



Concept Symposium 2018

Governing Megaprojects – Why, What and How

Contract Strategies Road and Rail – Similarities and Differences Norway and Sweden

Different contract strategies with early involvement of the contractors are all the rage in Norway these days, led not least by new entities like Nye Veier. From the basis of our experience as advisors to public entities such as Statens vegvesen, as KS2-consultants under the Governments Quality assurance program in Norway and as both consultants and designers of solutions in Sweden, we discuss usage and trends, advantages and pitfalls, focusing on similarities and differences between the two countries.

Speakers are Simen Olstad, partner in Concreto, and Bengt Hansson, Head of business Land and construction in Tyrens of Sweden.



Simen Olstad

Partner
Concreto
Norway

The Concept Symposia on Project Governance

The Norwegian Ministry of Finance and the Concept Research Program hosts every second year a symposium on project Governance. Project governance, in brief, is concerned about investments and their outcome and long-term effects. In view of the problem at hand, the aim is to ensure that the best conceptual solution is chosen, that resources are used efficiently and anticipated effects realized. Resource persons from ministries, governmental agencies, academia, international organizations, and industry are invited. In order to facilitate professional exchange and direct communication between participants, the number of individuals is restricted. The aim is to initiate further international cooperation and research on important issues related to project governance.

<https://www.ntnu.edu/concept/concept-symposium>

CONCEPT SYMPOSIUM

SESSION 5 PROJECT IMPLEMENTATION STRATEGIES

**Contract strategies for rail and road –
similarities and differences Norway and Sweden**

Bengt Hansson – Tyrens

Simen Olstad – Concreto



For this presentation, not focusing on:

- The number of contracts within a project
- Contract sizes and the markets ability to absorb these
- Contract formats (example NS8407 vs NTK)
- Requirements (which ones and what level), evaluation critieria (prize), requirements on contractor, details and descriptions in the tender etc.
- General terms of the contract
- Organization, training, digital tools, registres etc.
- The quality and scope of descriptions are vital either way:
 - Too much vs. too little (NS 3420)
 - How far to go in detailing by BH?
 - Spesific solutions vs. functionality

CHOICES, CHOICES ...

Build according to spec.

Utførelsesentrepriser –
Execution contracts

Hovedentrepriser og
generalentrepriser –
General contract

Design-and-build (DAB)

Totalentreprise TE – DAB

OPS – PPP

Samspillsentrepriser – partnership
contacts

CHOICES, CHOICES ...

Build according to spec.

Utførelsesentrepriser –
Execution contracts

Hovedentrepriser
general contract
General contract

Design-and-build (DAB)

Build according to spec.

- Usually more contracts and interfaces to manage for BH
- BH controlling the design- and engineering process, greater flexibility for change, but also time- and resource consuming
- Responsibility for interface between design and build

Entrepriser TE – DAB

OPS – PPP

Entrepriser – partnership
contracts

CHOICES, CHOICES ...

Design-and-build/partnerships

- One/fewer contracts, less interfaces to manage – risk
- Design phase done by contractor, based on spec. by BH
 - A precise description gives better pricing and, probably, less haggling
 - Compete on their solution and project plan
 - Contractors using their experience, more freedom to influence the project, the technical solutions and the way to build
- The contractor can see more/all of the project in its entirety, and plan and execute accordingly
- Changes according to contractual obligations and terms

Design-and-build (DAB)

Totalentreprise TE – DAB

OPS – PPP

Samspillsentrepriser – partnership
contacts

CHOICES, CHOICES ...

Build according to spec.

Utførelsesentrepriser –
Execution contracts

Hovedentrepriser og
generalentrepriser –
General contract

*Samhandlingsprosesser – interaction within
contacts*

Design-and-build (DAB)

Totalentreprise TE – DAB

OPS – PPP

Samspillsentrepriser – partnership
contacts

TRADITIONALLY ...

Execution contacts

Traditionally considered suited when:

- Large uncertainties with user and/or surroundings and/or the design itself – projects prone for changes
- Formålsbygg – not off-the-shelf solutions, need thorough design process and long anchoring processes
- Strong and experienced BH
- Historically the usual way of governing large public projects

Design-and-build DAB / partnerships

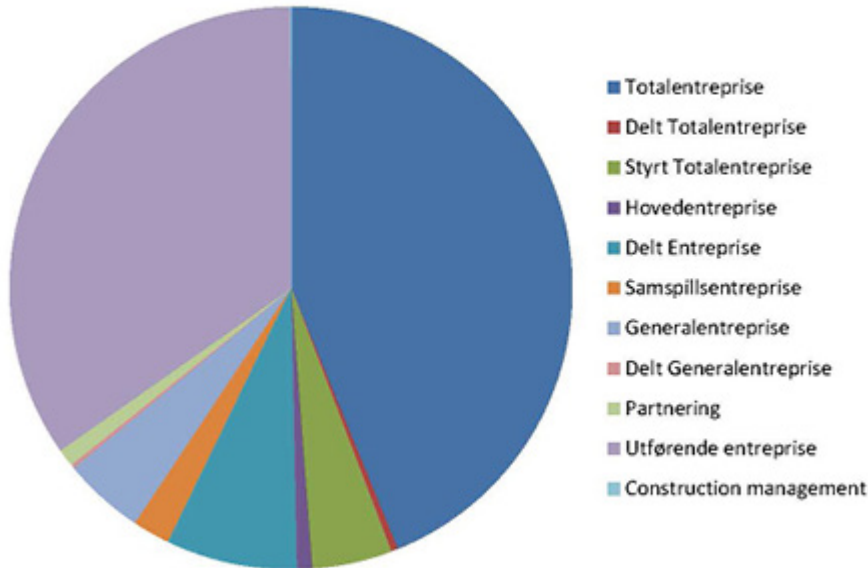
Traditionally considered suited when:

