

PARTNERING IN STATSBYGG

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ABSTRACT

To address the adversarial culture of the construction industry, partnering is used as a mean to create a collaborative and flexible building process where each partner achieves their business objectives.

This paper identifies which partnering elements - understood as contractual elements included in order to create win-win situations for the contracting parties - a large Norwegian public client – Statsbygg - has used in their partnering projects. Based on findings the article recommends which elements that should be used in future Statsbygg as well as other partnering projects.

The recommendations include elements such as; early involvement of design-builder, key subcontractors and consultants, value based procurement, an intentional agreement, target cost with bonus/malus incentives, open book economy, partnering charter, continuous workshops, partnering measurements, co-localisation, partnering champions, external facilitators, a predetermined method of dispute resolution, and a contractual right to remove unsuitable people.

The methodological approach chosen for our investigation was based on 1) a literature study, 2) the distribution and analysis of a questionnaire, and 3) interviews with professionals having experience with partnering.

The interviewees maintained partnering as an important step in the direction of changing the culture characterizing the Norwegian construction industry to an adversarial to a cooperative value based culture. Partnering is Statsbygg's way of facilitating a lean construction process where less time is wasted on disputes, and more value is added to the project.

KEYWORDS

Partnering, public client, partnering elements, recommendations

INTRODUCTION

The Latham report (1994) identifies the UK construction industry's existing industry practices as adversarial, ineffective, fragmented, and incapable of delivering for its clients. It urged for reform and advocated as well partnering as other manners of collaboration. Today, there is still a widespread acknowledgement that the UK does not get full value and has failed to exploit the potential for public construction and infrastructure projects to drive growth (Cabinet-Office, 2011).

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A report to the Norwegian parliament in 2011-2012 states that fragmentation and adversarial behaviour resulting in a decline in productivity equally characterize the Norwegian construction industry. The report requests a priority on cost efficiency, smart building and improved quality, and upholds the government's role in the development of the construction industry (Stortingsmelding-28, 2012). Statsbygg is the Norwegian Government's key advisor in construction and property affairs, building commissioner, property manager and property developer. One of its five main business objectives for 2011-2015 states that it shall "deliver within budget, on time and to the agreed standard". The matching key strategy for this objective is to "guarantee results through systematic work and continuous improvement". Equally, having a long-term, innovative perspective that contributes to development of the industry Statsbygg should be a role model for the building, construction and property management industry (Statsbygg, 2011). Statsbygg's role as well as their growing portfolio of partnering projects is the reason for their focus in this study.

Statsbygg initiated their partnering effort in 2001 to contribute to a change of the culture from adversarial to cooperative, and give both faster completion and more value for money. In this way partnering is Statsbygg's way of reducing waste and increasing the value of their construction projects. The close link between partnering and lean construction has been much described in the literature. Barlow (1996) stated for instance that partnering itself may have acted as a catalyst for the spread of new work systems in the construction industry. Cain (2004) upholds partnering as a mechanism that enables lean thinking to flourish.

At present time Statsbygg have initiated a total of thirteen partnering projects. Out of these thirteen, five have been completed, two are in the construction phase, two are in the design phase, and four are awaiting finance. This paper identifies the partnering elements Statsbygg has used in their partnering projects, and based on findings recommend which elements should be used in future projects. Understanding these features underline, in our view, the organizational context in which contemporary work organizing efforts need to be able to operate.

METHOD

The partnering elements investigated in this study were identified in a pre-study, including a literature study and interviews with two senior directors at Statsbygg. The methodological approach was based on 1) a literature study, 2) the distribution and analysis of a questionnaire, and 3) interviews with professionals having experience with partnering in practice. The research was designed in order to include different sources of data, thereby strengthening the analysis as described in Yin (2009).

The literature study carried out was based on a systematic search in internationally recognized databases according to key words such as "partnering", "relational contract", and "target cost". On our request Statsbygg distributed a self-administered questionnaire to each project manager that so far has lead partnering projects in Statsbygg. We selected this approach, since the most appropriate application for a survey is where the participants are uniquely qualified to provide the desired information and that questionnaires let the researchers contact participants who might otherwise be difficult to reach (Blumberg et al., 2011). Six out of thirteen questionnaires were received. It proved difficult to obtain the questionnaires completed from all of Statsbygg's partnering projects, mainly due to the long

timeframe in question, which made four of the project managers unavailable at present time. The interviewer filled out a further three questionnaires based on information given in the interviews. To clarify on some answers in the questionnaire, a follow-up email was sent to some of the interviewees.

