

CONSTRUCTION WORKING GROUP

THIRD MEETING - 26 Mar 07

Terms of Reference - Objective

Reporting into MatUK, the remit of the Construction Materials Working Group is to develop a Strategic Research Agenda and Deployment Plan for the UK Materials supply chain which will improve the competitiveness of the sector in the UK whilst meeting the key challenges of sustainability, energy and design.

This should include the major construction sectors:-

- Housing

- Non-Residential Buildings

- Infrastructure (including Road and Rail)

It will encompass the full supply chain and other key stakeholders, including designers.

Terms of Reference - Objective

This should be achieved by:-

- Confirming a vision for construction in the UK over 5, 10 & 20 year horizons, leading to the definition of the **key materials research and development requirements** for the Construction Sector.
- Identifying key strengths, gaps and opportunities for the UK materials supply chain to generate significant **new business** over the aforementioned timescales.
- Accounting for likely **policy, legislative, training and skills** impact on the sector to feed into other existing MatUK working Groups.
- Accounting for, consulting with and **influencing** existing National (and European) materials groups involved in the sector; including industrial, governmental, academic, NGO's, research councils and funding agencies.
- Promoting the formation of a **UK Innovation Platform** on Materials.

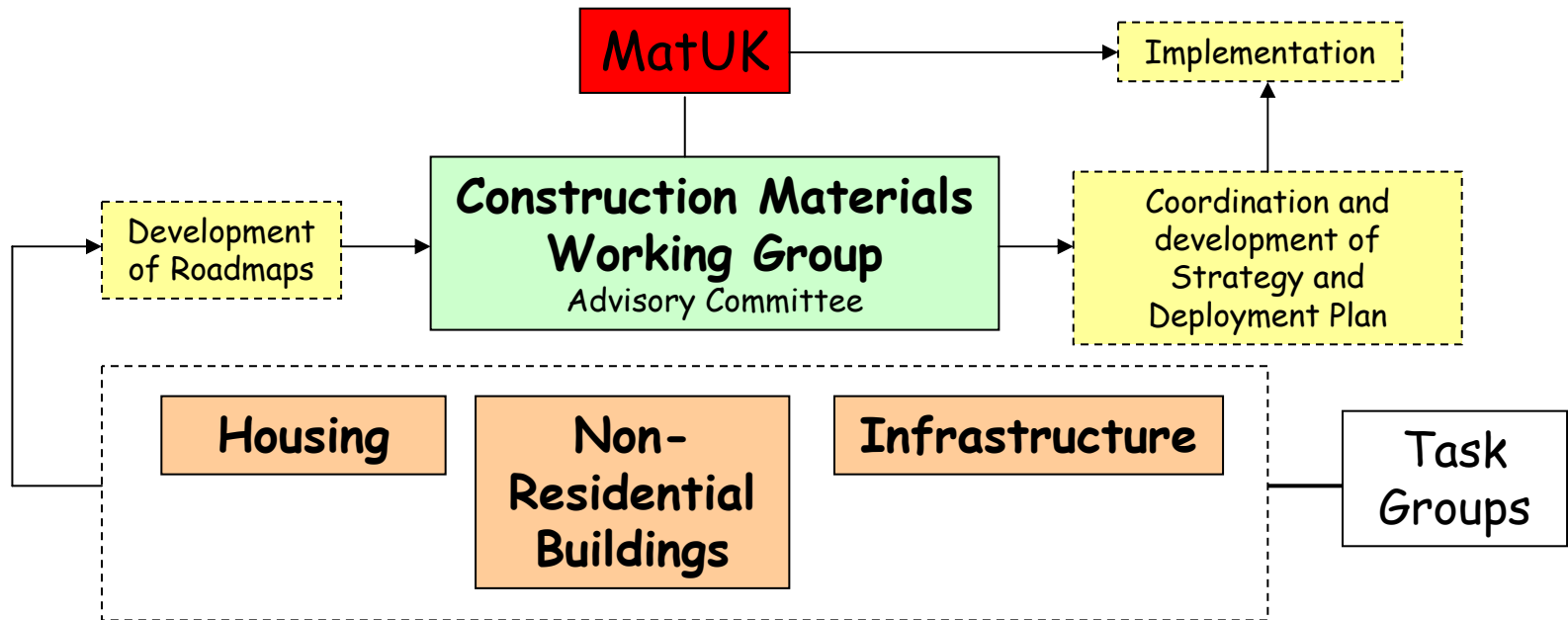
Terms of Reference - Scope

The Construction Materials Working Group will cover all the main sectors involved in the Construction Industry including raw material supply, product manufacture, construction processes and aspects of building and infrastructure design and usage. Government procurement is also a key aspect which must be considered.

