

EuMaT

The European Technology Platform for Advanced Engineering Materials and Technologies – **Status and Prospects**

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S&T Town Meeting, December 14th 2006

Role of Technology Platforms

Background

Established by recommendation of the EC under FP6 with view to:-

- Assist in the formulation of the FP7 programme for 'key sectors'
- Driven by industry and their needs
- Initial expectation of the EC for ~10-15 Platforms
 - Currently over 30! (eg. Aero, transport, construction, zero-emissions, steel, chemistry, hydrogen)

Deliverables

- Strategic Research Agenda
- Strategic Deployment Document

Other

- Ongoing influence of FP7 Programme
- Networking
- Brokering of partners/projects for FP7

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European Technology Platform for
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EuMaT-General

- Initiated in late 2004, EuMaT is a cross-cutting and underpinning TP for the FP7 programme. It does not focus on one single Sector
 - There are other TPs that could also fall into this category eg Steels & Chemistry
- Structure should align with EC priorities in order to allow clarity & transparency of how EuMaT aligns with FP7
- The structure **must** have the buy-in of the EC, and their endorsement to recommend Materials priorities

Who are EuMaT stakeholders?

- **Statistics...**
 - **500+ registered members**
 - **~30% industry**
 - **~40% R&D**
 - **~22% Higher Education**
 - **~8% Other**

Who are EuMaT stakeholders? Examples...

(industry)

- ALSTOM
- BAYER Technology, Germany
- BESIX, Belgium
- BOSCH, Germany
- Centro Ricerche FIAT, Italy
- ENEA CRF, Italy
- ENI Technologie, Italy
- Fischer Adv. Composite Comps AG, Austria
- Hauzer, The Netherlands
- Metso Powdermet Oy, Finland
- Patria Aviation, Finland
- Schunk Kohlenstofftechnik, Germany
- UMICORE, Belgium

(associations)

- DECHEMA, Germany
- EEA, Belgium
- EFC, Europe
- E-MRS, Europe
- EPPSA, Germany/Belgium

(standardization)

- CEN, Belgium

(government, society...)

- Land Baden-Württemberg, Germany
- Selected Members of European Parliament

(academia, R&D)

- AUT, Greece
- BZF, Hungary
- CEA, France
- CIMNE, Spain
- IJS, Slovenia
- IMR SAS, Slovakia
- INASMET, Spain
- IPPT, Poland
- MERL, UK
- MPA Stuttgart, Germany
- MPI (Max Planck Inst.) Plasmaph., Germany
- ONERA, France
- VTT, Finland
- WUT, Poland

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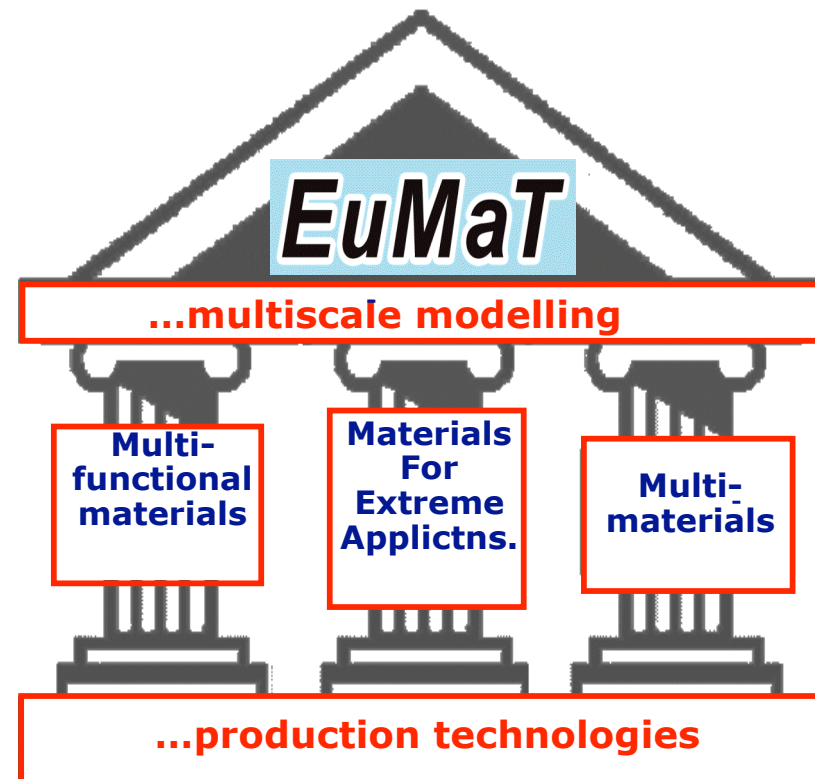
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EuMaT Structure “3 pillars” ...

