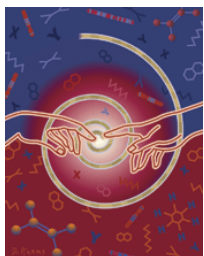


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# ***European Research Infrastructures: TT and industrial usage - results from ERID-Watch WP 1***

*Katharina Henjes-Kunst, ERID-Watch WP1, DESY*

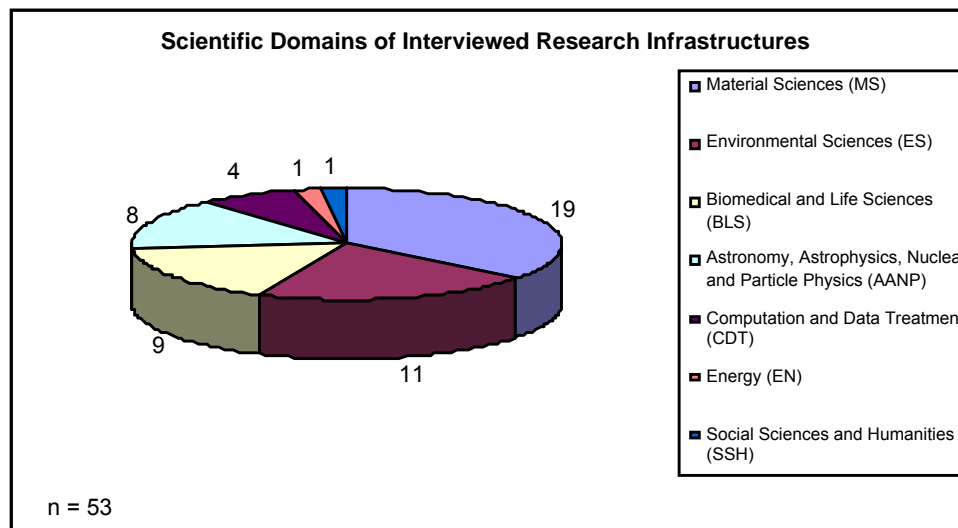




# WP 1: Technology Transfer

## Sample

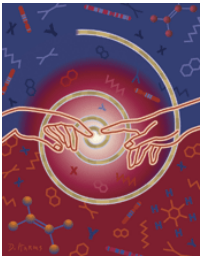
- **53 Research Infrastructures from 7 scientific domains and 15 ERA countries**



- **Methodology**

Broad Survey, Facts Report, Basic Conclusions:

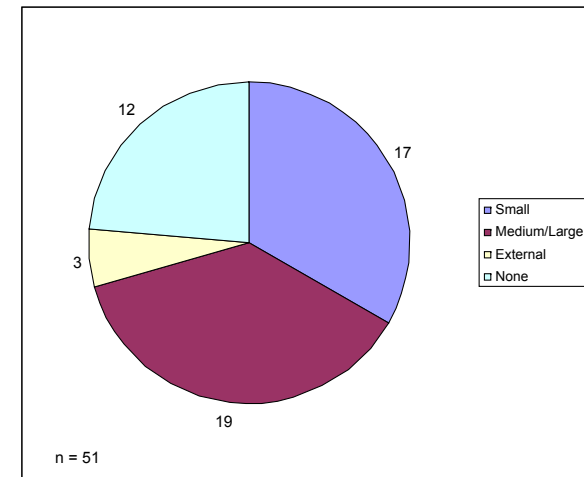
- Common Interview documents with WP2: Pre-Questionnaire and the Interview Guideline with questions about TT
- attempt of web-questionnaire „TT“ was made, but response too low and answers fit with other results

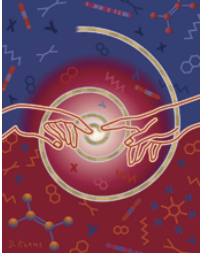


## WP 1: Technology Transfer

### Organisational set-up of TT & funding

- 39 of 51 RIs have the possibility to use a TT-office
- 50% of the TT offices are attached directly or as a department to the director's office
- Main source: general budget of the institution
- 45% of the RIs state, that they do not generate income from their IP
- Only 14% of the interviewed RIs managed to earn 50% or more of the money which is spend for their work
- But: even the RIs with income from commercialisation often do not organise TT as a profit centre → income disappears more or less unnoticed and commercial success does not gain any importance for the TT staff

