



TECHNISCHE
UNIVERSITÄT
DRESDEN

Technology Transfer

Conference NITT SK 2014

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Summary

- I. Transfer prior to and after re-unification
- II. General Information about TUD
- III. TUD Transfer Office today
- IV. Transfer Activities
- V. Synergies

Technische Universität Dresden = TUD

German Democratic Republic (DDR)

Prior reunification

till 1989	Patent Act of the German Democratic Republic (DDR)
	<p>Local Office for IPR, Innovation and Licensing (BfSNL)</p> <ul style="list-style-type: none"> • Located at each university • Fair exhibition • National IP application (DDR) • Notice to the DDR Patent Office: patent utilization <ul style="list-style-type: none"> • Inventor's compensation
	<p>Central Office for IPR, Innovation and Licensing</p> <ul style="list-style-type: none"> • Located in Dresden • IPR Training for Local Offices (BfSNL) • International IP application • International technology transfer <ul style="list-style-type: none"> • to generate foreign currencies

Federal Republic of Germany (BRD) After the reunification

after 1989	<p>Application of the provisions of German (BRD) "Patent Act" and "Employee Inventor Law"</p> <ul style="list-style-type: none"> • "university professor privilege" <ul style="list-style-type: none"> • Inventions were regarded as "free inventions" • Not as employee's invention (TUD)
	Dissolution of the DDR universities IPR structures
1989-1994	TUD transitional period
1990	<p>Establishment of PIZ (PATLIB centre) Dresden</p> <ul style="list-style-type: none"> • Trusteeship by TU Dresden
1994	<p>Start of TUD "Patenting Offensive"</p> <p>Bonus program for inventors</p> <ul style="list-style-type: none"> • Reactivate patent / transfer structures • Voluntary basis (TUD – Inventors)

Federal Republic of Germany (BRD) After the reunification

2001/02	TUD participation at hearings for reform of "Employee Inventor Law"
2002	Amendment of the employee invention law <ul style="list-style-type: none"> • Abolition of the "university professor privilege"
since 2002	Employee's invention (TUD)
2012	TUD – „University of Excellence“
2013	New TUD Transfer Office <ul style="list-style-type: none"> • 5 new employees