1. Multi-functional engineering materials
2. Engineering materials for extreme applications
3. Multi-material systems

plus two ‘underpinning supports’:-

- production technologies
- multi-scale modelling.

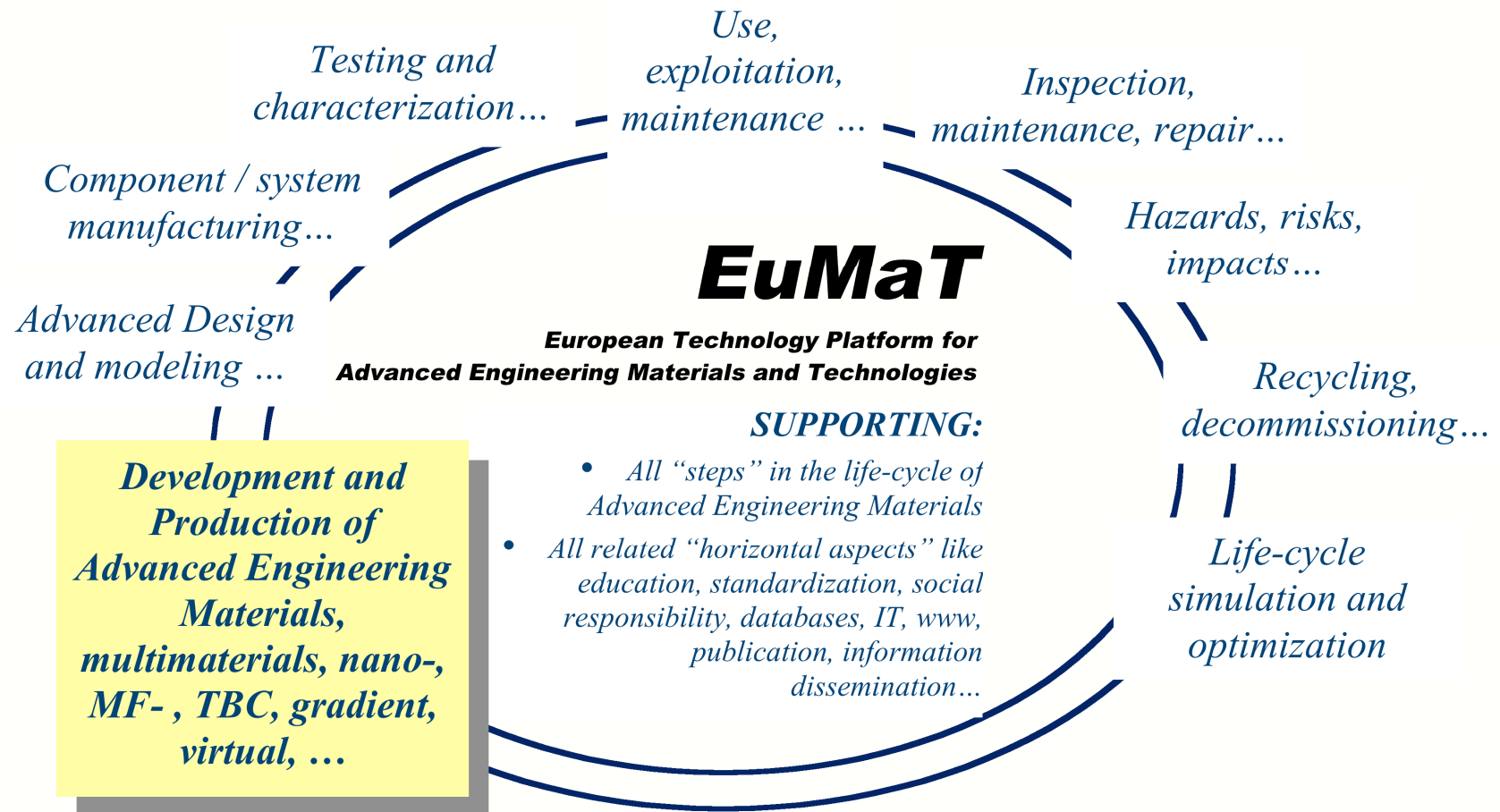


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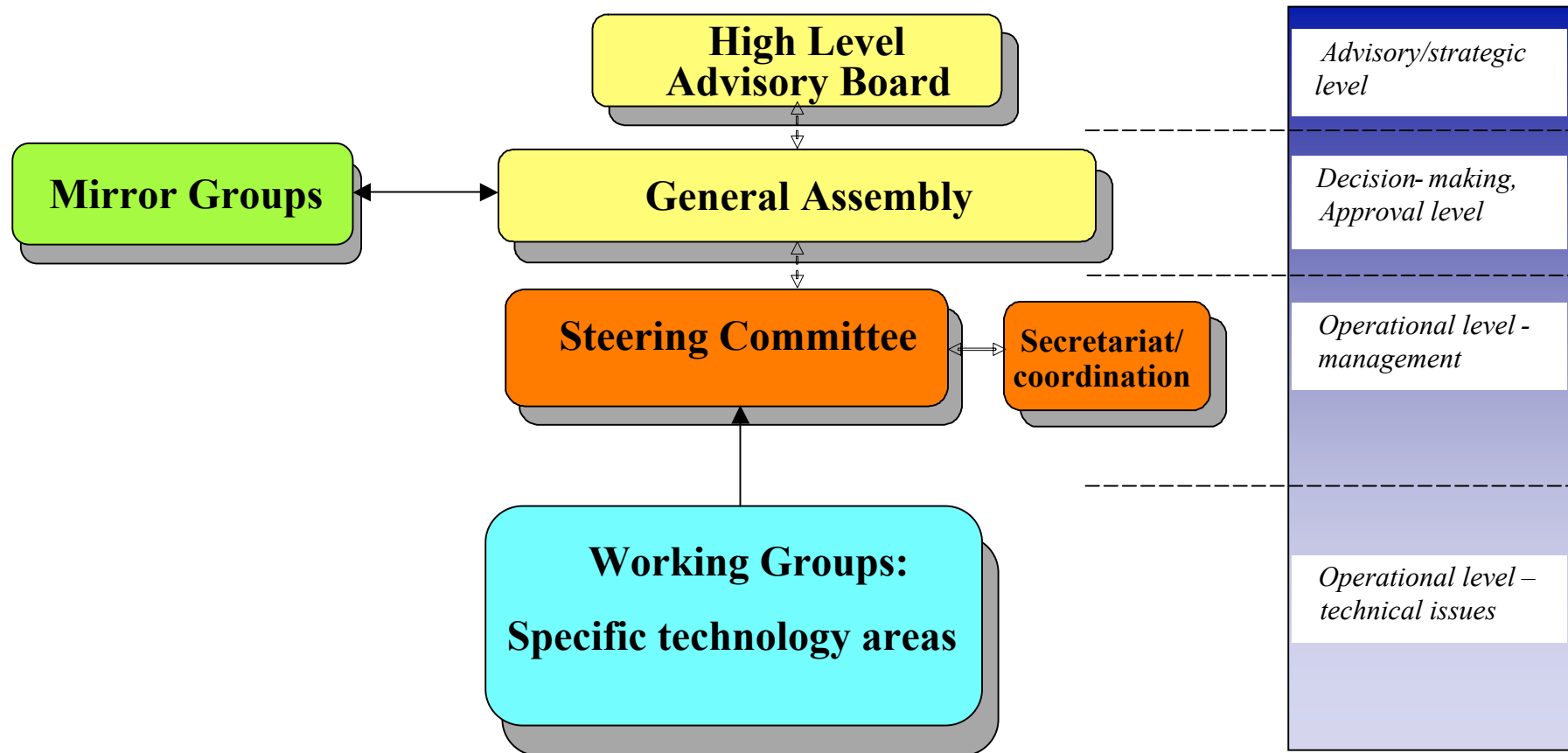
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What are EuMaT priorities? Life cycle...

- cover all elements of the **LIFE CYCLE** of advanced engineering materials / technologies



TP Structures



EuMaT National Mirror Groups

Poland (Siemaszko)
Spain (Igartua,
Mecerreyes,
Onate)
UK (Allen)
Switzerland (Lippert)
Slovenia (Jenko)
Finland (Liimatainen)
Germany (Schütze)
Hungary (Lenkey)
Italy (Piccinetti)
...