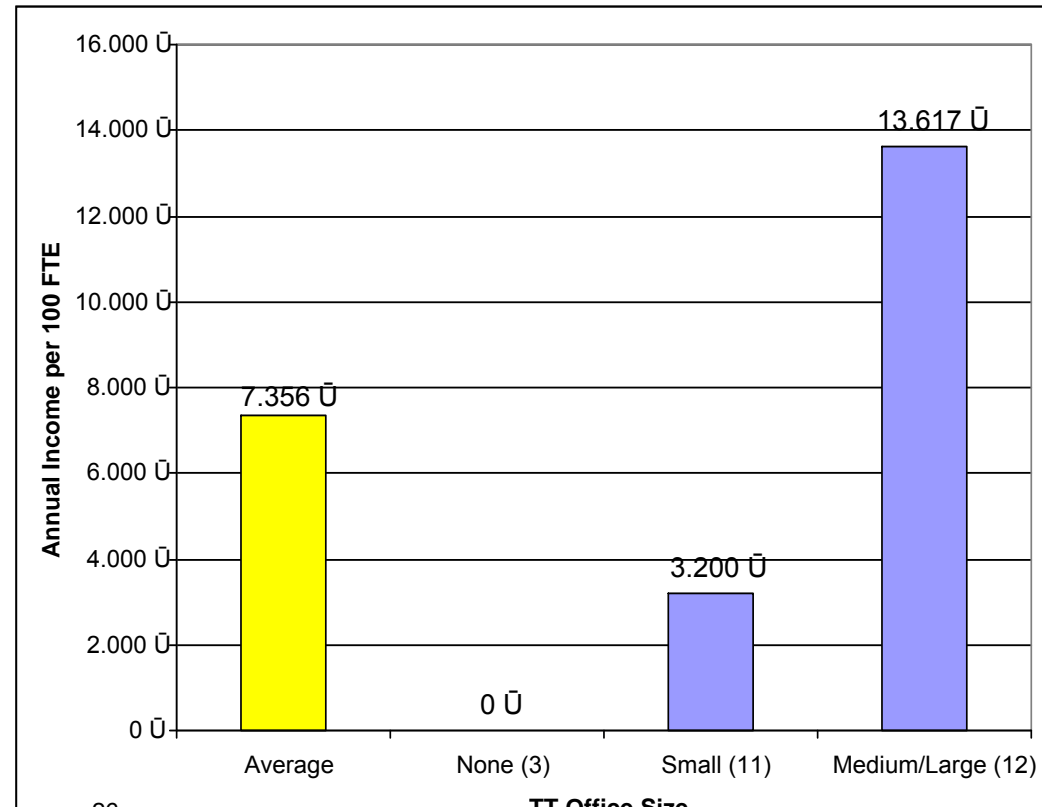


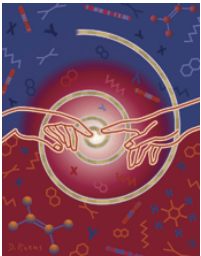


# WP 1: Technology Transfer

## Patent applications vs. TT office size

- None of the different TT office size varieties are far from the average of generating 0.44 patent applications annually per 100 FTE
- But: The annual licence income is higher in the medium/large TT office than in RIS with small or none TT office → they seem to concentrate on securing IP and don't have the resources to do marketing
- Superiority of the professional approach is underlined by the even higher license income at some external TT offices