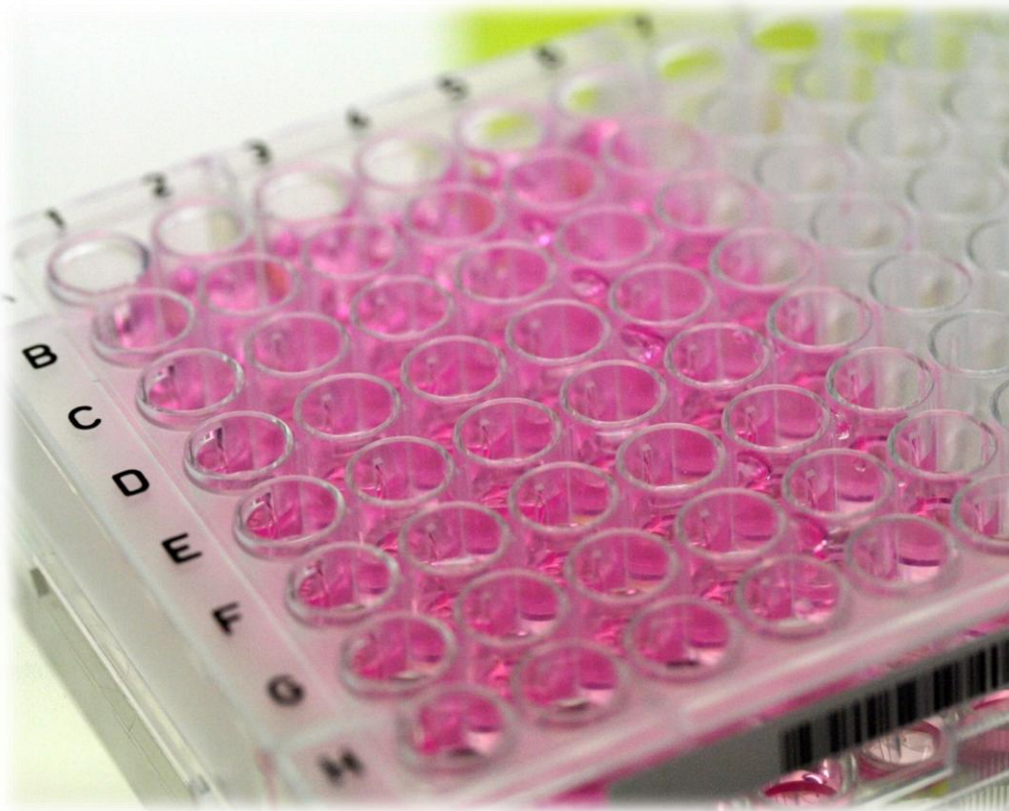
Technische Universität Dresden

General Information



TU Dresden today

One of the largest universities in Germany



- 4 Scientific disciplines
- 14 Faculties, organized in 5 schools
- Study programs: 126
- Professors: 538
- Students: 37.134 (2013/2014)
First year students: 9.439 (2013/2014)
- Employees: ca. 8.700
Employees financed by third-party funding: ca. 3.500
- Patent applications: 143 (2013)
- Third-party funding: 240 million Euros (2013)
Overall budget: 450 million Euros (2013)

5 Research Priority Areas

1. Health Sciences, Biomedicine and Bioengineering
2. Information Technologies and Microelectronics
3. Smart Materials and Structures
4. Culture and Knowledge
5. Energy and Environment

