Position of the Executive Board of Eindhoven University of Technology regarding the Research Assessment of the Department of the Built Environment 2010-2015

The Executive Board of Eindhoven University of Technology commissioned an international peer review of the research of the Department of the Built Environment. The committee who carried out the evaluation consisted of six experts: Prof Uwe Schröder (during site visit replaced by Prof Wim van den Bergh) from RWTH Aachen, Prof John Polak from Imperial College London, Prof Werner Lang from the Technical University of Munich, Prof Philip Block from ETH Zürich and Prof Simon Pepper from the University of Liverpool. The committee was chaired by Prof Gerhard Schmitt from ETH Zürich and supported by secretary Frank Zuijdam from Technopolis.

The areas of expertise of the members covered building physics; history and theory of architecture; architectural design; urban design; structural engineering and design; transportation planning; and information architecture. The assessment covered the period 2010 – 2015. In accordance with the Standard Evaluation Protocol 2015-2021 for Research Assessment in the Netherlands (SEP), the committee’s task was to assess the research on the following criteria: research quality, relevance to society, and viability.

The findings of the assessment committee have been published in the Peer Review Report and published online:
https://www.tue.nl/onderzoek/onderzoeksbeoordelingen/

Scope
The assessment focused on the four research programs of the Department:
• Building Physics and Systems (BPS)
• Design and Decision Support Systems (DDSS)
• Living Cities (LC)
• Structural Design (SD)

The task of the committee was also to assess the design artefacts of the Department (Design Artefact for the Built Environment, DABE).

Design is at the core of the Department, but design artefacts cannot be adequately assessed within the traditional evaluation framework for research. Therefore, the committee was asked to assess the design artefacts on their academic (are they research based?) and societal merits, using other indicators such as inter-subjectivity, transparency, reliability, reflexivity, valorization, etc. It was the first time such an assessment was part of the review of the Department’s
research and it was an experiment. The committee was therefore also asked to comment on this new method used to assess the design quality of design artefacts (in line with methods used at peer institutes).

Findings and recommendations

We list the most important findings and recommendations of the committee:

- The Department has outstanding relevance to society and increasing viability
- The committee is impressed by the quality of the PhDs. The Department has a good system in place for PhD training
- The Department managed to adjust to the system in which only external funding is available. It even increased the total number of PhD researchers
- The Department of the Built Environment contributes positively to the visibility of TU Eindhoven and its world leading groups and individuals improve the ranking of the entire University
- The dean and the management have taken the necessary steps to prepare the Department for the future and have done so in a sustainable way.
- The research programs are well aware of international trends and to a large extend well embedded in world wide networks
- However, the Department could increase excellence and global recognition from more international recruitments of young promising researchers and faculty, increasing long-term viability
- The committee was surprised to see the multitude of levels of strategic themes the researchers have to respond to. There seems some oversteering in the system. The research programs are pushed for alignment, which could reduce curiosity and innovation.
- Make the Smart Cities Centre a beacon of TU/e research and valorization. The Department should have a leading role and enrich it with its values, increasing societal relevance.
- Use the unique position of the Building Physics and Services, the Design Decision Support Systems, the Living Cities, and the Structural Design programs to offer solution strategies for challenges originating from rising sea levels, Urban Heat Island effects, rising noise and pollution emissions and decreasing livability.

The Executive Board of TU/e has accepted the report and its recommendations and wishes to thank the assessment committee for the considerable time and effort it has spent on this assessment. The Executive Board highly appreciates the recognition of the great merits of research within the Department of the Built Environment.