A total of eight interviews were carried out based on a semi-structured interview guide as described in Corbin and Strauss (2008). Five project managers from different partnering projects where Statsbygg acted as client were interviewed. Equally, two interviewees from large contracting companies with experience in partnering were interviewed. One of these latter had worked as a project manager with Statsbygg on the initial partnering project. The other was not a project manager, but had experience from various roles on partnering projects with another large public. A last interview was carried out with a senior director with experience from most of the partnering projects at an overview perspective.

The choice to select project managers was based on the presumption that they typically had a general overview over the model as it was intended to work in Statsbygg, as well as hands-on experience in everyday dealings. Interviews with more project managers, sub-contractors, designers, architects, site managers, etc. could have provided deeper insight into the phenomenon. However, due to the limits imposed by a narrow time frame, other interviews have not been conducted at this stage of our research.

THEORETICAL FRAMEWORK

The understanding of partnering has been growing since the 1980s and 1990s – but it is still difficult to define in a clear and unambiguous manner. Bennett and Jayes (1998) defines partnering as “a set of strategic actions which embody the mutual objectives of a number of firms achieved by cooperative decision making aimed at using feedback to continuously improve their joint performance”. Bennet and Jayes (1995;1998) maintain that performance in terms of cost, time, quality, constructability, and a whole range of other criteria can be dramatically improved if participants adopt more collaborative ways of working. During the 1980s, partnering and related forms of collaboration were identified as a way of dealing with the fragmentation that has prevented attempts to improve project performance (NEDO, 1988). Weston and Edward (1993) state that the central objective of partnering is to encourage contracting parties to a more cooperative, team-based approach.

Besides partnering, many other relational project delivery arrangements such as Alliancing, Integrated Project Delivery (IPD), Public Private Partnership, and Joint Venture exist today. None of these arrangements are a clearly defined operational model that cannot be modified (Lahdenperä, 2012). When assessing Statsbygg partnering practice within the context of lean construction, we find the similarities between this practice and IPD relevant. IPD definition task group (2007) defines IPD as “a project delivery method that integrates people, systems, business structures and practices into a process that collaboratively harnesses the talents and insights of all participants to reduce waste and optimize efficiency through all phases of design, fabrication and construction”. IPD is characterized by a contractual agreement between a minimum of the owner, design professional, and builder (Cohen, 2010). It includes shared financial risk and reward based on project outcome, liability waivers, fiscal transparency, and early involvement of key participants, intensified design,

jointly developed project target criteria, and collaborative decision-making. The catalysts for IPD are listed as a multi-party agreement, building information modeling, lean design and construction, and co-location of team (NASFA et al. 2010). Within Statsbygg practice, IPD has not been used, rather partnering has been applied in order to achieve similar effects. While IPD includes lean design and construction and building information modeling as mandatory elements, partnering merely facilitate such efforts by establishing an arena for teamwork with a win-win culture, and openness and trust between the parties. According to Naoum (2003), partnering is based in whole or in part on:

- Value-based procurement: Value can only be truly assessed by the client. Thus the client's principal criteria must be set out in the tender documents together with their relative emphasis or ranking, to enable transparency and engender trust.
- Single point responsibility: The fragmentation of design and construction is removed and replaced by teamwork.
- Inter-organizational partnership: A partnership between organizations to achieve common goals is essential to success.
- Means of dispute or issue resolution: In the short term most agree that there should be a predetermined method of resolving problems which is non-adversarial.
- All partnerships should focus on continuous improvement.
- Longer-term relationships instead of project by project: Dealing with a customer over medium to long term, has greater benefits due to shared experience and knowledge.
- Mutual gains for all participants to the process i.e. win-win culture.

Such a non-essential approach to the phenomena reveals in fact a sound skepticism to strict terminological limitations. An ultimate hope of standardizing a 'best practice' partnering model may be somewhat misplaced. Rather, the real benefits can be achieved through customizing partnering, based upon salient local conditions (Bresnen and Marshall, 2000). To address the complexity of the term we in the following base our analysis on a minimum definition of partnering as "contractual elements included in order to create win-win situations for the contracting parties".

