The Australian Performance Based Building Network

The Australian Performance Based Building (Aus-PeBBu) Network is a group of researchers and industry representatives who, with support from the Australian Government's *International Science Linkages* programme, are participating in the meetings and activities of the European Performance Based Building Network. Aus-PeBBu, coordinated by CSIRO, is also promoting the application of performance based building in Australia by way of industry seminar/workshops, technical working groups and a project web-site.

Performance based building is an approach to building-related processes, products and services that is concerned predominantly with the required outcomes (the 'end') and not with how these outcomes are achieved (the 'means'). This is in contrast to the traditional *prescriptive* approach which tends to focus on specifying the method or solution for achieving the required outcomes. The performance approach consequently leads to:

- (a) better understanding and communication of client/user requirements;
- (b) considerably flexibility in design solutions for building practitioners, which encourages innovation and cost-optimised solutions; and
- (c) the facilitation of international trade.

The performance approach can be illustrated by considering the goal of fire safety in a building. An example of the prescriptive approach would be to require that "all structural steelwork has a fire protective coating and ceiling sprinklers are provided throughout the building". A performance approach might instead require that in a given type of fire event, all occupants are able to leave the building safely within a specified time period. The performance approach would allow for any design solution which can be shown to meet this requirement (and which may or may not include fire protection and/or sprinklers).

CSIRO's division of Manufacturing & Infrastructure Technology hosts the network Secretariat. The other key participant organisations include the Australian Building Codes Board, the CRC for Construction Innovation, the Australian Procurement and Construction Council, and the Australasian Chapter of the International Alliance for Interoperability. An industry Advisory Committee, with membership drawn



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from different stakeholder groups, and from different states, provides independent advice to the Secretariat, particularly relating to liaison with industry groups.

The main developmental activity in the network is incorporated into seven technical domains or working groups:

- 1. Building Materials and Components
- 2. Indoor Environment
- 3. Building Design and Engineering
- 4. Environmentally Sustainable Built Environment
- 5. Innovation
- 6. Legal and Procurement Matters
- 7. Building Regulations and Standards

The domain working groups are predominantly concerned with advancement in the following three key areas:

- the description of appropriate building performance requirements
- methods for delivering the required performance (reliable methods and tools for design and analysis)
- methods for verifying that the required performance has been achieved.

Participation in any of the technical domains by interested companies, associations or individuals in the building and construction industry is warmly invited.

Further details and extensive resources relating to performance based building are available on the network's web-site, <u>www.auspebbu.org</u>.

ENQUIRIES

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