



**Enhance mechanical properties of timber,
engineered wood products and timber structures**

FP1004

Start date: 30/05/2011

End date: 30/05/2015

Year: 1

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Chair

UK



Scientific context and objectives (1/2)

- Various forms of strength enhancement through reinforcement have been considered in research, this COST Action consider work that will benefit from technology that is available worldwide but is not being completely exploited in structural design and construction
- The main objective of this Action is to enhance the performance of structural timber products and structures and thereby improve the competitiveness of timber structures.

Scientific context and objectives (2/2)

- **Research directions:**
- Network of experts for collaboration
- Development and publication of state-of-the art work
- Courses and seminars for dissemination
- Contribute to the improvement of design codes

Working groups

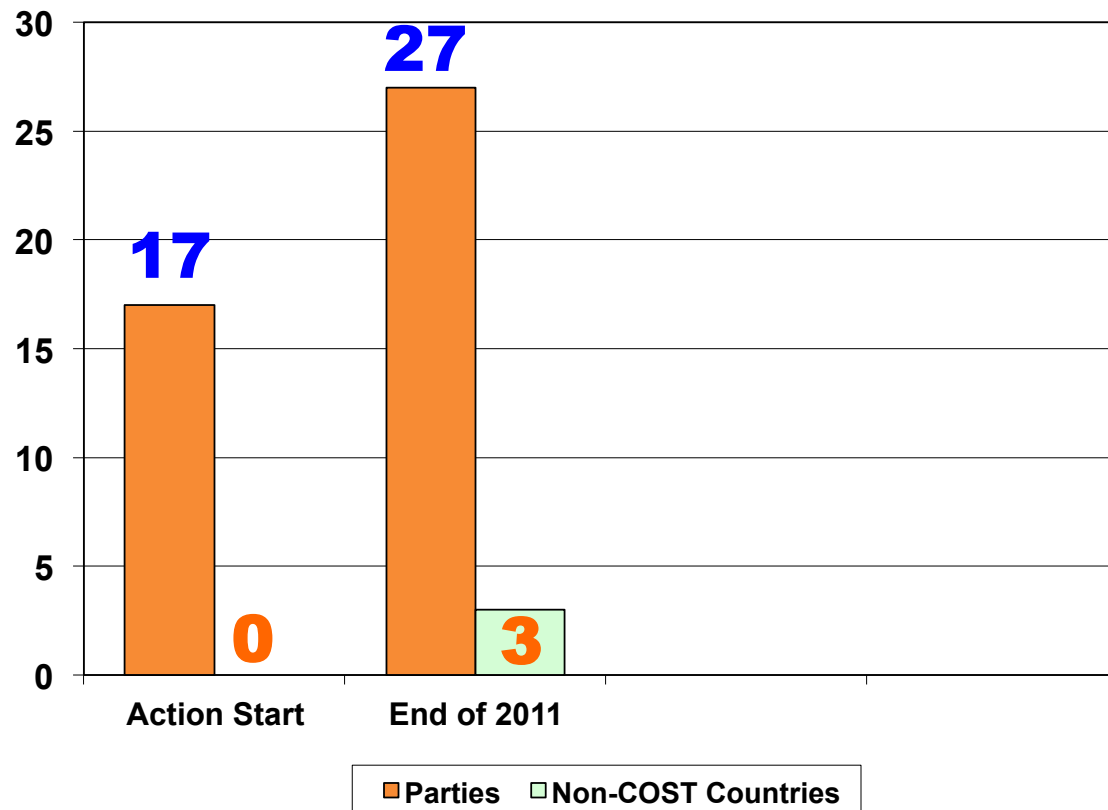
- **Working group WG1: Enhance performance of connections and structural timber in weak zones**
- **Working group WG2: Enhance the mechanical properties of heavy timber structures with particular emphasis to timber bridges**
- **Working group WG3: Modeling the mechanical performance of enhanced wood-based systems**



Future plans and challenges

- This is the first year of the Action, the directions for the work groups for the coming year has been determined
- WG1: Glued rods and screws for reinforcing weak zones and connections in timber
- WG2: Influence of connections on whole structure response in timber structures
- WG3: modelling of basic wood behaviour and of connections with glued in rods and self-tapping

Action Parties



Grant Holder:

- University of Bath
- Prof Richard Harris
- UK