Numerous publications address the benefits of partnering and the results achieved. Bennett and Jayes (1998) divide partnering into three generations based on the level of integration and sophistication. The basic approach, with mutual objectives, joint decision-making, and measurable continuous improvement from project to project produces a range of benefits on individual projects (Project Partnering). Far more significant benefits can be achieved when applied to a series of projects (Strategic Partnering). The benefits of project partnering include faster construction times, improved quality, less litigation, improved safety, better teamwork, more innovation and cost savings of 30%. A second generation strategic approach can deliver cost savings of up to 40% and reduce timeframes by 50% or more. A third generation is a vision of delivering cost saving of 50% and a reduction in timeframes by 80% (Bennet and Jayes, 1998).

Benchmarking of partnering compared with traditional construction show 10 % reduction in total project cost, 83% reduction in number of claims, 20% reduced timeframe, 50% reduction in rework, 80% reduction in change orders, 30% improvement in job satisfaction, and remarkable improvements in safety (Construction Industry Institute, 1996).

Ng et al. (2002) maintain that the majority of problematic issues experienced in project partnering arrangements stem from the actual commitment to the attitudinal change and procedural implementation required. As the clients are in the position of head facilitator in the arrangement, they must take a leadership role, and ensure that they are fully committed to compromise. The client should ensure that contractors have an adequate level of understanding of the partnering concept and what is required for its successful implementation. Where any or all stakeholders lack experience in partnering, an independent facilitator could be employed throughout the entire project.

Premature insistence on the presence of inter-organizational trust as a precursor to collaborative behavior between owner and contractor may actually be fatal to the development of a successful partnering relationship. Partnering is a process with great stress being laid upon trust-building activities. Therefore, partnering workshops need to be continuous and not once-off at the project start (Lazar, 2000). The arrangement accepts that problems will be resolved without recourse to legal remedies but through joint problem solving. While the environment does deliver mutual benefits it falls short of guaranteeing that each party will equally benefit (Walker et al., 2002).

FINDINGS AND DISCUSSION

The partnering model in Statsbygg is under development. A central part of this effort consists in an assessment of which elements generate the best process. According to the interviews conducted, senior personnel believe that the model provides more overall value for money and a more rational building process. The main idea is that time can be spent on productive activities, instead of arguing over change orders and placing of blame. There is consensus for the model being more demanding in regards to involvement from both the client and the contractor, and that people with the right mindset is a key prerequisite to its success.

The interviewees maintain that as a main rule, partnering should be considered if the project scope is complex and hard to define. Secondly partnering should be considered when it is believed to be beneficial to develop the project together with the contractors, for instance if there are special difficulties linked to the design and/or production. The interviewees all maintain that rehabilitation is especially suited for partnering due to the models' flexibility regarding scope changes with the embedded ability to solve problems as you go. Many equally stated that a design-build contract typically prove better suited if the project scope is easy to define clearly.

The interviewees underline how you have to take the local contractor situation into account. As partnering is a relatively new concept for the Norwegian construction industry, most regional contractors are not used to work in this manner. The industry is still characterized by a traditional adversarial mindset, which is highly incompatible with the partnering mindset of openness and mutual benefit. Therefore, the interviewees expressed that much thought has to be provided in the selection process of the partners.

Both because Statsbygg is in a trial and error phase when it comes to partnering and because every project is unique, the different elements of the model are customized for each project. Some are used on all the projects, and some have only been tested on a project or two. The elements included in the different partnering projects are presented in table 1.

Table 5: The matrix presents the partnering elements that have been used in 9 different Statsbygg projects.

Included Elements	The National archives	Oslo Court-house	Saemien sijte	Equestrian corps	University in Bergen	College in Sør-Trøndelag	Health-archive in Tynset	College in Gjøvik	The supreme court
Start/finished	March 03/ Sept05	July 05/ Sept 06	Sept 05/ On hold	April06 / July08	Jan 10/ Aug 15	March 11/ Sept13	Nov 11/ On hold	March12/April 14	Feb13/ Jan14
Value-based procurement	X	X	X	X	X	X	X	X	X
Functional description	X	X	X	X	Conceptual design phase as basis for procurement	Conceptual design phase as basis for procurement	X	X	X
Intention agreement before establishment of the target cost	X	X	X	X	X	X	X	X	X
Target cost with bonus/malus	X	X	X	X	X	X	X	X	X
Open book economy	X	X	X	X	X	X	X	X	X
Design-build contract with additional partnering regulations	X	X	X	X	X	X	X	X	X
Startup workshop	X	X	X	X	X	X	X	X	X
Use of a partnering charter	X	X	Unknown	X	X	X	X	X	X
Early involvement of design-builder	X	X	After Outline conceptual design	X	At startup of detailed design phase	At startup of detailed design phase	X	X	
Inclusion of subcontractors in the partnering group	Technical subcontractors	Lighting and Cladding			Technical coordinator	X	Technical subcontractors	Technical subcontractors	
Inclusion of consultants in the partnering group	X	X	X	X	X	Transported to design-builder	X	X	
Inclusion of the architect in the partnering group	X	X	X	X	X	Transported to design-builder	X	X	