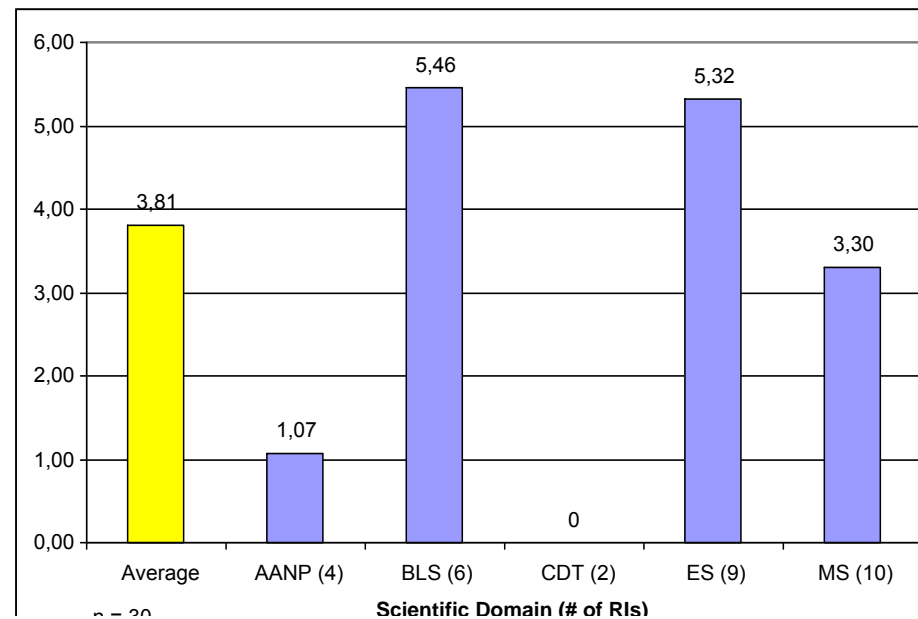


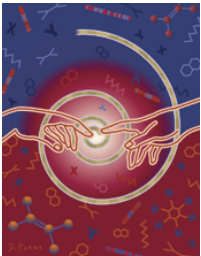


# WP 1: Technology Transfer

## Total number of patents held

- The total number of patents held in 2006 is low in the domain of AANPP, which is in contrast to the high number of patent applications in this area → quick transfer or dropping of patent applications?

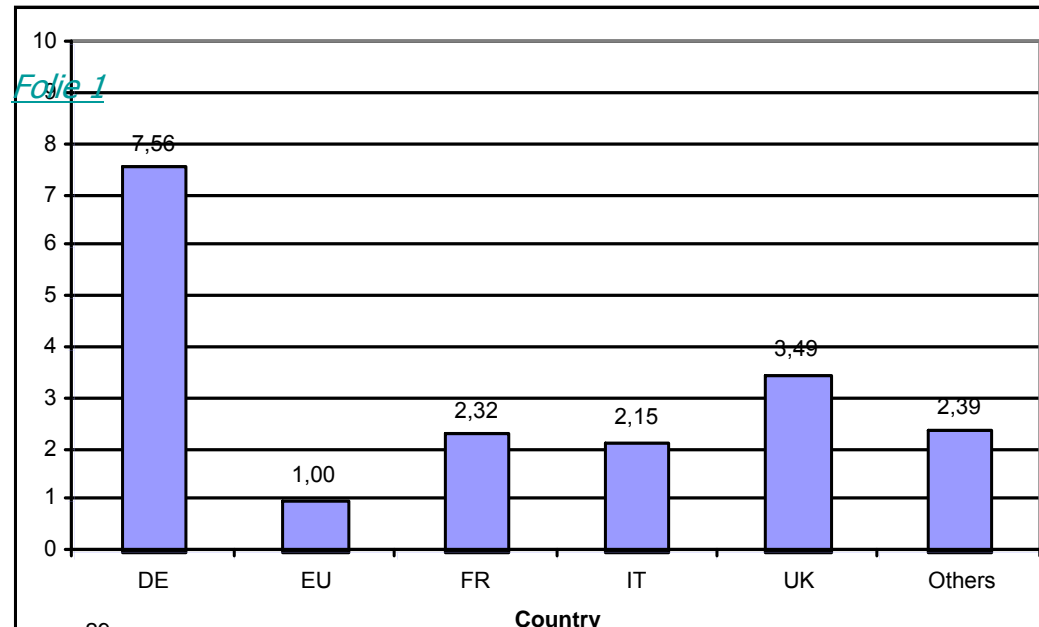


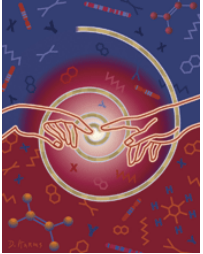


# WP 1: Technology Transfer

## Patents per 100 FTE per country

- High tendency to keep IP rights in German (7.56 patents per 100FTE) or British (3.49 patents per 100 FTE) RIs



