

CASE-STUDY THE DISABLED PEOPLE'S BUILDING ESTABLISHING COLLABORATION

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This case-study was drawn up as a supplement to the guide on 'Establishing collaboration'. The guide, appendices and case-study can be downloaded free of charge from [www.vaerdibyg.dk](http://www.vaerdibyg.dk).

The case-study is based on interviews with the following people:

**Jesper Boesen** (Disabled People's Organisations Denmark) | **Helen Kristensen** (Rambøll) | **Mette Thiberg** (previously Gottlieb Paludan, now Bascon) | **Erik Vibe Pedersen** (NCC) | **Malene Raagaard Møller** (NCC) | **Per Ravn** (CUBO Architects)

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Photos: **Disabled People's Organisations Denmark** and **NCC** | Layout: **Larsendesign.dk**

Copenhagen, 2012

# THE DISABLED PEOPLE'S BUILDING PROJECT IS BASED ON COLLABORATION

A good lift-off for the collaboration can not only give a construction project a flying start. It can also contribute to a more qualified construction project – and to a better building.

You can check the latter point for yourself by taking a trip to Høje Taastrup, where DPOD inaugurated a new shared home in December 2012 which sets completely new standards for accessibility in the building industry.

As for the first point, all those involved can confirm that it has only been possible to realise the wild ambition to erect the world's most accessible office building because the client insisted on an unusual degree of collaboration on the solution right back in the tendering phase.

As a framework for the tendering procedure, a turnkey contract model was chosen. And from the first invitation to prequalification, the client stipulated a strongly dialogue-based approach. Most unusually, interested architects, engineering firms and contractors were invited to apply for prequalification individually, as the

client himself wanted to assemble the competing teams from companies showing commitment to the task.

Applicants also had to agree that they were prepared to take part in a two-day training workshop and subsequently complete an exercise to enable the client to select three teams for the final competitive procedure.

## A MAN WITH A MISSION

The initiative for the Handicaphuset came from a man with a vision. Which became a mission.

Disabled People's Organisations Denmark (DPOD) could no longer remain in its run-down offices in Hvidovre, and administration manager Jesper Boesen saw potential synergies in moving together with some of SPOD's many member organisations, which previously had offices spread around the country. He presented this idea to the management of DPOD.

They realised that this sort of construction project could be an opportunity. A chance to rethink the whole

## FACTS ABOUT THE DISABLED PEOPLE'S ORGANISATIONS DENMARK BUILDING (HANDICAPHUSET)

DPOD's new home in Høje Taastrup is to house the secretariat for the umbrella organisation Disabled People's Organisations Denmark and 20 or so of its 32 member organisations. Covering approx. 10.000 m<sup>2</sup>, the building will accommodate some 300 staff.

The building is also provided with meeting rooms and facilities for the associations' membership activities, shared projects and voluntary work.

Client: Disabled People's Organisations Denmark, CEO Jesper Boesen

Client adviser: Gottlieb Paludan, with Rambøll and mtre as sub-consultants

Turnkey contractor: NCC, with CUBO (architects), Force 4 (architects), NIRAS (engineers) and Møller & Grønberg (landscaping consultants)

Schedule:

2010: Prequalification, introductory process and tendering procedure. Financing agreement.

2011: Outline proposal and main project. Start of construction.

2012: Construction and handover

concept of accessibility, going beyond ramps and lifts and two-metre wide doors to toilets the size of aircraft hangars. They wanted to get away from the institutional feel and put up an office building that would be completely accessible to all – and in such a way that everyone would feel equally treated.

They wanted to erect the world's most accessible office building. And to have outstanding architecture. And they wanted to use the project to raise awareness of this new approach to accessibility – and also educate the construction industry to adopt it.

A number of foundations backed the idea – and the higher DPOD raised the bar, the more interested the foundations became, as it turned out. Now it was just a matter of finding a way of realising the vision. DPOD approached some client advisers, and Gottlieb Paludan – together with Rambøll and mtre – came up with the idea for a different kind of tendering procedure with built-in courses and learning.