Inclusion of subcontractors in bonus/malus			Didn't want to			Didn't want to		X	
Inclusion of consultants in bonus/malus		X	Didn't want to						
Inclusion of the architect in bonus/malus		X	Didn't want to						
Workshops to improve cooperation during the project					X	X	X	X	
Workshop to sum up experiences.	X	X	Some summary		X		X	X	
Measurements during project	Only economy	Only economy			X	X	X	X	
Predetermined method of resolving disputes	Dispute counsel				Dispute counsel			Dispute counsel	
Contractual right to replace people from the project	X	X		X	X	X	X	X	
Contractual right to replace firms from the project				X	X				
Architectural Design Competition with compensation	X								
Colocation of partnering group					X			Partly	
Form of payment, C= Cost plus, F= Fixed prices	F+C	C	C before target cost	C	F+C	About 50/50 F+C	Unknown	Around $\frac{3}{4}$ C+ $\frac{1}{4}$ F	C before target cost

ELEMENTS USED IN EVERY PARTNERING PROJECT

A **Value-based procurement** of a design-builder, a design team and in some cases technical subcontractors are used to procure the best partnering group. The group must have proper knowledge and experience, and understand the partnering idea. The award criteria in the tender documents are customized for each project, but hourly rates and fee percentage of the key participants are always included. This is also in accordance with Egan (1998) who recommends clients and the construction industry to rely less on competitive tendering and formal construction contracts.

The basis for procurement is always a **functional description** of the project. Sometimes the design-builder has been contracted on the basis of work done in the conceptual design phase¹.

After procurement an **intention agreement** is signed, and the group work is based on hourly fees. This agreement last until a mutually agreed target cost is established. The client can abort the project at any time, pay the group for their efforts, and keep the project material.

The **target cost with bonus/malus** is used in every Statsbygg partnering project. The target cost is landed after a negotiation, where both parties should be content with the pricing of the project and the incorporated risk reserve. The negotiations are considered to be difficult, as the design-builder will have unilateral incentives for adding as much risk premium and profit to the prices as possible. However, after the target cost is landed the design-builder has a strong incentive to chase best possible deals with subcontractors and increase productivity.

At the end of the project, everything between the target cost and the actual cost is shared 50/50 between the contract parties. Statsbygg uses an **open book economy** in all their partnering projects. With an open book economy, the client can see where money is spent, something considered by the interviewees to be an important basis for trust. The interviewees state that there are more rational discussions concerning changes in partnering than in a traditional project, and that focus is on how to find solutions to problems efficiently.

Statsbygg always use a standardized **design-build contract (NS8407) with additional partnering regulations**. The design-builder is their only contractual partner in the partnering projects.

A **startup workshop** is held in each partnering project. Here, the parties do teambuilding activities and sign a **partnering charter with** the goals for the process and the project. The charter is then hung up in each project office as a reminder.

ELEMENTS USED IN SOME PARTNERING PROJECTS

At what stage the design-builder is contracted varies from right after the feasibility study or after outline of the conceptual design, to startup of detailed design phase. Most of the interviewees emphasized the importance of **early involvement of the design-builder**. Getting the design-builders competence in constructability involved at an early stage, makes it easier to jump straight to the right solution instead

¹ Statsbygg operates with own definitions of the phases in the building process, notably feasibility study, conceptual design phase, detailed design phase, and construction and operational phase. The conceptual design phase can be split into outline conceptual design and full conceptual design.

of having lots of costly design iterations. Early involvement also provides the contractor with a greater sense of ownership to the project. By requesting **early involvement of the technical subcontractors** (particularly on electrical and ventilation works), they can participate in the initial partnering group and contribute to constructability within their respective disciplines. There is consensus among the interviewees that the benefits of early involvement of the contractors greatly overshadow the extra cost.

