

Dübendorf / St. Gallen / Thun, 26 September 2006

Experts call for more research in building sector

Innovation boost for construction industry

The Swiss building sector spends too little on research and development – this was the message at a conference held at the Empa Academy in Dübendorf on 20 September. In the quest for solutions, over 70 representatives from business, various universities, research institutes and federal authorities teamed up to launch the new Swiss Construction Technology Platform (SCTP).

Under the umbrella of the Swiss Zukunft Bau (Construction Perspectives) platform, the SCTP will endeavour, in the years ahead, to pinpoint those areas of construction with an acute need for research. The scope of the backlog was clear to all present at the kick-off meeting: though accounting for 10% of Swiss GDP, the building trade remains the back marker among all economic sectors in terms of research and development spending (just 1%).

Empa's role as exemplar

In charge of the new platform is its initiator Peter Richner, Head of Empa's Civil and Mechanical Engineering Department and Board Member of the Zukunft Bau platform. In his view, the SCTP's mission is "to break the present stagnation and clear the way for a major leap forward". Given its wide-ranging research partnerships with the construction industry, Empa is poised to play a pivotal role in the new think tank.

Opening the SCTP kick-off meeting, Hansjürg Leibundgut from the Swiss Federal Institute of Technology (ETH) in Zurich and also a Zukunft Bau Board Member, described the first step: "The indispensable catalyst for change in the building sector is the realization that modernization potential exists." He was convinced that the construction industry posed major obstacles to the achievement of economic sustainability and trusted that, through the SCTP's efforts, research in this area would attain higher priority in the political and business communities.

The ultimate goal was to co-ordinate the SCTP's work with that of its European counterpart, the European Construction Technology Platform (ECTP), which addresses the same issues at EU level. The two transfer platforms will now proceed to develop concrete proposals for seven focus areas, following the formulation of a European "Vision 2030", on which experts from Switzerland also collaborated.

Sustainability through innovation

The key issues from the EU's perspective were enumerated by Christophe Lesniak, Member of the European Commission: "The construction sector must redouble its efforts in satisfying customer needs, improving sustainability and promoting innovation." The representative from the EU's highest executive body is certain that the national platforms now established in over 20 countries will succeed in boosting R&D performance in the building industry. Jesús Rodríguez Santiago, Chairman of the ECTP Support Group, was equally confident: "The national platforms are crucial for the development and implementation of new ideas." Yet, he was quick to underline the paramount importance for success of a smooth collaboration between the individual national platforms and with the EU Commission.

In workshops dealing with the seven focus areas, experts singled out the issues of particular relevance to the Swiss construction sector. The "Cities and Buildings" focus group, for instance, identified the need for research into strategies for renewable energy supply to urban districts. Borrowing the widely established principle of minimally invasive surgery from medicine, the "Networks" group plans to develop solutions for laying mains without ripping up whole streets. At the same time, the "Underground Construction" forum will look into ways of increasing the proportion of buried infrastructure as a means of providing more open spaces above ground. The other focus groups – "Quality of Life", "Materials", "Cultural Heritage" and "Processes and ICTs" – have likewise defined potentially fruitful areas of practice-oriented research. The draft proposals are designed to spawn a wealth of research collaborations, thereby providing a fillip both to the Swiss building trade and to Switzerland's standing as a centre of research.

In his final statement, SCTP Head Peter Richner welcomed the positive feedback from all sides and hailed the new platform as a driving force for more research and development in the construction sector. "We must endeavour to translate our discussions into concrete projects as soon as possible." He expressed his hope both for higher levels of research investment on the part of construction companies, SMEs in particular, and for an increasing number of partnerships forged between research institutes and the building industry.

Author: Lukas Herzog

Further details of the event are available at www.zukunftbau.ch

Technical enquiries

Dr Peter Richner, Zukunft Bau platform / Head of Civil and Mechanical Engineering Department, tel. 41 44 823 41 40, peter.richner@empa.ch

Editor and contact for photos

Sabine Voser, Communications Dpt., tel. +41 44 823 45 99, sabine.voser@empa.ch



Empa Departmental Head Peter Richner, who is in charge of the newly formed Swiss Construction Technology Platform, stresses the need for more research in the construction sector.



At the inauguration of the Swiss Construction Technology Platform, Christophe Lesniak from the EU Commission called upon the building industry to target greater innovation.