*“If you want people to act differently from the way they usually do, you need a different setup from the usual,”*

says Mette Thiberg from the client advisers.

“It was the right idea at the right time – and we have had a tailwind all the way. But the really crucial thing was that we found absolutely the right concept for how we wanted to involve architects, consulting engineers and contractors in our ambition,” says Jesper Boesen.

## **‘EYE-OPENER’ COURSE KICK-STARTS THE COLLABORATION**

Fifteen companies were invited to tender for the Handicaphuset project. They were also told that the client had grouped them into five teams, each with an architect, a consulting engineer and contractors. They were asked to send no more than six people from each team to an introductory learning workshop a few weeks later.

Some of the teams put their heads together beforehand, while others only met for the first time when they turned up at SBI in Hørsholm on the appointed day for a two-day course on accessibility.

“We wanted to get them out of the ‘habit’ which says that, when it comes to accessibility, we simply refer to SBI’s checklist. Anyone can learn the rules, but our aim was to get them to think about fresh solutions. That is why they had to see for themselves what it means to live with various disabilities,” explains client adviser Mette Thiberg.

So the participants were blindfolded and sent off around the building with a white stick and wished ‘good luck’. They were put in a wheelchair, so they could learn for themselves how hard it is to fight your way up over kerbstones, through revolving doors and around a building. Over two intensive days, architects, engineers and contractors experienced directly what the world is like when you have to live with a disability. An eye-opener, said all those who attended the course, which also served to kick-start the collaboration with-



in the teams, who now had to battle to be among the three invited to tender.

“We quickly gained a common understanding of the task, and the course did a lot to give us this shared mindset, which we expressed in an ‘accessibility manifesto’ – a set of active rules for how to design this building,” explains project architect Per Ravn from CUBO, which took part together with NCC and NIRAS.

## THE ELIMINATION RACE

*“We discovered that it simply does not have to be difficult if you just think about accessibility from the outset. We were totally engrossed in the task, and wanted to qualify ourselves to take part in the tendering,”*

says NCC’s project manager, Erik Vibe Pedersen.

The elimination race was a ‘mini tendering procedure’, in which the five teams were taken to a prize-winning new building. With their new understanding, they were asked to analyse the problematic accessibility (to put it mildly) of the building, and to draw up proposed improvements. Their response – and the client’s perception of the team’s commitment and collaboration – formed the basis for the selection.

“You could call it an advanced form of job interview. Their handling of the competition and the dialogue we held with them gave me a really good impression of the strengths and weaknesses of the teams – and a good basis for assessing whether they were really engaged with what we wanted to do, or whether they just wanted to help construct a big, expensive building,” observes Jesper Boesen.

*“At the same time, we got a fantastic insight into how they worked together, and that is something you should never underestimate. It doesn’t matter how technically competent people are if they can’t manage to work with others.”*

Architect Per Ravn from the winning team agrees: “We quickly got together and established really good collaboration. It turned out to be very important – not at least to meet the client’s intention to have the contractor, the engineer and the architect thinking about the task together.”

## PROGRESS IS A SHARED RESPONSIBILITY

One thing all of the three teams selected submitting proposals in the tendering procedure did master, was collaboration. They all approached the task of developing the world’s most accessible building with monumental commitment.

The unusual tendering procedure had worked as intended. It succeeded in qualifying the competing bidders, and in convincing architects, engineers and contractors of the client’s vision.

NCC, with CUBO, NIRAS, Force4 and Møller & Grønborg, drew the longest straw. A few months then passed while the client got the final financing into place, but just before Christmas 2010, the turnkey contract was signed. Right after New Year, the contractor invited his partners and the client to a kick-off workshop to agree on the basis for the future process – and to ensure that the good collaboration would continue through design and construction.

*“We were very keen that the spirit and commitment that had characterised the team in the tendering phase should be carried forward into the process of designing and constructing the building. That is why we invited everybody to a kick-off workshop.”*

“The planning team, the client and his consultants, representatives of the Accessibility group and our own key people, including the production manager who was to manage the site,” recalls Malene Raagaard Møller, senior development manager at NCC Construction.