Research Promotion and Transfer

Research Promotion

Support for Third Party funded
Research Projects

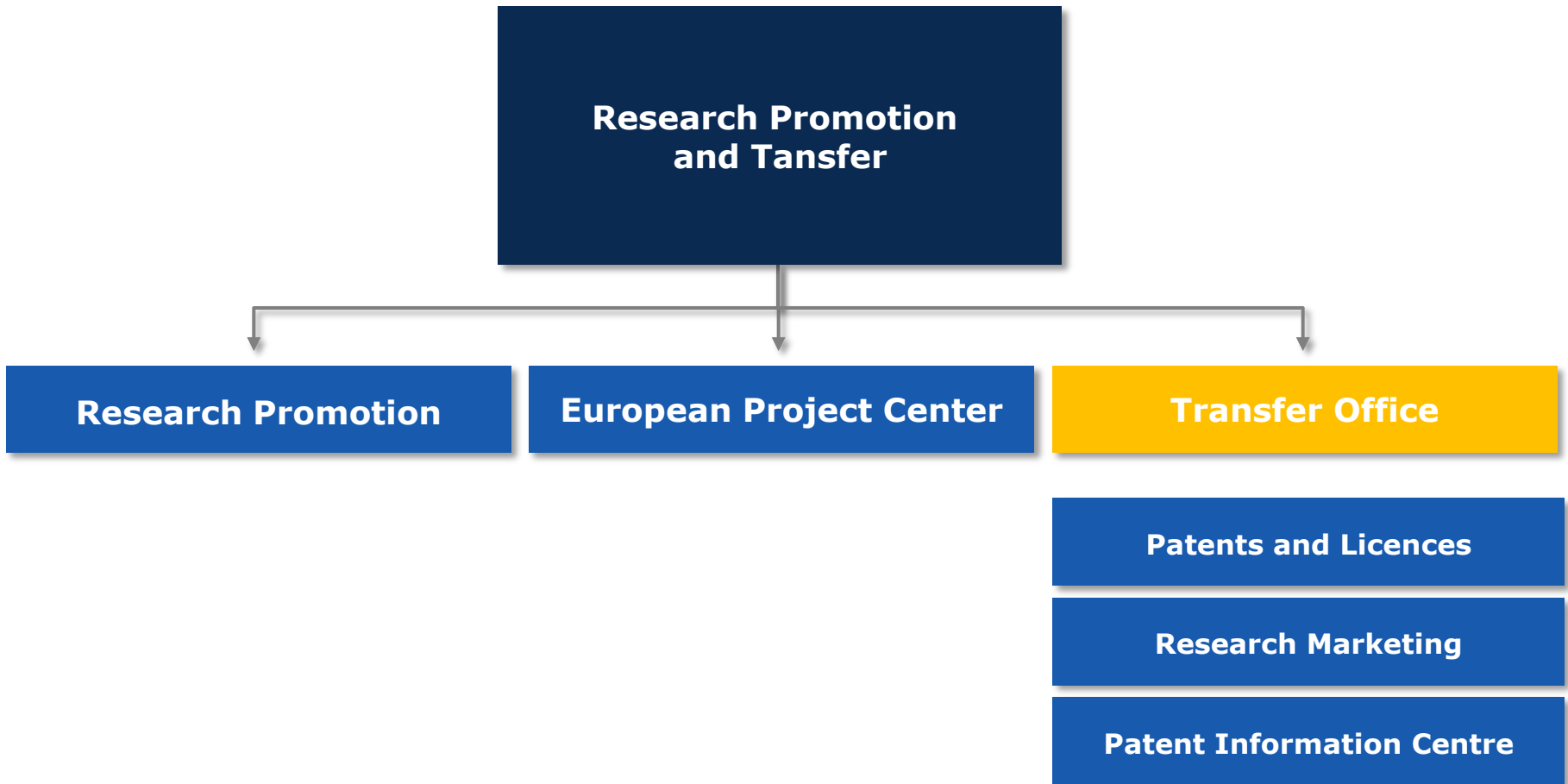
European Project Center

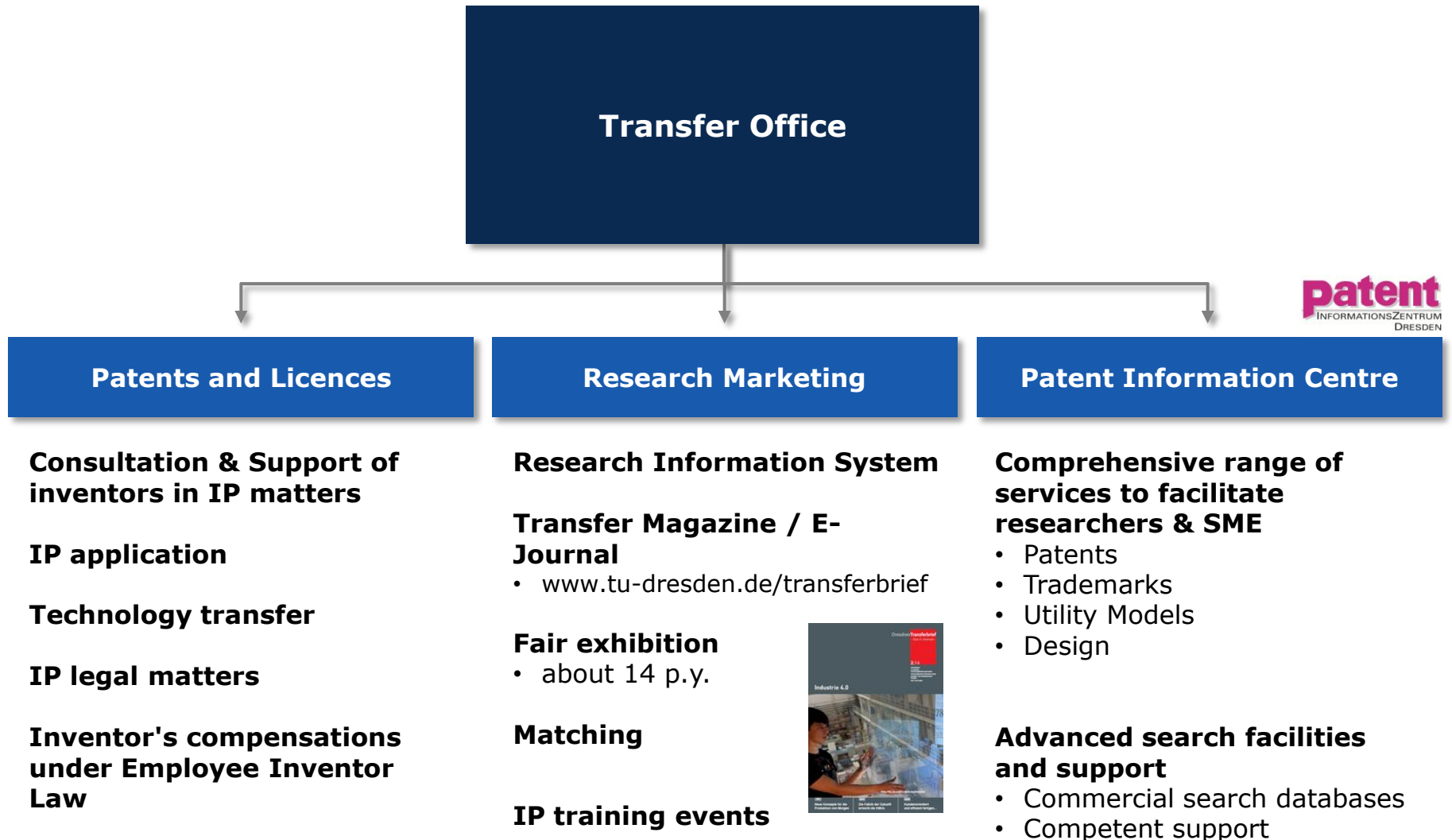
Support for Implementing EU-
funded Projects

