrid, May 18-19th, 2006

CSIC

CSIC in figures

- CSIC is the largest public research organization in Spain
- As a multidisciplinary body we cover all fields of knowledge, from basic research to advanced technological development
- We play an active role in the science policy of all the autonomous regions through our centers across Spain:
  - 116 centers (of which 40 are mixed centers).
  - 134 units associated with universities and other institutions
- 2.400 scientists, 3.900 graduate and postgraduate researchers, and 4.100 support staff
- A budget of 530 M€, of which 38.5% is external funding

High quality research

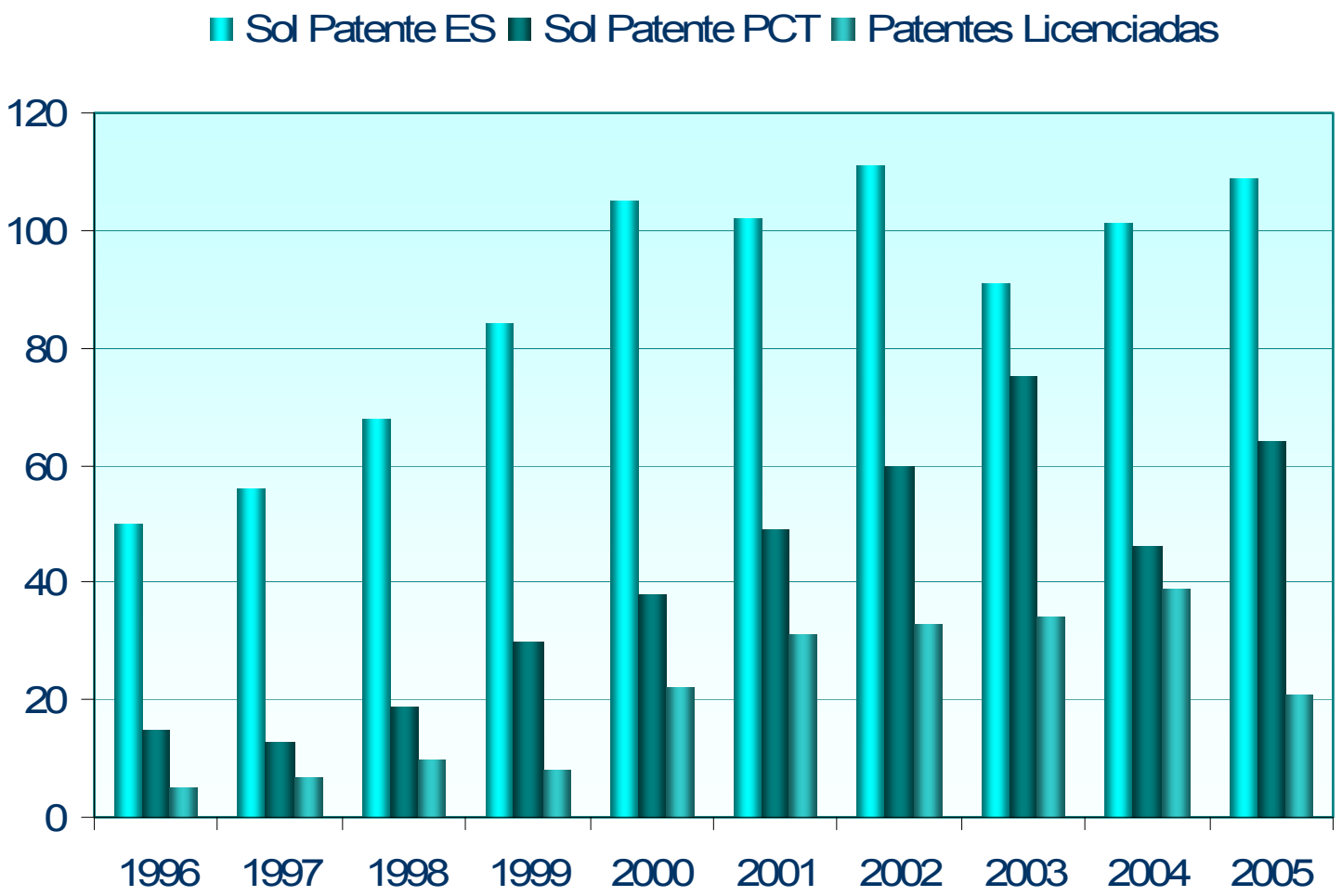
- Spain accounts for 2.7% of the world's output in international databases. The CSIC is responsible for 20% of Spanish international scientific publications (mostly from the public sector)
- CSIC is responsible for 50% of the Spanish public sector's papers in prestigious journals (Nature, Science, PNAS, etc.).
- CSIC represents 6% of the Spanish R&D efforts.

