

Alliance for Materials

A4M

A proposal for an effective integration of value chain stakeholders in Materials R&D and Innovation

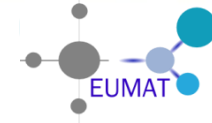
Marco Falzetti

Chairman of the **EuMaT** Steering Committee
*The European Technology Platform on
Advanced Engineering Materials and Technologies*



EuMaT

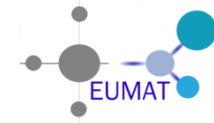
***European Technology Platform for Advanced
Engineering Materials and Technologies***



Few words about EuMaT

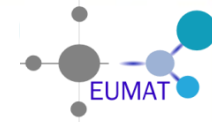
FUMAT Conference
Warsaw 22-23 September 2011

EuMaT – the objectives



.....the promotion of the leading global position and global competitiveness of the EU technology in the area of Advanced Engineering Materials, as well as promotion of the consolidated and unified R&D and innovation European policy in this area...

....to assure optimum involvement of Industry and other important Stakeholders in establishing European R&D priorities.



EuMaT – An Effective vision of the Industrial needs

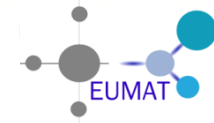
Innovative use of existing materials based on good understanding of applications, material requirements and materials degradations mechanisms

Modification of existing materials to fit better for applications (new grades for existing materials systems, possibly new manufacturing processes)

Development of entirely new materials or materials groups (nanomaterials, active/intelligent materials, composites, hybrid and multimaterial structures etc.)



EuMaT – in figures



Kick-off meeting, 31 Aug. 2004

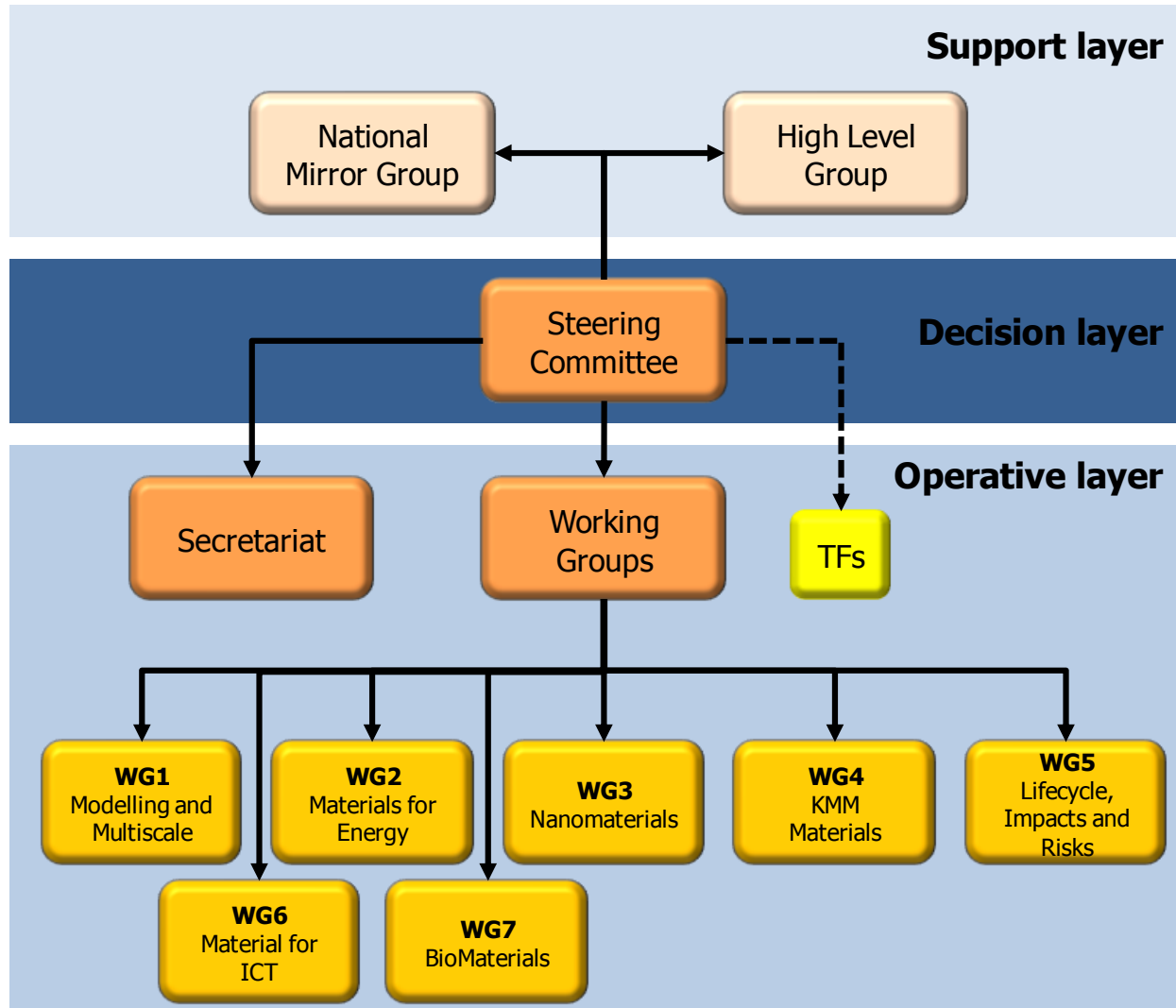
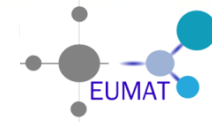
SRA issued 25 April 2006