Transfer Office

Interface between Science and
Economy







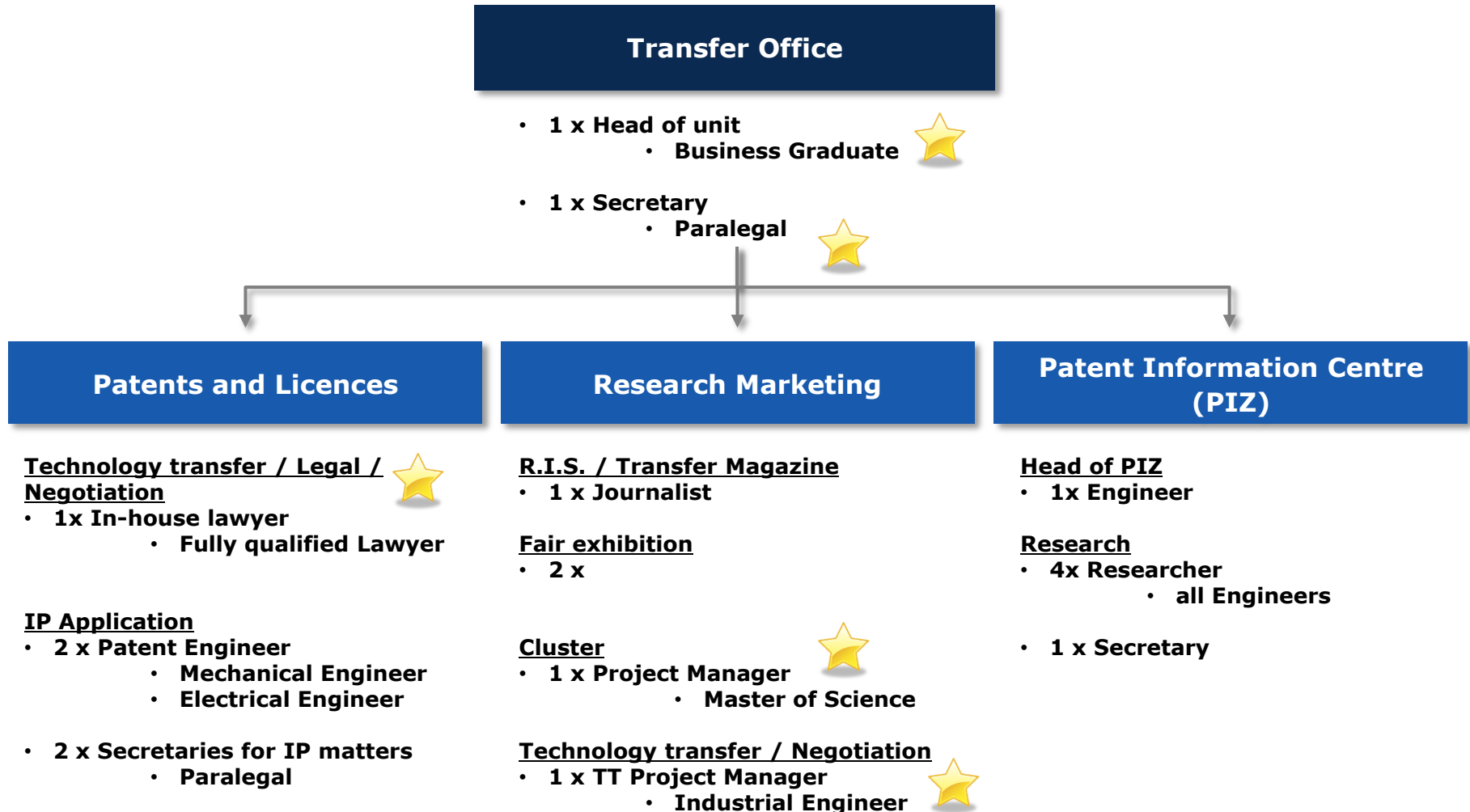
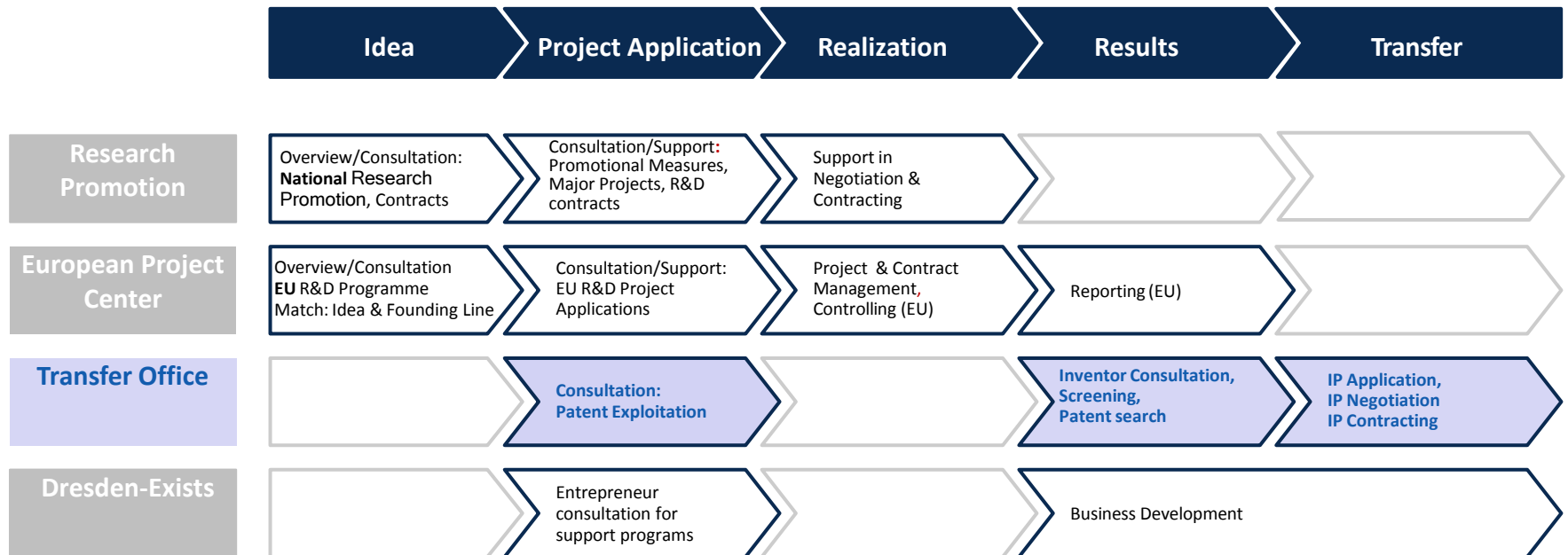