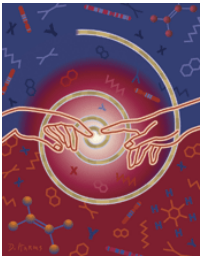


## *WP 1: Technology Transfer*

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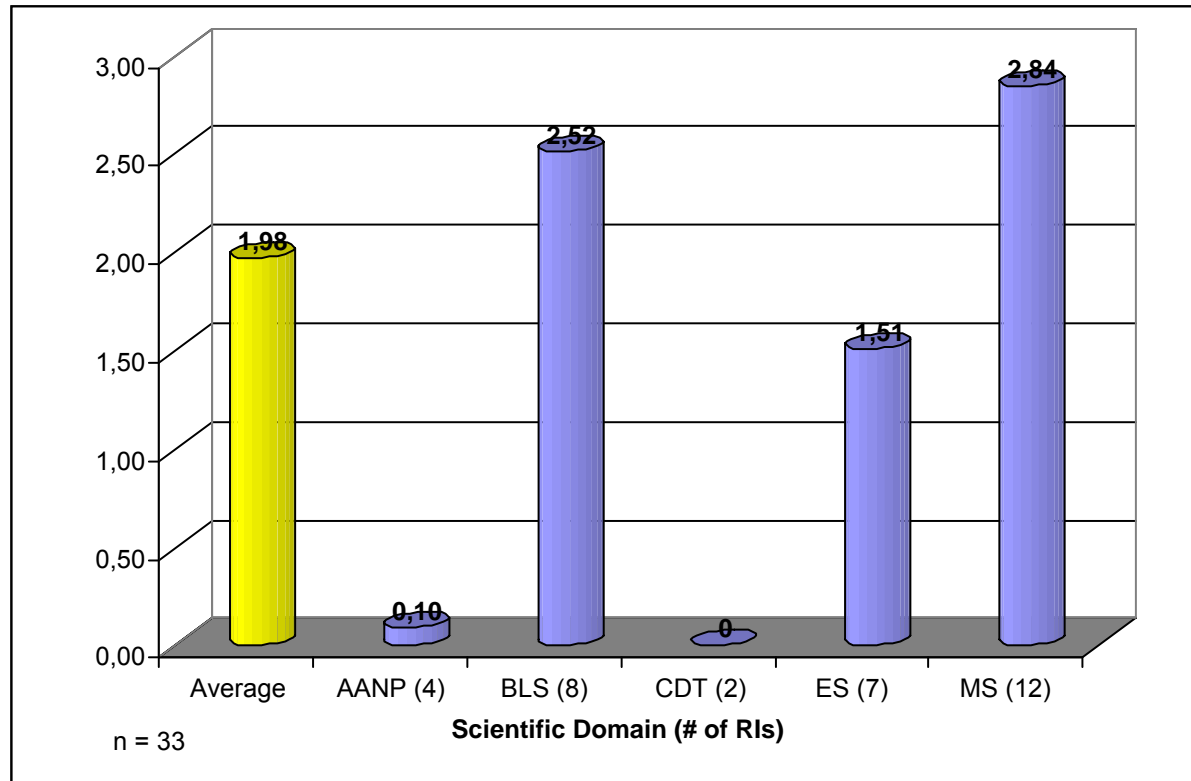
### **Services offered**

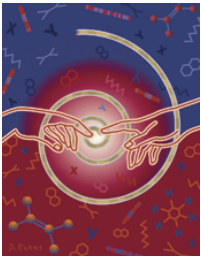
- 65% of the interviewed RIs offer services to industry, for some industrial usage is not a issue at all
- The number of industrial research contracts per 100 FTE is quite high in the domain of Material Sciences and in Biomedical and Life Sciences, the domains of Environmental Sciences and AANPP are below the average
- But: engaging in patenting/ licensing does not seem to be imperatively linked with the industrial usage → even the RIs with a low profile in these areas may have the chance to transfer their know-how to industry