Official launch meeting, Brussels, 26 June 2006

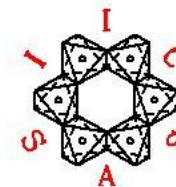
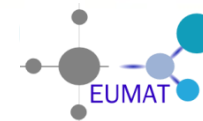
Presently: more than 900 registered members

23% of presences from industry

EuMaT – the structure



EuMaT – Steering Committee members



EuMaT

European Technology Platform for Advanced Engineering Materials and Technologies



Alliance for Materials



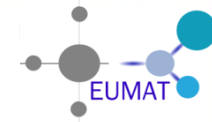
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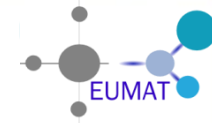
A4M – The concept

○ The original initiators of **A4M** initiative are six European Technology Platforms with a strong material agenda in their respective strategies. These are: EuMaT, Suschem, Manufuture, FTC, ESTEP, SMR.

○ Among the fundamental concepts of **A4M** is the Value Chain concept. It is regarded as the key element driving the expected synergy through a common path which integrates actors, resources and strategies from the fundamental aspects of materials science up to the industrial system which produce and/or transform the materials in valuable products, acting as driver of the final innovation processes.

The driver for this collaboration was to ensure a Value Chain coverage to improve the speed of innovation implementations in Europe that address the Grand Societal Challenges.

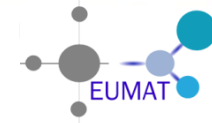




A4M – The concept

- Relevant technological initiatives are underway and further will appear to face the identified challenges. In almost any of these, the proposed innovative solutions have demanding requirements in terms of Materials needs. Many of these solutions will fail or will not be fully implemented if suitable and proper Materials and the necessary manufacturing processes are not available on time
- Even if the related industries belonging to **A4M** will have competitive activities the **A4M** group regards the complementary aspects of higher importance: the collaboration impact is stronger than the sum of the individual contributions

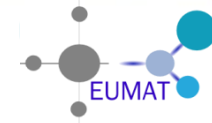




A4M – The concept

- Materials R&D is by definition a crosscutting and enabling technology area which affects almost every industrial sector. The achievement of effective coordination between different sectors, while maintaining the relative autonomy, interests and strategies of each, is an essential condition to achieve the best and most effective use of community resources in Materials R&D targeted to make effective contributions to the Societal Grand Challenges
- A4M intends to contribute and to provide an effective answer to this coordination need, in the frame of the present and future European research and innovation programme and initiatives
This integration will contribute to overcome some limitations existing in the today research and innovation programmes still mostly sectorial driven.

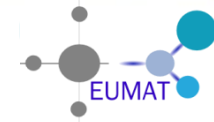




A4M - Vision and objectives

- to contribute to create the conditions for an effective integration of stakeholders, views and resources in the field of Materials R&D at EU dimension
 - **Stakeholders:** any subject/system directly or indirectly involved in the process of increasing knowledge on materials, producing materials, processing and/or transforming materials, using materials and any form of their aggregation (i.e. ETPs)
 - **Views:** any technological, industrial, commercial strategy which deal with materials R&D and/or count on that
 - **Resources:** any programme, initiative or financial tools, at national or EU level, able to support the R&D and innovation processes in the field of Materials R&D
- **A4M** does not act on behalf of the single ETPs. These lasts remain totally independent on their decision making action





A4M - Vision and objectives

- **A4M** does not intend to be an over structure where to meltdown all the different actors of the Materials R&D community, but it intends to become a single table where all the relevant different initiatives are shared and discussed with the whole community of R&D actors but giving central role to the others players of the value chain too.
- **A4M** welcomes and supports in principle any initiatives launched by the different actors of the value chain in the field of materials R&D but providing these initiatives have been shared and discussed within the **A4M** concepts



A4M – The beginning

○ On 14th December 2010 the 'Material Letter' was sent to the two Commissioners: Máire Geoghegan-Quinn and Antonio Tajani.