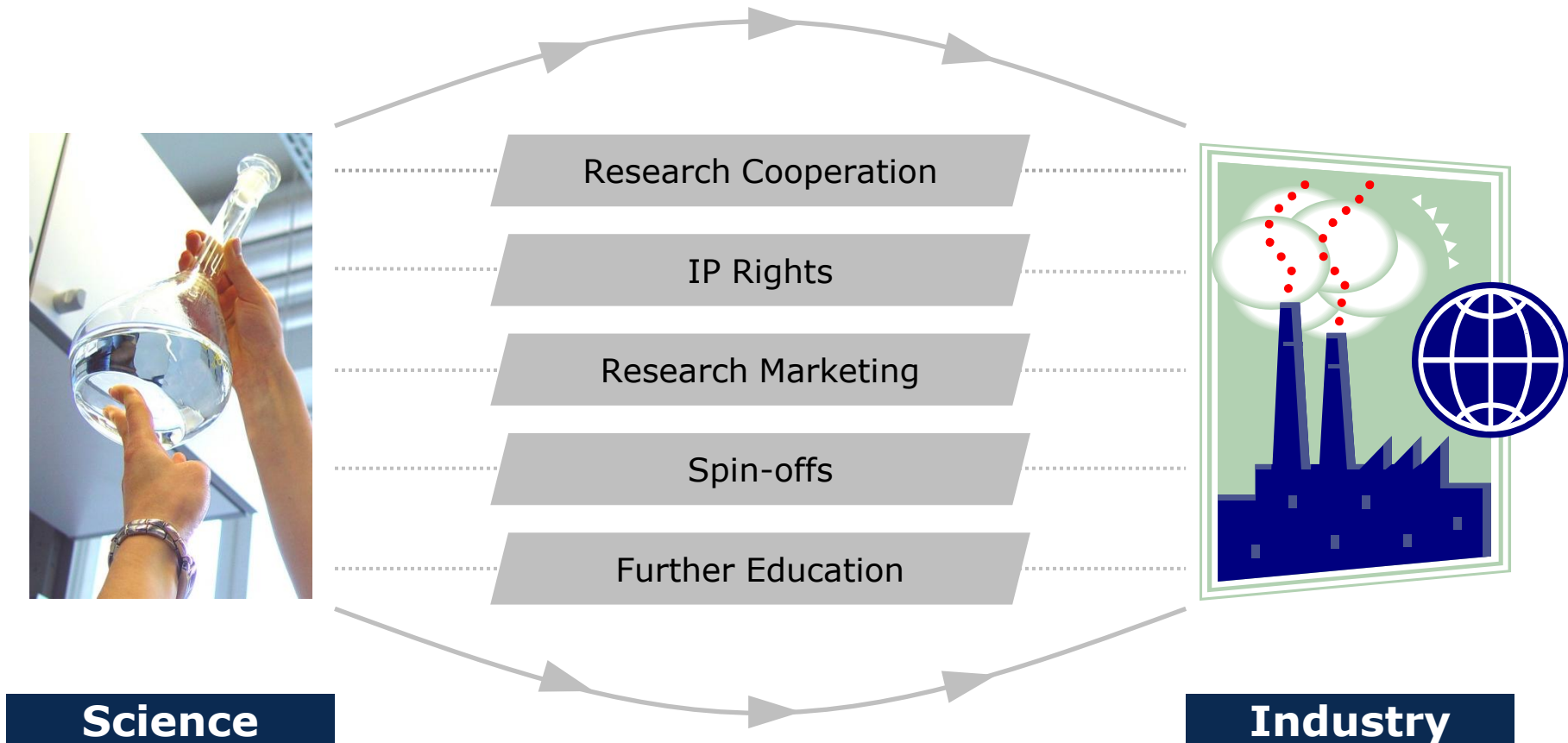
chart 13

Service & Workflow



Technology Transfer services

Technology Transfer links between science and industry



Opportunities of cooperation

Offers for collaboration with industry

Research and development

Close networking between science and industry

- Collaborative ventures with several institutes and chairs
- Contract works and service agreements
- Interdisciplinary projects development of networks
- Simple transfer and application of know-how and intellectual property

Recruiting- and Sponsoring

Excellent students and graduates and professionals