- Easier project – knowing what you order
- Faster and cheaper – keep it simple, “freeze” scope, standardisation when right circumstances
- BH as a professional commissioning organization, based on a spec.
- Lesser room for conflict BH and contractor – more settled framework for responsibilities

BUT TIMES THEY ARE A CHANGING' – DAB AND PARTNERSHIPS

- Byggfakta.no (2015) – Norge:

Andel pr entrepriseform



- DAB (TE) biggest in the overall marked
 - Private
 - Semi-public entities like Entra
- Nye Veier – DAB/TE. Trying out partnership contracts (IPL) as well
- Bane NOR
- Statens vegvesen – goal 10-15 pst DAB
- Statsbygg
- The municipality of Oslo

SOME ELEMENTS IN A DISCUSSION – DAB/PARTNERSHIPS

- Benefits – potential and/or real with DAB or partnership contracts:
 - Lower costs
 - Faster project implementation
 - Lower level of conflict
 - Higher quality – innovation, see the different elements together and in context
 - Health and safety in project
- A new equilibrium?
 - How much freedom in practice? (Håndbøger, normaler og prosesskoder; signaling in rail, users in general)
 - The extent, scope and interfaces and dependencies of BHs own contracts outside of DAB – responsibility
 - When involvement of the contractor takes place, and on what terms and framework?
 - Conceptual vs. technical?
 - Level of design from the BH in advance (too much vs. too little)
 - Markets; what to they want? Incentives?
 - Partnerships and the Stockholm syndrom?
 - Partnerships needs to be a contract that requires **effort by all parties** in the contractual obligations
 - KS2 – part one, part two

LOOK TO SWEDEN

A closer peak at the experiences of Sweden

Tre deler i Bengts presentasjon:

- *1980-2000-tallet; hvordan de gjorde det i Sverige*
- *Kriteriematrise for valg av kontraktsstrategi*
- *Status og utvikling nå*



Bengt Hansson

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CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

- Topics
 - Experiences from the 1990s to the present day
 - What lessons have we learned?
 - The Swedish Transport Administration(Trafikverket) process to select business formats
 - Co-operation – the solution to complex and uncertain Projects in Sweden.

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

THE SITUATION AT THE BEGINNING OF THE 1990s

- In-House-Management to a large extent (both design and construction). Operation and maintenance entirely in-house.
- Difficulties establishing a knowledge base in the industry due to a limited market.
- Few players in the field of total works. Lack of competition, suspicion regarding rigging of tenders (e.g. the asphalt cartel).

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

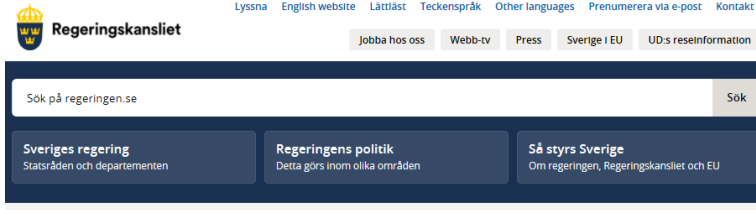
DEVELOPMENTS 1990 - 2000



- The Road Administration and the Rail Administration transform into managing organisations in the beginning of the 90s. Design and construction activities are separated from the managing organisations.
- During the 90s the market size increased thanks to the Big City Packages (e.g. the Dennis Package in Stockholm)
- Lack of experience in handling major complex construction projects on behalf of the Road and Rail Administrations.
- Unit price/ built contracts constitute the absolute majority.
- Several cases of low bids led to ensuing commercial litigation.
- Delays, grossly exceeded budgets, and certain instances of quality issues (e.g. the Hallandsåsen, and Södra länken projects).

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

DEVELOPMENT 2000 – 2010



"Skärpning gubbar! Om konkurrensen, kvaliteten, kostnaderna och kompetensen i byggsektorn"

ID-nummer: SOU 2002:115

Ansvarig: [Näringsdepartementet](#)

- The notion of co-operation is introduced as a common tool intending to resolve the problems at hand.
- Government decrees regarding major projects (> SEK500m, 2008). The "Method of Progression" (Successivmetoden) is to be applied, steering committees are introduced, reporting format improved.