General

Editorial Group

National Mirror Groups

GERMANY

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- **Documents**
- **List of members (as provided by the Contact Person)**

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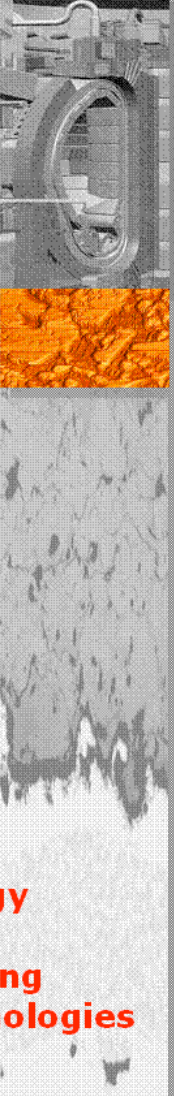

ITALY

National EuMaT Mirror Group Italy

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- **Documents**

EuMaT deliverables...

- 2-page Vision Paper
- SRA – Strategic Research Agenda
- Deployment Document
- Terms of Reference



EuMaT
Materials for Life Cycle

... multi-scale modeling

Hybrid & Multi-materials

Materials for extreme conditions

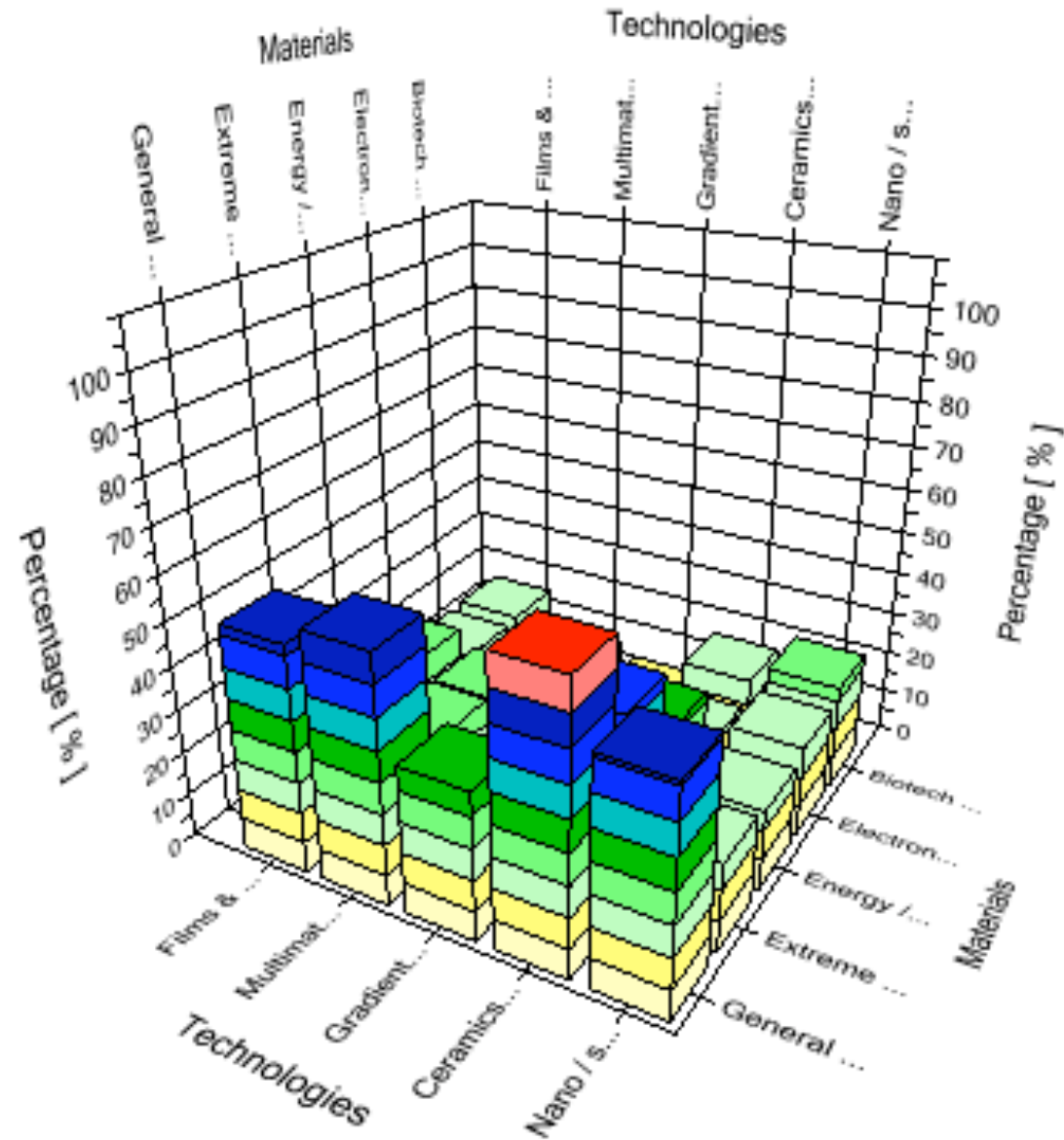
Multi-functional materials

... related production technologies

Roadmap of the European Technology Platform for Advanced Engineering Materials and Technologies