The scope will include the upgrading of the existing building stock and infrastructure as well as new build.

The Chairman will communicate with the Chairmen of the other Working Groups by attending their meetings and the Materials UK Executive Committee, to avoid duplication and confusion concerning the scope and roles of the various Working Groups.

Terms of Reference - Structure



The overall structure and responsibilities are shown in Figure 1

Terms of Reference - Structure

The Group will comprise of an **Advisory Committee** consisting of industrial representatives of the **full materials supply chain** from producers to end-users and other key stakeholders.

Inaugural members include: Pilkington, Corus, Ibstock, TWI, BRE, H+H Celcon, DTI, CIRIA. *(and others to be added in March)*.

Additional organisations will be invited to join as deemed necessary by the Committee to form a balanced sector view.

Task Groups will be set up to tackle specific issues or technology areas as required. Task group membership will be open to any stakeholder or individual experts who can make a useful contribution. The initial proposed Task Groups are shown in Fig 1. These will comprise a chairman or co-chairmen (who will be a member of the Advisory Group) and typically up to six additional experts in the relevant field. Their remit and scope will be set by the Advisory Committee. The remit/scope of the initial Task Groups is given in Annex 1.

Terms of Reference - Organisation

The Construction Materials Working Group Advisory Committee will be **chaired** by Philip Ramsey (Pilkington).

The secretariat will be supplied by **Construction Products Association (CPA)**.

The Group will report into the **Executive Committee of Materials UK** through the chair, but will also have the freedom to act upon its own initiatives where and when appropriate, particularly in the implementation phase.

The Group started in September 2006 and it is anticipated that it will have an initial lifespan of **2 years**.

Terms of Reference - Deliverables

A Strategic Research Agenda (SRA) for energy materials which defines the drivers, barriers and roadmap for R&D over the next 20 years.

A Deployment Plan which indicates how the SRA will be implemented and impact on the UK materials industry.

This will be formally presented through MatUK to key stakeholders of Government officials, Research Councils, RDA's and the Technology Strategy Board to develop an agreed, long term, sustainable Construction Materials Research Programme for the UK.

Terms of Reference - Dissemination

Dissemination to the wider community will be through communication routes including:

MatUK and the materials KTN's and their associated websites

The Institute IoM3 Journal

Town meetings

Appropriate conferences and meetings

Terms of Reference - Task Groups

Task Groups will be set up by the Advisory Committee to take up specific 'time-limited' activities with clear deliverables related to the work of the Group. Task-group membership will be open to any stakeholder or individual experts who can make a useful contribution. The Task Groups will comprise a chairman or co-chairmen (who ideally will be a member of the Advisory Group) and a core team of experts in the relevant field.

Initially, three TGs will be established to develop an R&D roadmap for Construction Materials in the UK covering: Current status/value to the UK, SWOT analysis, Drivers, R&D needs, Barriers, Recommendations

The initial TG's are:

TG1 - Housing

TG2 - Non-Residential Buildings

TG3 - Infrastructure

(Add comments on our likely task groups after further discussion by the Advisory Committee)

There will clearly be several common drivers across the task groups including the inter-related aspects of energy, carbon, environmental impact and sustainability.

The Advisory Committee will collate the output of the task groups and ensure that common themes are identified.

