

English summary

The main course of this rapport is to present and analyse the methods of cooperation between architects and construction engineers. The aim of this rapport is to show gains through an earlier, more active involvement of construction engineers in the planning process.

The profession of architects and construction engineers are very old and their parts have, with minor adjustments always been to commonly plan buildings. It would seem quite natural that cooperation is a key ingredient for the end result to be satisfying. Yet, my experience from planning is that many actors are more interested in their own winnings than the end result of the project.

This rapport is mainly based on an extensive case study namely the cooperation with Anneli Andersson in the planning of a centre for freediving by the lake Vättern. Both the planning process and the cooperation itself has been subject of discussion. As a result a deeper understanding in the possible development of the cooperation is achieved.

Which are the critical elements of the planning process? When would the involvement by a construction engineer be most important to achieve better quality and cost efficiency? There are of course numerous different elements in the planning process that would be easier if a more tight cooperation was introduced at an earlier stage but as a result of the case study some of them are more easily identified and can be evolved with small means. Technical discussions are important already in the early planning. The risk otherwise is that re-planning is necessary and the overall cost of the project is increased.

Environment and energy are increasingly more important questions in the building process and the strife to create energy efficiency is important in a cold climate.

Rough energy calculations can be carried out at an early stage of the planning to find other designs that achieve energy efficiency without compromising the vision made by the architect.

According to the interviews, younger architects especially but also younger construction engineers lack knowledge in forming technical details. From that reason critical joints are shown in this rapport.

The main thesis is that the problems regarding cooperation do exist and that it is divided in two. The first part concerns the cooperation itself, the communication between architects and construction engineers. It is obvious that the culture, methods and use of language are different between architects and construction engineers.

The other part concerns the involvement of construction engineers at an early stage of the planning process. Both overall economics and quality could be improved through a more tight cooperation at an early stage of planning.

Together the studies carried out in this rapport shows that there should be no doubt whether the problem with cooperation exists or not, throughout the whole building industry. It should be equally true regarding cooperation between architects and construction engineers.

It should be obvious that both architects and construction engineers are needed for the end result to be satisfying but success is not a fact until the common achievement is the best possible solution.