○ The letter deals with a proposal message *Through an alliance of a number of ETPs, each with a fundamental and significant materials component in their strategies, **we will provide in the near future a proposal** for concrete initiatives on how to align the value chain consisting of the supply of materials, their processing and the manufacturing needed to address the key societal challenges defined within the EU 2020 policy objectives. These initiatives can also be applied in the ongoing work of the High Level Group of Key Enabling Technologies.*



To the courtesy attention of
Máire Geoghegan-Quinn
European Commissioner for Research, Innovation and Science
European Commission
Antonio Tajani
Vice-President European Commission
European Commissioner for Enterprise and Industry
European Commission

The enabling role of materials for industrial innovation and wealth creation under next FP8 and CIP

Dear Madam, dear Sir

The global economy is facing Grand Challenges. The European Knowledge Society must enable them through the best available scientific and technical resources. Challenges exist over the sustainable delivery of energy, food and digital services; the growing depletion of energy, water and food; changing economic, public health, planetary and security risks; and the manufacturing challenge of turning Europe into an eco-efficient economy... (From the Lead Declaration)

With the Lead Declaration, clear focus has been defined for identifying future European R&D needs for the next 20 years. Starting from these lines, the European Commission has shaped a strategy as stated in the Agenda 2020, the Innovation Union Communication and other initiatives related to Materials R&D (New Material Initiatives, KET ...). All these documents contribute towards setting the scene for achieving the technological progress necessary to meet the thrust of the major Societal Grand Challenges (SGCs).

The optimum solution for the main issues posed by the SGCs require a global approach where political, economical, ethical and technological aspects are taken jointly into account to develop solutions able to ensure multi-scale, long term sustainable growth. Among these elements, the technological dimension is a first step problem.

Relevant technological initiatives are underway and further will appear to face the identified challenges. In almost any of these, the proposed innovative solutions have demanding requirements in terms of Materials needs. Many of these solutions will fail or will not be fully implemented if suitable and proper Materials are not available on time.

With its FP7 NMP programme, and previous FP and CIP actions, the European Commission has obtained relevant results to assure a strong European dimension to Materials R&D and to promote a collaborative attitude among the European materials science community and the various European industries who produce and transform advanced materials into innovative solutions and products.

Including raw material extraction, the process industries producing and transforming materials, and the downstream industries producing industrial and consumer goods from these materials.

Through an alliance of a number of ETPs, each with a fundamental and significant materials component in their strategies, we will provide in the near future a proposal for concrete initiatives on how to align the value chain consisting of the supply of materials, their processing, and the manufacturing needed to address the key societal challenges defined within the EU 2020 policy objectives. These initiatives can also be applied in the ongoing work of the High Level Group of Key Enabling Technologies.

Yours sincerely

For the European Technology Platforms

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- Dick Hendriks
Chairman of the Enabling Council
TEXTILE - Future of Textiles and Clothing
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- Bernard de Lamberterie
Secretary General
ESTEP - European Steel Technology Platform
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Brussels, 30th November 2010