- Arranging internships, graduate study projects and graduates by several presentation opportunities, networking events as well as online job portal
- Scholarships, research prizes, education funds, equipment and infrastructure

Strategic Partnership

Construction of a long-term partnership

- Strategic (research-) framework contracts
- Operation of joint research centres
- Cooperation with spin-offs
- Endowed professorship

Example: Strategic partnership with Audi AG

Ingolstadt Institute of Technischen Universität Dresden (INI.TUD)

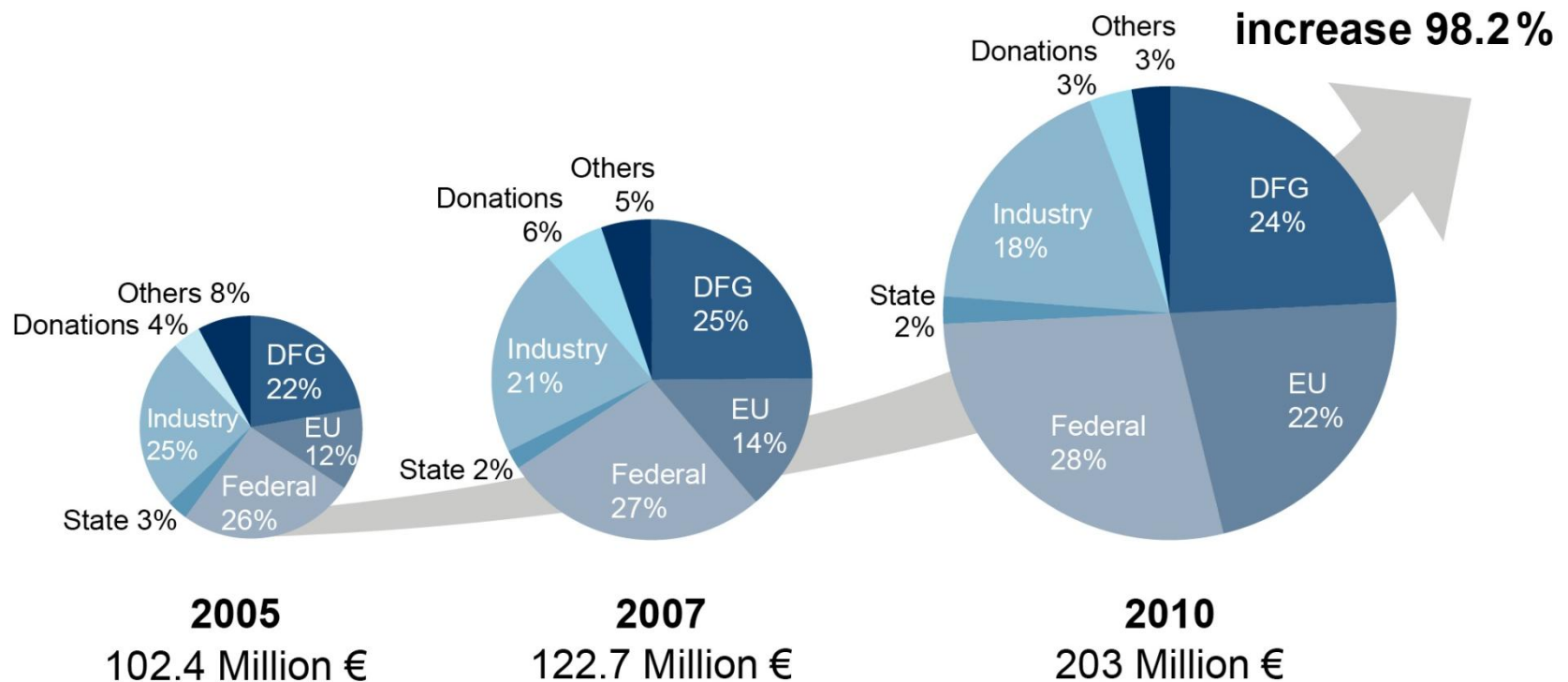
Prof. Dr.-Ing. Ulrich Hackenberg, Chairman for technical development of AUDI AG