To some degree, different participants are included in **the partnering group**. The client and the user committee are always part of the partnering group. In most projects the partnering group includes the design-builder with his design team of consultants and architects. In some projects key subcontractors also participated.

Inclusion of the subcontractors in the bonus/malus: Two of the examined Statsbygg partnering projects included the technical subcontractors in the bonus/malus. It was up to the design-builders to decide whether or not to include the subcontractors in the bonus/malus. One of the interviewees upholds that this inclusion strengthens the partnering arrangement, and that it in some cases should be considered mandatory. Yet - when given the choice – many subcontractors choose to stay out of this arrangement because of the risk and that they do not want to reveal their figures according to the open book arrangement. It is recommended in literature to include the key subcontractors as well as consultants in the bonus/malus, as it has been adopted in some of the most successful partnering arrangements (Naoum, 2003). **Consultants and the architect have only been included in bonus/malus** in one partnering project in Statsbygg. It was maintained by one of the interviewees that if they were included they would have a stronger ownership to the project's overall success, as well as be discouraged to overspend hours on the project. Some of the interviewees point out that there are not many consultants with financial solidity to be part of a substantial malus, so therefore they usually decline.

Workshops to improve cooperation during the project and a **workshop to sum up experiences** are used in roughly half of Statsbygg's partnering projects. The interviewees that regularly used workshops emphasized the importance of openness, trust, and communication to maintain a functional partnership. There should be an efficient monitoring of team goals throughout the project to ensure that stakeholders' commitment is strong, and if not, procedures should be implemented to improve the situation (Ng et.al 2002). In some of the latest projects, Statsbygg initiated **measurements during project** on the partnering spirit among the participants. The measurements were related to cooperation, openness, honesty, trust, response times, attitude towards dealing with uncertainty, communication-flow with informal contact, attitudes towards profitability for all parties, work environment and job satisfaction, and everyone's active contribution. The project managers responsible for this initiative considered it critical to maintain focus on the partnering idea over time. Feedback and continuous improvement is one of the key elements of partnering (Naoum, 2003), and by measuring the project managers know if they are on the right track or if they are falling back into adversarial habits.

Statsbygg uses a **predetermined method of resolving disputes** that says disputes shall be resolved at the lowest possible level. In addition, some projects have established a dispute counsel where senior management from each firm meets regularly to resolve issues that need to be elevated above project level. Ng et al. (2002)

found that a preparedness to address problems quickly at the lowest possible level will promote effective project partnering.

A contractual right to replace people from the project was used in seven out of nine projects. The interviewees emphasized the importance of the people in the partnering projects. Participants should be open-minded, solution oriented and able to communicate clearly without hidden agendas. To remove a person that undermines the partnering ideas can be smart at the time, but will leave a gap in the project information history.

A contractual right to replace firms from the project was used in two of nine projects, but none of the interviewees had any experience from use of this.

In two of the initial partnering projects, an **architectural design competition** with compensation for design proposals was used in the procurement process. Even though Statsbygg has good experiences with this, design competitions have not been used in the latest projects due to the belief that things would work out by themselves when the right team was appointed. In retrospect, design competition was considered as a good approach for producing the best project solutions.

Only one of the partnering projects has a full **colocation of the partnering group**. The project manager on this project emphasizes the importance of face to face communication in order to have a successful partnership. This is also upheld in the literature as the most effective form of communication (Cockburn, 2002).

Form of payment: The interviewees maintained that when using an open book along with a bonus/malus arrangement, a majority of the work should be contracted as cost plus. If subcontractors are not included in the open book nor in the bonus/malus arrangement, the form of payment should be adapted to whether the design-builder or the subcontractor favor management by fixed prices or by cost plus.

ELEMENTS NOT USED IN STATSBYGG'S PARTNERING PROJECTS

The partnering process is sensitive to changes in key staff. Because the partnering process is lubricated by people's close communication and open relationship, it is hard to start from fresh and build up a new relationship, for instance if a key person gets sick or change job position. Therefore, one of the interviewees recommends a **doubling of key personnel** in partnering projects in order to reduce the vulnerability.

In some projects Statsbygg has taken the responsibility for leading the partnering process, while in other projects the design-builder or everyone is considered responsible. Ng et al. (2002) recommends that an **external facilitator** should be used throughout the project if the different stakeholders lack partnering experience. One of the interviewees from a project where neither client nor contractors had any former partnering experience supported this view. The facilitator should ask the proper and often difficult questions necessary to lead the partnering process.