© EuMaT Members
Version 23
April 25, 2006

SRA Priorities










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SRA Priorities

Horizontal Issues:

Material Modelling	 62,75%
Manufacturing / fabrication related material technologies (e.g. bonding, brazing, welding...)	 66,67%
Material testing, characterization & qualification	 77,45%
Impacts, risks, reliability & lifecycle	 50,98%
Material data management, selection & optimization systems	 36,27%
Pre-normative work, standardization	 26,47%
Int. collaboration, education, technology transfer	 67,16%

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EuMaT Priorities for 1st FP7 call

- **-Energy Materials (Brokers meeting IoM³ early Jan 07)**
- **-Nano assembled materials**
- **-Materials for transport**
- **-Multiscale modelling**
- **-Novel multifunctional materials**

Forthcoming Changes in EuMaT & role of UK (1)

EuMaT is going through a transition

- Secretariat/Coordination is changing hands
- Chairmanship has changed
- UK, through the materials KTN will be 'bidding' to run EuMaT

Challenges

- Profile needs raising
- Insufficient credibility with EU
- Current scope too broad
- Needs greater active industrial membership 'key players'
- Requires more formal structure along line of MatUK

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Forthcoming Changes in EuMaT & role of UK (2)

Potential Benefits to UK

- Opportunity to influence EuMaT direction and align it better with UK Materials Strategy & IGT report
- Influence future FP7 calls
- Enhance EU & International collaborations & networking opportunities (particularly for SME's)
- Raise UK Materials profile in Europe

What Can UK Offer?

- **An existing & funded infrastructure for support and coordination**
 - Supported by national government
 - Existing secretarial/coordination resource
 - Conference/meeting facilities
 - Publicity/marketing
 - Existing Website
- **Strong Industrial links and existing networks**
- **Similar drivers and priorities to EU**
- **Existing links (particularly through the IoM³) with other European Materials Bodies**

Meeting to discuss UK offer on 5th Jan 07

Joining or information on EuMaT?

EUMAT.ORG - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Word Excel abc Bluetooth

Address <http://www.eumat.org/> Go Links Google

1/31/2006

EuMaT

European Technology Platform on Advanced Engineering Materials and Technologies

Home about EuMaT Members News & Events Links Contact Member area

Latest News

4/3/2005
EuMaT is now officially included in the list of Technology Platforms referenced on the EU website.
[more...](#)

1/4/2005
MTI (Materials Technology Institute) is organizing a roll out conference of RBI Book on 21st February 2005 in Tampa, FL.
[more...](#)

Latest EuMaT Statistics

Status of: 31-01-06

Members total: **409**
out of which **66** 'core' partners

Industry:	28%
Res.:	41.5%
High. Edu.:	8.5%
Other:	8.5%

Interested in Participating?

If you are interested in taking part in EuMaT Technology Platform...

Latest versions of EuMaT TP specific documents

The EuMaT TP specific documents have been prepared. In order to improve the uniformity, all the documents have been incorporated into one single document (FP7 - Roadmap of the European Technology Platform for Advanced Engineering Materials and Technologies (EuMaT)) which is now available for download.
[more...](#)

EuMaT Leaflet

EuMaT leaflet (02.11.2004) summarizes the whole idea behind the EuMaT initiative. To download the latest version of the leaflet in PDF format click on the link below.
[download leaflet](#)

What are Technology Platforms...

Technology platforms are new mechanism proposed by jointly by the industry and the EU in order to define research, technology and development (RTD) priorities, timeframes and budgets on a number of strategically important issues...
[read more](#)

News, communications, downloads for members

EuMaT [internal](#) documents are available for the members now. Login and review them...
[more...](#)

Basic idea of EuMaT

An important part of the 17 billion € investment made into the 6th Framework Programme (FP6) were research related to advanced engineering...

TP on EU websites...

You can read more about the technology platforms on one of the following EU websites...

Start | C:\... | In... | Eu... | Ad... | Re... | Wi... | Eu...

<http://www.eumat.org/>