



**Forests, their Products and Services (FPS)**

### Participating countries

AT, BE, BG, CH, CY, CZ, DE, DK, EL, ES, FI, FR, HR, HU, IE, IT, LT, MK, NL, NO, PL, PT, SI, SE, TR, UK

COST Action no. FP1004

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

2011 | 2015

## Objectives

- The main objective of this Action was to enhance the performance of structural timber products and structures and thereby improve the competitiveness of timber structures
- 2012
  - established the state of research in the three working groups
  - understood the gaps in knowledge in the area of bonded rods
- 2013
  - promoted involvement of early stage researchers
  - moved bonded-rod design towards accepted design rules
  - consolidated of knowledge in use of cross laminated timber (CLT)
- 2014
  - strongly involved industry
  - broaden activities to ESRs
  - included larger structures through timber bridge conference
  - worked with COST Action FP1101 to achieve maximum impact
- 2015
  - disseminated information on the range of topics covered by the COST Action during through its work

## Main Achievements

- Assembly of information on bonded-rod design and presentation at CIB-W18 in Vancouver
- Published design guidelines for bonded rods in COST Action FP1101
- Major CLT Conference at TU Graz - wide industry participation and publication of proceedings
- Published of a series of four ISBN referenced high quality proceedings
- Special edition of European Journal of Wood and Wood Products

## Working Group 1 - connections and structural timber in weak zones

- Sub-group assemblies summary of previous research on bonded-rods. Paper publication
- Three conferences (ESR-biased in Zagreb (2012) and Prague(2014) and Nicosia (2013))

## Working Group 2 - heavy timber structures (timber bridges)

- Cross-Laminated Timber initiative (Graz Conference with publication and training school)
- Joint FP1004/FP1101 timber bridge conference in Biel, Switzerland in 2014

## Working Group 3 – modelling

- Modelling papers included in all conference proceedings
- Training School on modelling mechanical performance of enhanced wood-based systems

## Contact details

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