

**IDEA** League

Imperial College London  
TU Delft  
ETH Zürich  
RWTH Aachen  
ParisTech

# IDEA League Excellence Clusters

Chris Hankin,  
Chair IDEA League Strategic Research Committee

Leading European education and research  
in science and technology

# The IDEA League

- Imperial (**I**),
- Delft (**D**),
- ETH Zurich (**E**);
- RWTH Aachen (**A**) and
- ParisTech;
- **IDEA** working together for almost 9 years
- ParisTech joined
  - ‘Observers’ Jan 2006
  - Full member Jan 2007



# The IDEA League

	Imperial College	TU Delft	ETH Zurich	RWTH Aachen	Paris Tech	Total
Academic and Research Staff	3,057	2,488	3,913	3,830	3,461	16,769
Non-doctoral Students	10,529	14,299	10,335	26,357	12,475	74,005
Doctoral Students	2,627	1,645	2,900	3,893	2,413	13,478



# The IDEA League

Key Performance Indicators (Cumulative for 2007)	Total
Patent Portfolio	3,412
Published Articles	17,934
Spin-out companies (with some university ownership)	168
Total Income (in Million Euros)	2,998



# Education activities

- a set of common education quality management principles
- academic profiles for graduates
- mutual recognition of degrees (1st, 2nd and 3rd Bologna cycles)
- student interchange via IDEA League scholarships
  - Focus on key research areas (UG, PGT or PGR)
- joint masters programmes
  - Geophysics (Aachen, Delft, ETH)
  - Potential for 2 (academic) year masters (Senate 2007)
- joint Summer Schools for doctoral students
  - 5 planned for 2007/08
- Potential for collaborative/joint PhD programmes (Senate 2007)



# Research activities

- IDEA League Research Strategy
- PhD student mobility
- Fellowships for staff visits
- Transferrable Skills
- Brussels Panels
- Excellence Clusters



# Research Strategy

- ***Data, Information, and Knowledge*** – to realise the potential of new science and technology in the management and understanding of information;
  - ***Energy*** – to meet the increasing demands of the developed and developing nations;
  - ***Environment*** – to develop sustainable modes of existence and industrial processing, and better understand the complex mechanisms that support us;
  - ***Healthcare*** – to address the new demands that the demographic shift brings;
  - ***Transport*** – to meet the need to transport safely persons and goods in densely populated areas at low cost and with low environmental impact and energy consumption.
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- ***Communication Technology;***
  - ***Computational and Mathematical Sciences;***
  - ***Materials and Nanotechnology;***
  - ***Sensors and Imaging.***



# Succeeding in Europe

- A Summer School for Doctoral Students working in Science and Technology
- Students and Mentors from each of the 5 IDEA League universities
- Easthampstead Park (thesis);  
RWTH Aachen (jobs and entrepreneurship)





# Brussels Panels

2000: Current Visions? The Future Energy Supply in Europe

2001: Water for Europe - Quality and Quantity in Future

2002: Nanotechnology - dwarfs revolutionise the information age

2003: Bionics - Life Sciences versus Engineering Sciences

2004: Education through Research - The University Concept

2005: Manufacturing - Key technology for Europe

2006: Reliable Power - Europe's Strength

2007: Sustainable Transport - Knowledge and Innovation for Europe's Systems of Tomorrow



# Excellence Clusters

- Key areas: energy, environment and health, **ICT** and **mobility**
- focus on education, research and innovation
- SWOT, potential collaborations, potential partners (universities and industry)



# Terms of Reference

- To prepare for a closer collaboration taking into account the need to address the complete knowledge triangle
- To set the overall strategy for collaboration in the specific area (including consideration of different funding modalities: FP, EIT, Private)
- To schedule an outline of the deliverables
- To provide a schedule for the rotation workshops in 2008 and 2009
- To identify potential partners (industry and other stakeholders)
- To form a steering committee (one member per university, chair at the leading university)
- To report to the Strategic Research Committee (SRC).



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Questions?

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