# WP 1: Technology Transfer

## R&D contracts with industry per 100 FTE

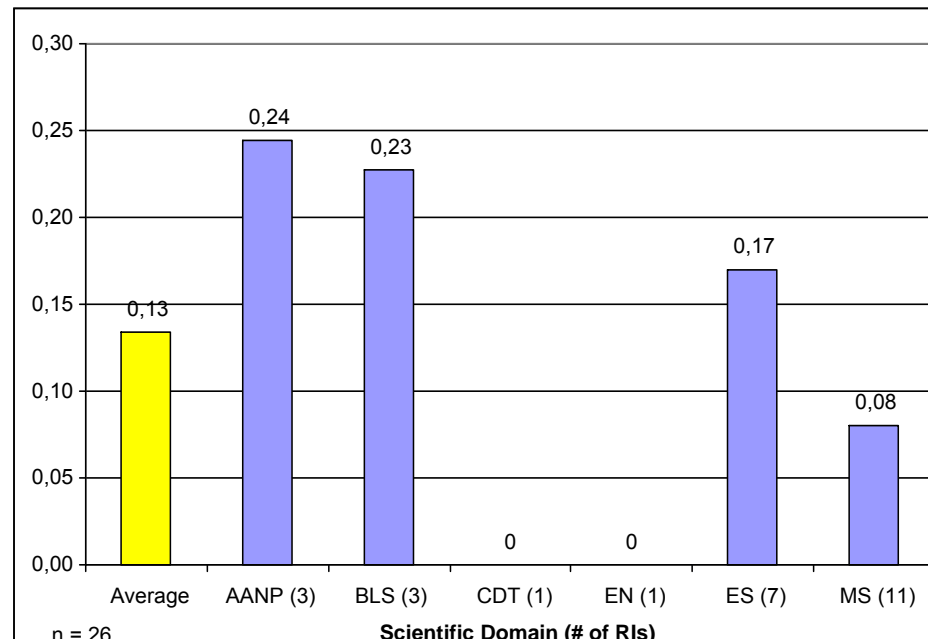


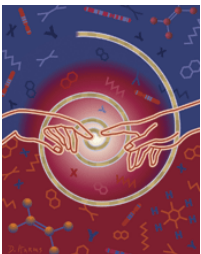


# WP 1: Technology Transfer

## License income and licenses

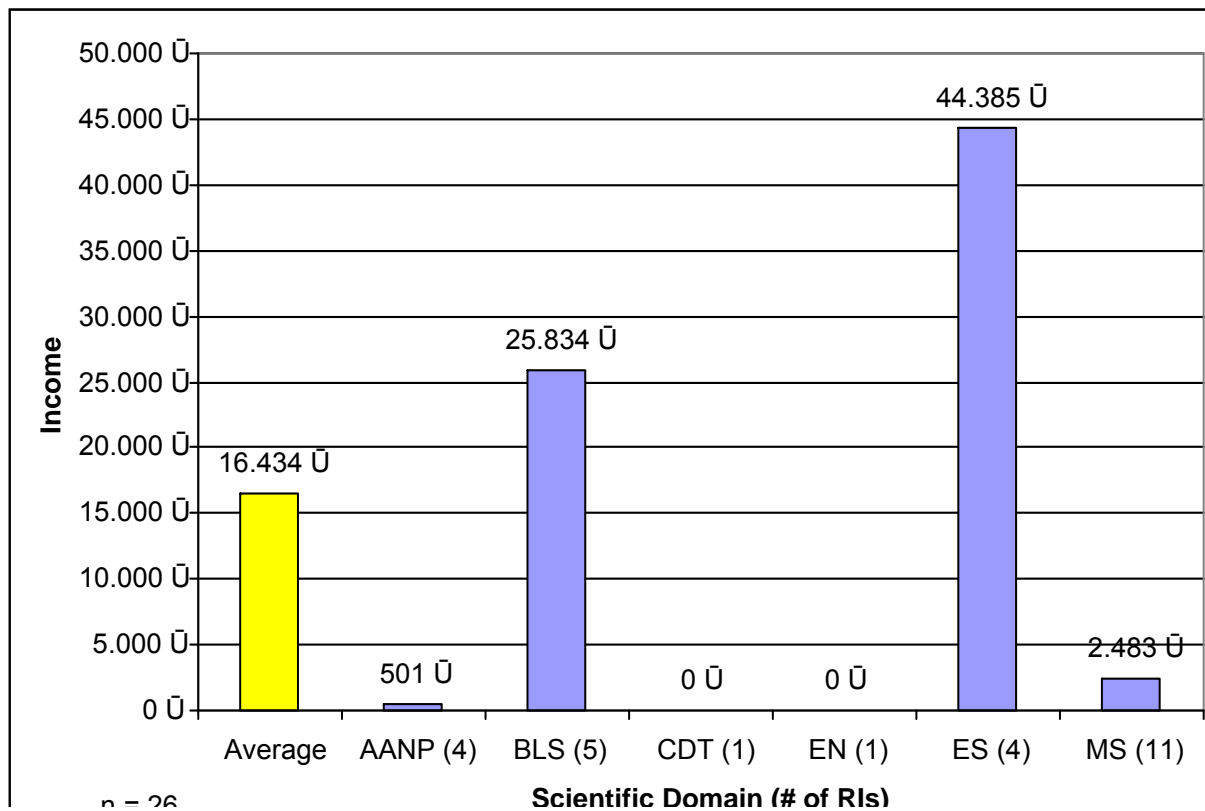
- Only the half of the interviewed RIs gave a statement about this topic, of them even a majority reported that they haven't given any licences
- On average only 0.8 licences was given per each RI per year - about 20 licences/year for the 26 RIs who answered the topic
- Seems not be the core route for RIs