„With TU Dresden we gain a **University Of Excellence** as strategic partner, with **profound scientific expertise** in the automotive industry. [...] The objective of our cooperation is the technological transfer between science and industry: We want to translate research results in specific projects on the highest level. Thus we can ensure our long-term technological advantage.“

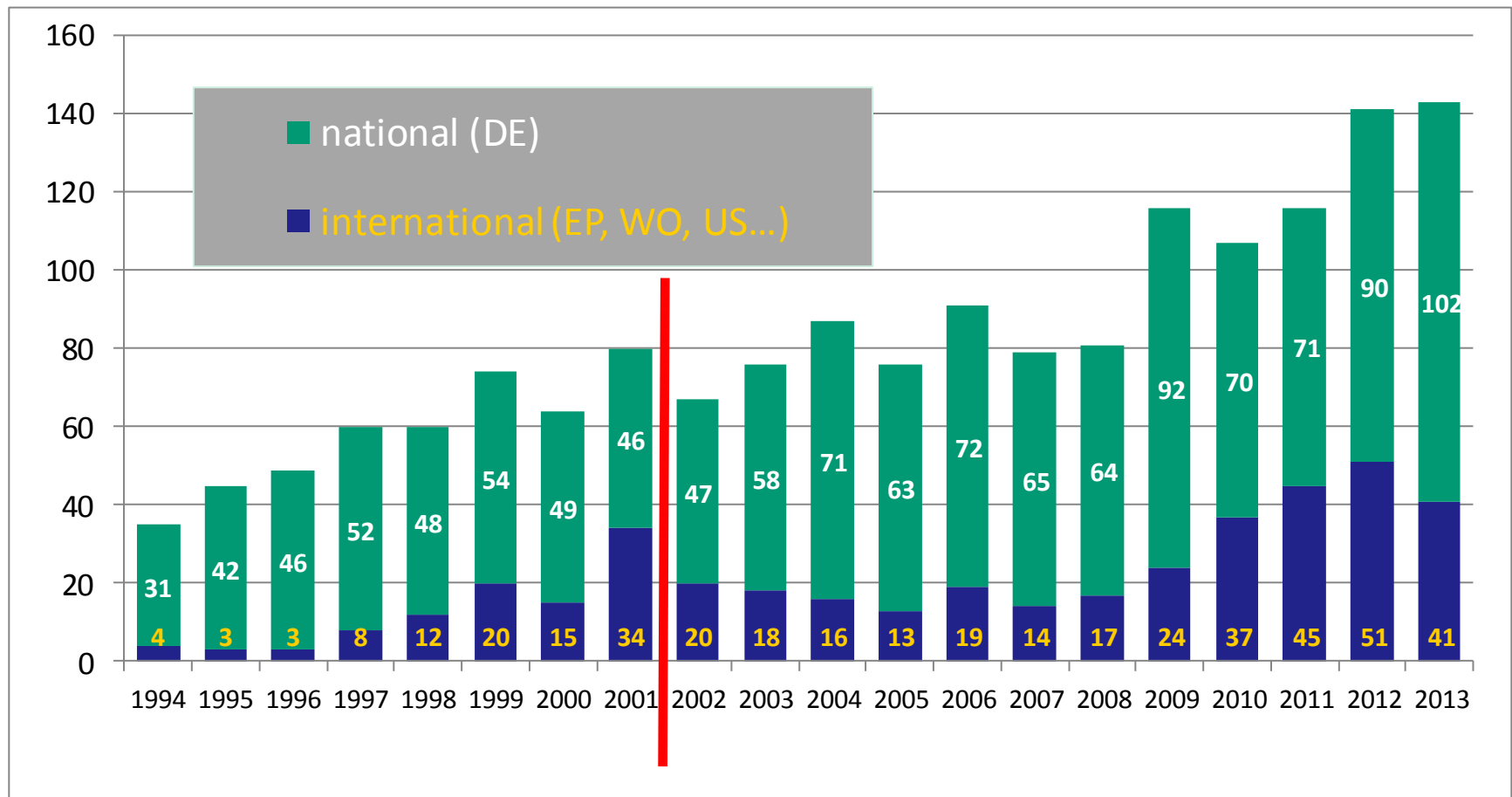
Prof. Dr. Hans Müller-Steinhagen, Rector of the TU Dresden:

„We want to create a **center of excellence** by **closely connecting** research and business. One distinguishing quality is the strong **interdisciplinary orientation**, as scientists from various different faculties are involved in the foundation. Besides physicists, electrical engineers and machine engineers also psychologists and traffic science experts will work together on projects around automotive engineering.“

Third-party funding: increase of 98 % since 2005



Patent Applications 1994 - 2013



Latest transfer activities – Patent Sales

TUD Spin-Off

Biotechnology

Patent sales

- | | | |
|----------|-------------|---|
| 12/2013: | 260.000 EUR | <ul style="list-style-type: none">• 2 patent families |
| 06/2014: | 260.000 EUR | <ul style="list-style-type: none">• 2 patent families |

Under negotiation

- Research framework contract
- Further patent sale

TU Dresden - Spin-offs (extract)

Novalad AG	Prof. Leo; OLEDs; 130 employees
Namos GmbH	Dr. Hofinger; Bio Implants
Voice Interconnect	Frau Dr. Hirschfeld ; Software
Radioplan GmbH	Prof. Fettweis; Mobile Telephony; 30 employees
Systemonic GmbH	Prof. Fettweis; Mobile Telephony; 80 employees
Signalion GmbH	Prof. Fettweis; Mobile Telephony Software
DresdenSilicon GmbH	Prof. Fettweis; Mobile Telephony Software
mbmSystems GmbH	Prof. Buchroithner; 3D-Maps
Heliatek Dresden GmbH	Prof. Leo; Solar Cells
Kinaris GmbH	Prof. Gutzeit/Prof. Knölker
Riboxx GmbH	PD Dr. Jacques Rohayem; siRNA's
	TU Dresden as Shareholder

Spin-off of the TU Dresden AG



NovaLED GmbH, Dresden (www.novaLED.com)

- founded in 2001
- Prof. Leo
- some TU Dresden patents formed the basis of the spin-off
- Sector
 - long-lifetime OLED structures
 - OLED (organic light-emitted diode) technology and material provider

- sale of TUD-Patents to NOVALED
- TUDAG Dresden as trust company of TU Dresden was shareholder of NOVALED AG
- research framework contract between Novaled AG and TU Dresden
- collaboration projects
- R&D contracts

Novaled today



- Strong IP position in OLED technology
 - more than 500 patents granted or pending
- Employees: 130 (2012)
- Revenue: 26 million EUR
- 18,000 ft² occupied incl. clean rooms and labs

- Officially now owned by Samsung
- Majority owner: Samsung
- Acquired by Samsung on August 2013
- 260 Mio. EUR (almost \$350 million)

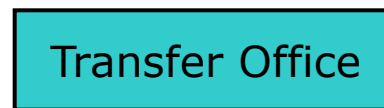
The path to success is SYNERGY: DRESDEN-concept



The whole is more than the sum of its parts!

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CIMTT





Thank you very much for your attention!

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