## CONSTRUCTIVE BASIS FOR COLLABORATION

The workshop had two purposes. First, to introduce the new people who were to assist in the main design and construction to the values of the project and the client. And secondly, to agree on the framework for future collaboration, define milestones and success criteria and generally reach all the necessary agreements to ensure that the good collaboration could continue, albeit now within the turnkey contract.

“We were always driven by our desire to make it as good as possible, because we had become so committed to the task. But the fact that we established a good basis for continued collaboration was definitely one reason why it went so well.

*“The rules we agreed on are not really that different from those we normally work to. They are simple principles, but they work. An agreement that progress is everybody’s responsibility means that everyone is part of the solution – not a possible problem. That promotes constructive dialogue,”*

says NCC’s project manager, Erik Vibe Pedersen.

Within the design team, people made an effort to bring the new team members up to speed with the bidding team before starting work on the outline proposal and the main design. The white stick and wheelchair were retrieved again, and everyone took their turn.

“It was nothing like a normal turnkey contract,” says Erik Vibe Pedersen. “It wasn’t partnering ether, but we had a collaboration agreement and, in many ways, it worked like a partnering exercise, although formally it was not.”

## GROUND RULES ALONE ARE NOT ENOUGH

The concrete workers were also introduced to the idea of accessibility when NCC started site work next to Høje Taastrup station in the autumn of 2011.

“After all, what matters is what you actually do on the site – whether you are cutting stones or building a cathedral. When you have tried for yourself being sat in a wheelchair, then you can really identify with the problem. Accessibility is an easy value to communicate; who would not want to help to make life a bit easier for people with disabilities, once they have had it explained?” says Erik Vibe Pedersen.

“When you have done so much to design it right, as we have here, you can’t let it be destroyed by a paver who thinks he should make a kerb because there is usually one. That’s why we worked so hard to carry forward the understanding that we ourselves gained in the tendering phase onto the construction site,” explains Malene Raagaard Møller, senior development manager at NCC Construction.

NCC made an effort to maintain the focus on the project values and to follow up on the agreed success criteria. The architect, Per Ravn, was there to explain to the workers why the building looks as it does – that the atrium is pentagonal so blind people can find their way by counting angles, for example. And the client, Jesper Boesen, also visited to explain the intentions behind the building to the workers.

*“Documents with ground rules and success criteria do not work by themselves. It was invaluable to us that the client has a front man in Jesper who really understood how to engage everyone around him in his vision and his mission. He radiates commitment and credibility, and when he turns up on site, people really listen,”*

says Erik Vibe Pedersen.



## FROM TRUST TO LEGAL ACTION – AND BACK

However, this good collaboration was put to the test when the heavens opened in the summer of 2011 and made work on site impossible for weeks – at a critical stage of the project. Costly preventive measures were necessary, and the already tight schedule slipped. Suddenly the parties started arguing about liability – and rather a substantial amount.

“It was a bit of a shock”, says Jesper Boesen. “We had become very close and felt we were on a shared mission. It was a huge step forward. But when you then end up in a conflict situation, it hits you that much harder. Wait a minute, how could we disagree like that?”

“It taught me that when you enter into a dialogue-based and involving process, you must be really clear in your mind from the outset about how you intend to handle conflicts. Because they will come – the contractor needs to earn money and the client wants the best possible building for the lowest possible price. That’s in the nature of things. We had agreed on rules for conflict

handling, but had not done a good enough job of defining them. So it got rather strange, and more emotional than necessary. But we got a grip on it and settled the matter,” recalls Jesper Boesen.

“This was a real acid test of the collaboration. On other projects things could have turned out quite differently,” thinks NCC’s Erik Vibe Pedersen

The conflict thus confirmed that all parties had profited from the close value-based collaboration established by the client’s innovative approach to the tendering procedure.

*“I really do think we are getting better quality than we are paying for because we have established this fantastic commitment from our consultants and contractors.”*

“We have got a lot of things in the package that we would not have obtained if we had not managed to make them understand our intentions – and to rise to the challenge,” says Jesper Boesen.



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