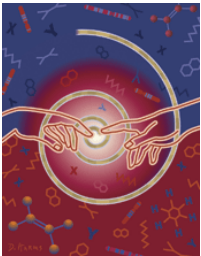


# WP 1: Technology Transfer

## License income

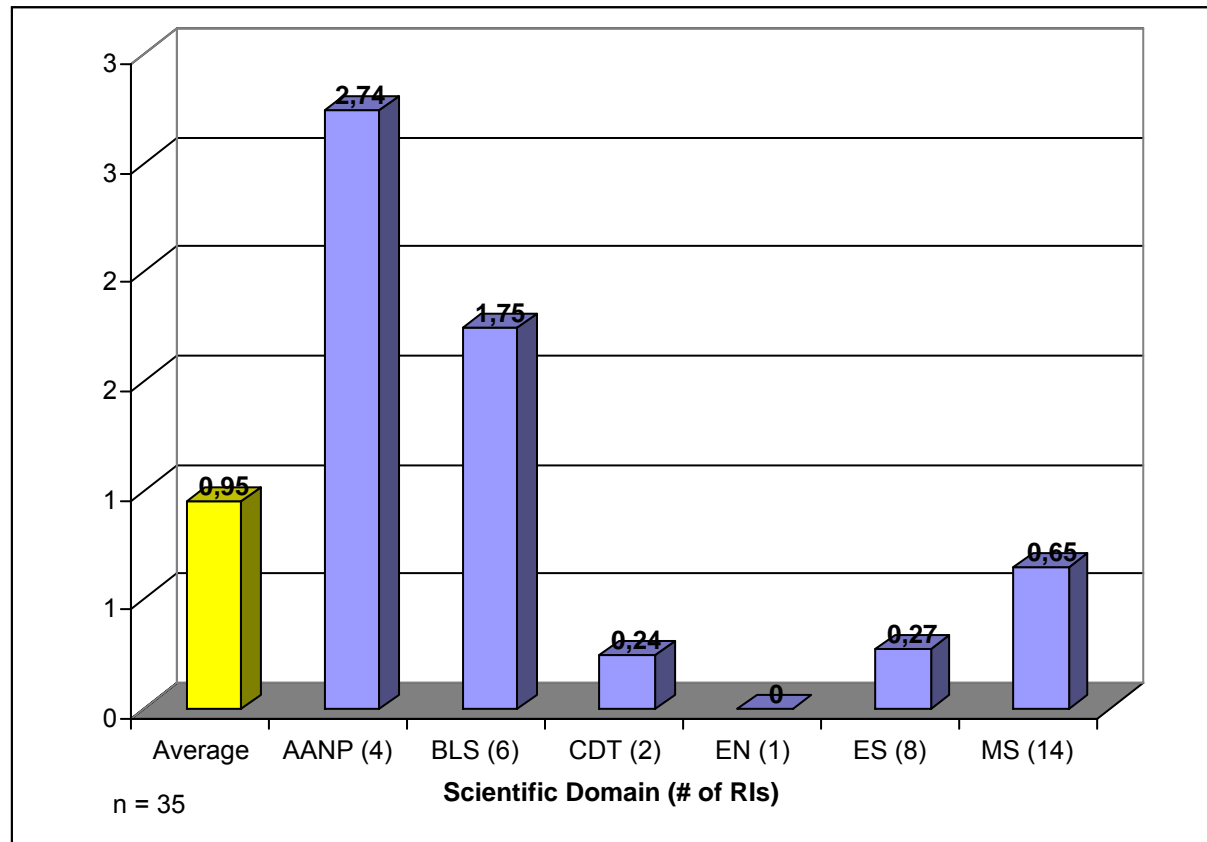


annual license income per 100 FTE

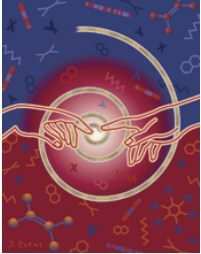


# WP 1: Technology Transfer

## Spin-off companies



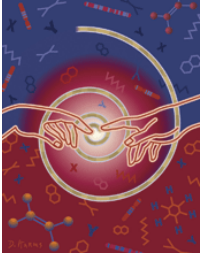
existing spin-off companies per 100 FTE



# **WP 1: Industrial Usage of Synchrotrons**

## **Sample, Prices, Industrial Usage**

- **11 interviewed Synchrotrons (10 in Europe, 1 in the US)**
- **All of them are opened for industrial usage**
  
- **Distinction between published and proprietary research**
- **Price ranges between 100€ - 930€ for 1 hour beamtime – average sales price 313€**
  
- **Number of users from 4 to 50 p.a., most of them visit more than once a year**
- **Average number of industrial users is 27**
  
- **Usage spans from 0.2% to 12%**
- **All Synchrotrons want to increase usage and expect this**
- **Most customers from Life Sciences (Pharmacy) and Chemistry and Energy**
- **All European Synchrotrons offer rapid access**

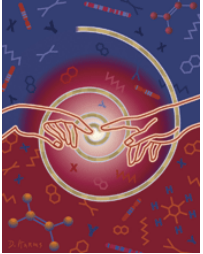


# ***WP 1: Benchmarking and Best Practices***

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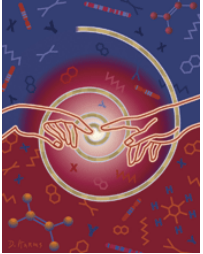
## **Recommendations**

- **1) Develop and regularly revise a clear vision and strategy for K&TT**
- **2) Develop and apply a simple, but comprehensive long-term scheme to register key data and best practice information for all relevant K&TT processes on the RI level**
- **3) Use a professional and sufficiently staffed TT office with clear processes, clear responsibilities and a dedicated focus on licensing**
- **4) Organise your TT business with a separate budget in a profit-oriented way**
- **5) Identify services that may be offered to industry in mutual compliance with the principles of responsible partnership and market these services in a pro-active manner**



## ***WP 1: Benchmarking and Best Practices*** **Recommendations**

- **6) Use networks to exchange strategies, experiences and standards in K&TT among Ris – further develop networking also between the different types o Ris!!!!**
- **7) Transfer existing IP rights and know-how to industrial partners to receive royalties at market conditions**
- **8) Support potential spin-off companies early and use all professional means available**
- **9) Offer fast and easy access for industrial customers**
- **10) Maintain a service group for industrial liason to secure the communication between industry and science**
- **→ Networking and exchanging best practices is needed to improve industrial usage and to receive broader effects on society**



## WP 1: Benchmarking and Best Practices

**Thank you for your attention!**

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- **[www.eridwatch.eu](http://www.eridwatch.eu)**