Bennett and Jayes (1998) recommend appointing a **partnering champion** in each firm. The partnering champion is to lead by example, and promote the partnering process in his or her own organization. Partnering champions often have to overcome resistance to change from powerful colleagues responsible for finance, administration, purchasing, etc. By making them aware of the ideas of partnering, they are more likely to join the search for more effective ways of working. The essential internal preparation usually needs to take place in parallel with developing external partnering.

Naoum's (2003) description of the key elements of partnering – listed earlier – corresponds with Statsbygg's partnering efforts, except for Statsbygg's use of project partnering instead of a long term strategic partnering.

There are many similarities between partnering and IPD. Many contractual elements that characterize IPD are also included in the Statsbygg partnering projects. These include shared financial risk and reward, fiscal transparency between key participants, early involvement of key participants, intensified design (to some degree), and jointly developed project target criteria. Elements characterizing IPD that are not included in Statsbygg's partnering projects include liability waivers between key participants, a multi-party agreement, and collaborative decision-making. Thus, IPD goes further than Statsbygg in tying the key participants to the projects goals.

RECOMMENDATIONS

Based on findings from the literature study, interviews and questionnaires, our recommendations for future partnering projects in Statsbygg as well as for other clients are listed in table 2.

Table 6: Recommended elements for future partnering projects.

Elements	Recommendation
Value-based procurement	X
Functional description	X
Intention agreement before establishment of the target cost	X
Target cost with bonus/malus	X
Open book economy	X
Design-build contract with additional partnering regulations	X
Startup workshop	X
Use of a partnering charter	X
Early involvement of design-builder	X
Inclusion of subcontractors in the partnering group	At least the technical subcontractors
Inclusion of consultants in the partnering group	X
Inclusion of the architect in the partnering group	X
Inclusion of subcontractors in bonus/malus	X
Inclusion of consultants in bonus/malus	X
Inclusion of the architect in bonus/malus	X
Workshops to improve cooperation during the project	X
Workshop to sum up experiences.	X
Measurements during project	X
Predetermined method of resolving disputes	Dispute counsel
Contractual right to replace people from the project	X
Contractual right to replace firms from the project	X
Architectural Design Competition with compensation	X
Colocation of partnering group	X
Form of payment for subcontractors, C = Cost plus, F = Fixed prices	C>F

Additionally we recommend the use of an external facilitator when the parties lack experience with partnering, a doubling of key personnel, and that each organization appoints a partnering champion responsible for promoting the partnering process in his or her own organization.

Based on the categorization of elements from the partnering initiatives as utilized by Statsbygg, the major advantages and potential pitfalls of partnering as experienced by the interviewees can be summarized as follows:

ADVANTAGES OF PARTNERING

- The client can utilize the design-builder's competence in constructability early in the design process, and hence eliminating a lot of re-design.
- The client can utilize the subcontractor's competence in the latest technology in the market, often resulting in smart solutions to problems.
- The client, users, design team, design-builder, and subcontractors design the building together, committing the parties more to the end product.
- It is easier to change and adjust the project scope during the process.
- Reduced number of conflicts and litigations
- A positive work environment.
- Better communication flow
- Reduced uncertainty of the project cost at an early stage
- Closer involvement of the users, preventing changes and last minute re-design.

POTENTIAL PITFALLS OF PARTNERING

- Partnering is demanding for the client. The client has to be more active and use more resources than they would with another project delivery system.
- There is a risk of failure if the cooperation fails or the target cost is not reached.
- The partnering ideas are dependent of top management support.
- It is difficult to set a fair target cost.
- Few contractors fully understand the concept. Often the process of teaching people how to partner starts afresh for each project. That a firm has previous experience in partnering does not necessarily mean that the key persons offered to the project have experience in partnering.
- Partnering success depends on the participants, and is vulnerable for changes in key staff.

Partnering is still a rather new concept in the Norwegian construction industry, but the use of partnering is increasing. The interviewees uphold partnering as an important step towards a cooperative culture. However, this cultural change will not occur overnight. Partnering is Statsbygg's way of facilitating a lean construction process where less time is wasted on disputes, and more value is added to the project. The partnering efforts have been successful from Statsbygg's point of view, and partnering elements will be used in future projects when suitable. IPD may be considered as the next logical step in creating further win-win situations for the participants in future projects.

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