Leader in Spain

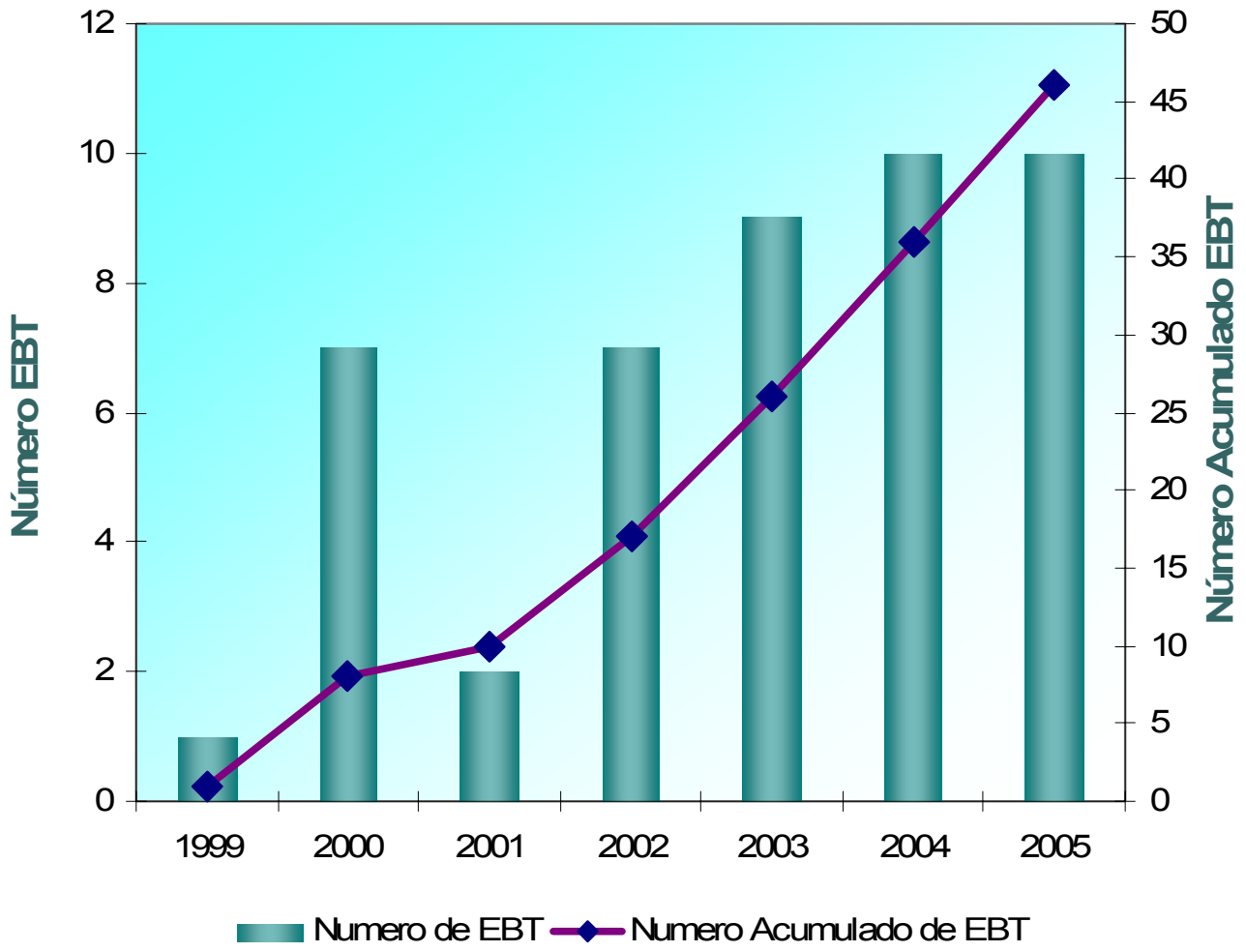
- First customer of the OEPM
- **Leader** in Spain in number of PCT patent applications (1)
- 47% of the international patents applied for in the public sector (2)
- Spain contributes with only 1% of the UE patents, while its economy represents 8% (3)
- >2.000 researchers involved in contracts with companies and institutions (@1/3 total)

(Sources: (1) World Intellectual Property Organization, WIPO;
(2) Grupo de Bibliometría del CINDOC-CSIC.
(3) OECD
All data for 2004)

Patent applications



New Technology-Based Companies (spin-offs)



Transfer objectives for 2006 - 2009

- Invention disclosures: from 150 up to 300
- Spin-off companies: from 10 up to 15

- Based on high quality research, with a transfer sensibility
  - We feel part of the public research community
  - We use its tools and methods: communication/ exchange/dissemination

Patents fit research organizations

- Communication - Publishing Research Results - Proved method for Science Advancement
- Publication is "still" (?) the way to be promoted/recognized in Public Research Organizations/Public Research
- How to make it compatible with industrial use (Industry's interest for) of Research results? Patenting
  - Essential when using spin-off creation as a tech tranfer tool

Our experience: Three “no’s” and one “yes”

- *Do patents affect the use of inventions for research purposes?*
  - No
- *Are our researchers aware of possible limitations?*
  - No (many are not aware of patents)
- *Will they be happy if limitations occur?*
  - No
- *Will limitations affect the way we do perform research*
  - Yes (the way scientists interact among themselves – institutions vs. individuals)

… and now you experts talk!

- *Will the new way of doing research be better or worst?*
  - No idea: you experts talk
  - … and we listen
  - … we will adapt to compete!

Final remark … out of scope?

- Grace period
  - Better adapted to public research dynamics
  - It would diminish excessive fragmentation in patented knowledge
  - It would diminish the amount of industrially useful knowledge lost because it is not protected