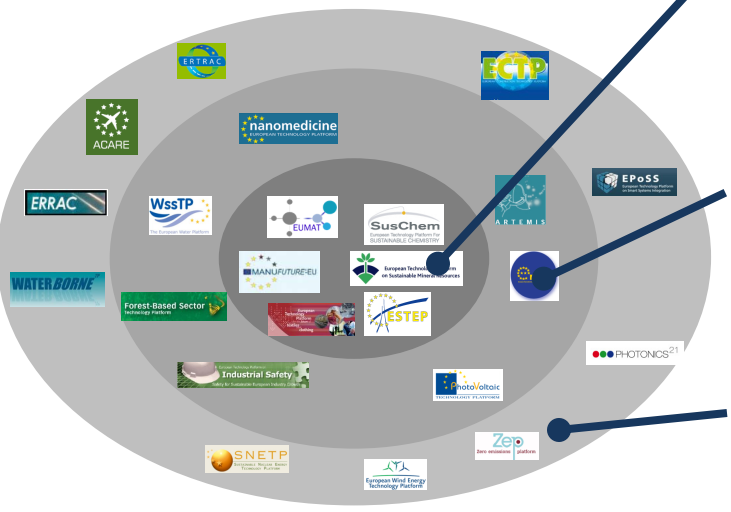


A4M – key elements

A value chain driven action



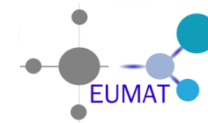
A4M – key elements



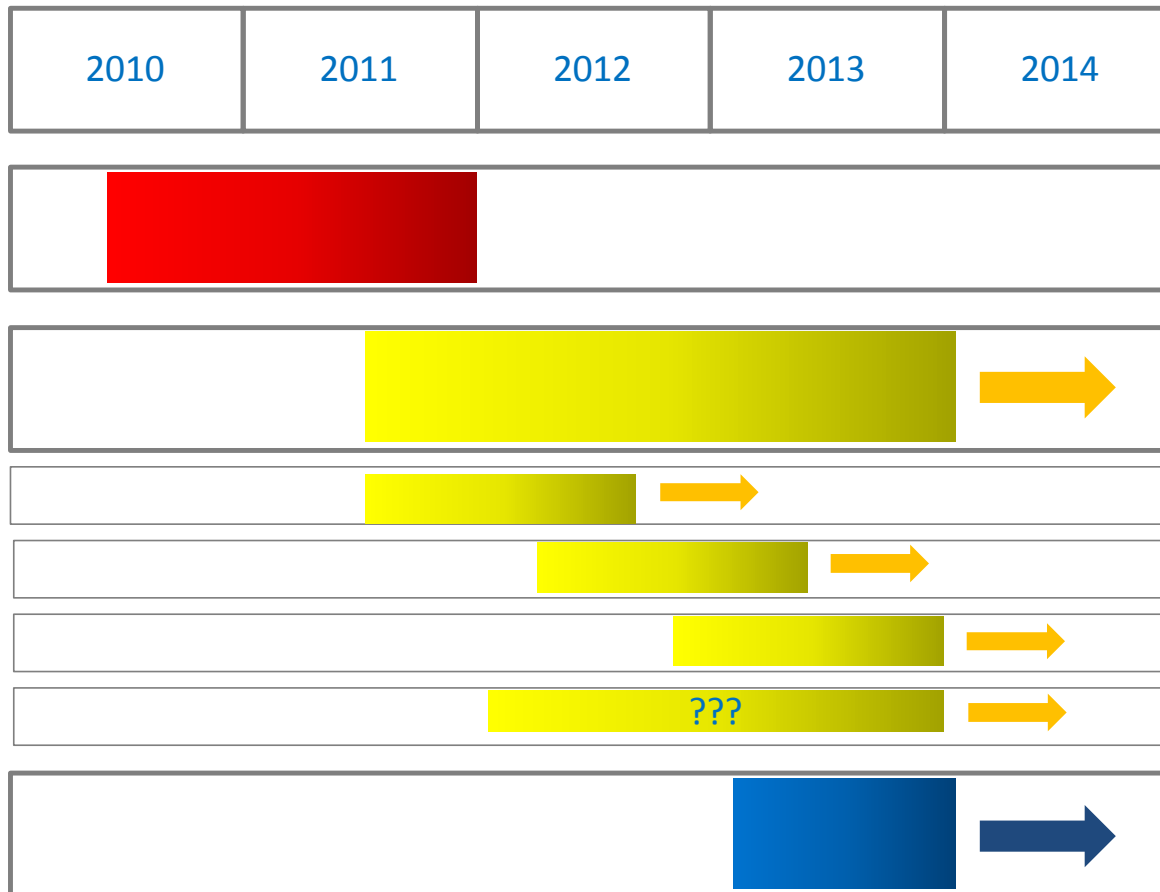
- it includes the ETPs directly related to Materials science, technology, production, transformation [EuMaT, Suschem, Textile, Manufuture, SMR, ESTEP] in short “the core“
- it includes other ETPs which have evident links to the materials related aspects [ETPIS, PV, ENIAC, ARTEMIS, NanoMed, etc..]
- it includes the final transformers of materials, and/or the end users [ACARE, ERTRAC, ERRAC, ZEP, ECTP, etc...] in short the final ‘industrial sectors’

A gradual involvement of different ETPs and other related sectors systems/organisation, within a specific VC, is mandatory for an effective implementation of the A4M strategy

A4M – WBS



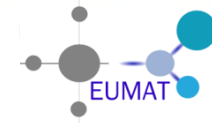
Horizon 2020



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EuMaT

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Thank you for your attention

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