FIA - Förnyelse i anläggningsbranschen  Följ FIA - Förnyelse

Många vill ha en förändring

Pressmeddelande • Jun 19, 2007 13:22 CEST

Det har funnits en välgrundad misstro mot bygg- och anläggningsbranschen. Det menar FIA:s ordförande Åsa Söderström Jerring.
-Men nu är vi på rätt väg. Det här är en otroligt förändringsbenägen bransch som oerhört snabbt när det väl behövs.

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

DEVELOPMENT 2010 - 2018

- The Swedish Transport Administration is founded in 2010
- Clear mandate from the Government to enhance industry productivity and innovation
- More design and built contract, target c. 50 % of commissioned work

Renodlad beställarroll

– ett förhållningssätt där vi skapar förutsättningar för marknaden att...



CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

DEVELOPMENT 2010 - 2018

- Systematic co-operation at different levels compulsory throughout all projects. The degree of co-operation varies depending on project size and complexity.
- Various types of bonuses are introduced to promote co-operation and efficiency.
- Increase in international co-operation through e.g. the tendering network Netlipse (NETwork for Large Infrastructure ProjectS in Europe) and with the Rijkswaterstaat (the Swedish Transport Agency equivalent in the Netherlands).



CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

- What lessons have we learned?
 - The parties understand the motivations one another
 - Clear demarcation of roles and responsibilities in the projects
 - Co-operation is for mutual benefit to all
 - Degree of co-operation to be dictated by actual needs
 - Trust
 - Positive deviation compared to the National Plan for Major Projects: -5%, equivalent to SEK4.3bn.

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

- The Swedish Transport Administration choice of business format

Entreprenadupphandlingar

Hur kan byggherrar främja effektivitet och innovation
genom lämpliga upphandlingsstrategier?

**Business formats for design and construct
contracts which are commonly applied by the
Swedish Transport Agency:**

TRV E1 till E6

Uppdragsforskningsrapport 2014:4

En rapport skriven av
Per Erik Eriksson och John Hane
på uppdrag av Konkurrensverket

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

TRV E6. Complex works with a high degree of uncertainty

	Focus on Competition		
	Focus on Co-operation		
Type of Works	Design and built contract. Execution responsibility of the contractor (ABT)	Co-operation in addition to ABT regarding design. Turn-key contract. Design responsibility of the contractor (ABT). Transport Administration acts as advisor	More in-depth co-operation regarding design through "Early Contractor Involvement" (ECI/TEM). Distribution of responsibilities e.g. through early tendering based on ABK or ABT
	Built contract. (AB)	Co-operation in addition to AB regarding design. Execution contract. Design responsibility of the employer (AB). Employer is advisor.	Choice of form for total works at a later stage becomes evident from Co-operation high degree.
Remuneration Formula	Fixed price with or without quantity adjustments	Cost price principle (cost plus) with remuneration form incentives and target price	Cost price principle (cost plus). Potentially with fixed fee for the contractor and/or a bonus for achieved quality aspects.
Tendering Procedure	Open and negotiated tendering. Also simplified below the threshold amount.	Selective and negotiated tendering. Selection even below threshold amount.	Selective, negotiated tender, competitive dialogue. Selection even below threshold amount.
	No limitations with regards to bidders. Multiple tenders.	Limited to qualified bidders. Fewer tenders.	Limitation of number of bidders.
Evaluation of Tenders	Main focus is price	Focus on quality and price.	Main focus on quality.
Form of Co-operation		Co-operation in line with the Swedish Transport Agency basic requirements	Co-operation in line with the Swedish Transport Agency strict requirements, multiple co-operation activities

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

- High degree of co-operation – the solution to complex and uncertain projects in Sweden.

” Co-operation with regards to total works should result in good relationships, efficient and elaborate working procedures, an innovative and solution orientated climate and attainment of the stipulated targets with regards to quality, time and cost for the project.”

”The business format is suitable for large and complex projects where teams consisting of employer, contractor and designer co-operate to gain enhanced understanding of requirements, develop innovative solutions, plan and mitigate risks, in order to jointly work in a production and time efficient manner while reducing cost”

Are we there yet?

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

- Co-operation consists of a number of activities:
 - Co-location
 - Joint target setting
 - Joint risk mitigation
 - Conflict resolution methods
 - Continuous follow-up, improvements and benchmarking
 - Openness regarding topics of similar type
- Will co-operation suffice as a driving force behind construction?
 - Terms of contract
 - Trust
 - Competency, commitment and project management structure
 - All projects develop their own culture – make sure it is a positive one
 - Focus on project in focus regardless of to whom it belongs
 - Unambiguous, clearly communicated and common goals with the project
 - People make the difference

CONTRACT STRATEGIES - ROAD AND RAIL IN SWEDEN

- Thoughts on co-operation – application and results.
 - Strong focus on the contractual conditions and work procedures
 - Less focus on suitability when it comes to staffing. Goes for all parties.
 - Lack of understanding of how own actions affect the degree of trust between the parties
 - I TRV E6. Neutralised the financial aspects – cost plus and rich incentives towards achieving the target price.
 - Important to resolve conflicts, not sweep them under the carpet.
 - ECI/TEM – a financial and organisational challenge for contractors.