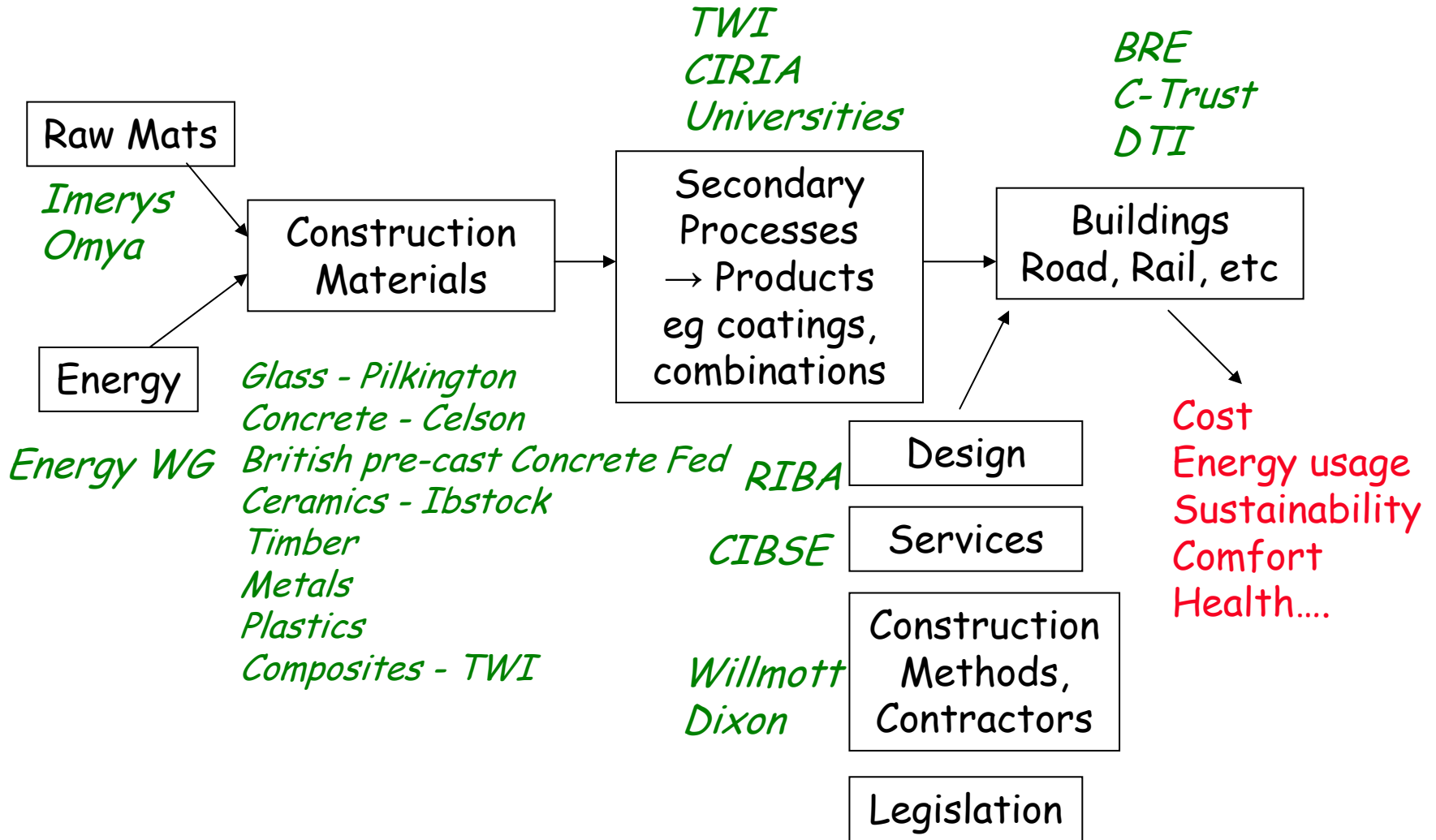
Construction Working Group - Steering Committee

Membership of Steering Committee:

| | | |
|------------------------------|---------------------|---------------|
| Phil Ramsey | Pilkington | Glass (chair) |
| Tim Broyd | ex CIRIA now Halcro | Research |
| John Brumwell | | DTI |
| Graham Couchman | | BRE |
| John Davenport | TWI | Composites |
| Cliff Fudge | H+H Celcon | Concrete |
| Denzil Spencer | Ibstock | Ceramics |
| John Tebbit | | CPA (sec) |
| Roy Wakeman | | Timber |
| <i>Corus member now left</i> | | Metals |

Other potential members: Plastics, Designers, Insulation, C-Trust,
Large Contractors, CIBSE, Universities, DEFRA, RDAs, etc

Supply Chain and Working Group Participants



Construction WG - Not "Starting from Scratch"

For example: Tech Strategy for Built Environment – May 05

Drivers:

- Sustainability (in all its guises)
- Security, terrorism, vandalism
- Robustness to changing climate
- Self-maintaining / healing, self-diagnosis
- Health - germs, comfort, entertainment
- Safety (during construction and use, eg fire resistance)
- Off-site construction
- IT - communication, smart appliances

Barriers to Innovation:

- Client Behaviour
 - Purchase bespoke solutions
 - Not aware of available innovations
 - Risk averse
 - Capital cost, not whole life cost
- Gov responsibility for policy split over several departments / agencies
- Adversarial, fragmented supply chain
- Difficult to protect innovation (?)
- So, innovation tends only to occur to:
 - Solve specific problems
 - Make a statement
 - Meet new regulations