Recent results of pilot projects with a Partnering Approach for German Infrastructure Projects

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Typical situation in the construction market in Germany (1)

- Cost overflows
- High expenses for claim- and anti-claim-management
- Distrust between client and contractors
- Dissatisfied clients
- Growing number of disputes and litigations between client and contractor
- Decrease of know-how ("lowest price")
- Low rate of return and high risk of business failure
Is the relationship between client and contractor cooperative?

80%!
Present situation in the construction market in Germany (3)

Are you comfortable with the present situation?

CHANGE!

- +++
- ++
- +
- 0
- -
- --

 contractor
 client

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Present situation in the construction market in Germany (4)

Win-Win
Elements of Partnering

- Trust
- Choice of partner
- Corporate objectives
- Open Books
- Fair risk distribution
- Feedback / documentation
- Clear decision structures
- Corporate problem solution
- Incentives

Client  Win-Win  Contractor
Limitations for Partnering:

- Tendering Regulations for public projects (D, EU) → public tendering, equal opportunities
- Budgetary Regulations (Treasury) → open competition, “lowest price”
- Legal approval process for public infrastructure projects → public participation

Demands for regulations:

- Acceptance by the Ministry of Transport
- Acceptance by client organizations
- Acceptance by construction companies
- Feasible and thinkable for people (change process!)
Research Partners

- Federal Ministry of Transport
- Clients
- Contractors
- Construction associations

Research Partners include:
- Hessen
- DB
- DEGES
- BVMB
- Zentralverband der Deutschen Bauindustrie

Clients and Contractors are associated with:
- WITTFLD
- OBERMEYER Planen + Beraten GmbH
- Bilfinger Berger
- Balfour Beatty Rail

Research Partners are supported by:
- Deutsche Bahn AG
- Ministry of Transport
Guideline for partnering in infrastructure projects in Germany

• Preamble

• Element 1: Good and clear project specifications

• Element 2: Clear and predefined processes and regulations for project changes

• Element 3: Fair risk handling

• Element 4: Joint data system for data concerning both parties

• Element 5: Clear responsibility on the client and the contractor’s side

• Element 6: Preventive conflict management

• Element 7: Contractual incentive regulations
Preamble & Element 1

Preamble

• Client and contractor assure their willingness to cooperate → Signature

Element 1: Good and clear project specifications

• High level of design quality → project specifications
• Client has to CLEARLY define the project specifications
• Bidder has to assure a complete offer – questioning the client as far as necessary
• Planner as consultant for the contractor
• Site visit obligatory
• Regular project reviews / workshops between client and contractor
Element 3: Fair risk handling

- Fair risk distribution:
  - a) risk to the party, which can manage it best;
  - b) each party must state the risks early, the other party has to bear
- Risk list, starting from the design phase up to the contract phase
- Corporate handling of new risks in the execution phase $\Rightarrow$ risk committee

Element 4: Joint data system for data concerning both parties

- Joint data collection, treatment and documentation
- One project server for all data
- Static data (contract)
- Dynamic data (performance, time schedule, costs, workflow report)

$\Rightarrow$ Joint data = less conflicts
Preventive Conflict Management

Phase 3
Court

Phase 2
Joint Dispute Resolution
Conciliator(s) → Decision

Phase 1b
Strategic Level
Top Management

Operational Level
Project Manager

Trust

Obligatory in Germany
Arbitration agreement in contract

De-escalation model

Workshops
Project culture
Transparency
Partnership
Decision making

Element 6

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Element 7

Contractual incentive regulations

• Project optimization in the contract phase to the client’s benefit

• Additional earning for the contractor (incentives)

• Predefined incentive regulations:
  
  – Reducing costs for equivalent works: sharing the benefit (50/50)
  
  – Shortening of the construction time: bonus
  
  – Quality higher than standard: bonus

• Win-win situation reduces disputes and improves trust
Pilot Projects - Overview

• Construction of a new Motorway with 7 bridges
  – Federal project
  – 8.7 km
  – € 45 Mio.
  – Construction finished in Q2 2013

• Expansion from 2 to 4 lanes of a regional road during ongoing operation
  – State project
  – 1.1 km
  – € 4 Mio.
  – Completed in 2012
What is different from „traditionel“ projects in Germany

1. Site visit obligatory
2. Clarification conference in the bidding phase
3. Knowledge transfer design - realisation
4. Commitment to partnering by the management
5. Risk transparency (risk committee)
6. Regular project reviews / workshops between client and contractor
7. Project optimization in the contract, dispute adjudication included
8. Contractual incentive regulations,
9. Joint data
10. Regulations for responsibility and decisions
Pilot Projects - Experiences

- Good Practices / Lessons Learned concerning client and contractor in joint workshops
- Open communication
- Common risk handling
- More transparency between client and contractor → project data available on the server
- Faster solving of problems
  - Most solutions on project or strategic level
  - 3 solutions by joint dispute board (accepted by both parties)
  - Avoidance of litigation → cost and time saving of long litigation processes
- Enhanced product quality
- Reduction of risks (for the client) by project optimization
- Cost savings by project optimization: € 1 Mio. (2,8%) public money
- Bonus for the contractor: € 800.000
Pilot Projects - Experiences

- But also: difficulties with “living” partnering!
  - Problems in the beginning (change process)
  - Sometimes falling back into “traditional” project execution
  - Disregard of time limitations for project changes
  - No overall use of project data on the server
  - Not all people on both sides “live” partnership
  - Fair risk distribution ....... To improve!
  - Little progress for contract changes

- More exercise, more piloting
Partnership??

Do it better!
Thank you for your attention!
Objectives of the research project

A partnering approach for infrastructure projects in Germany ..... 

- Less conflicts and avoidance of litigations
- Good working atmosphere
- Knowledge transfer
  - between planning and execution
  - between client and contractor
- Project optimization (after contracting)
- Savings of time (faster decisions, less disturbances)
- Savings of money
- Respecting the limitations in Germany
Present situation in the construction market in Germany (3)

Who is the winner of the present situation?

- Contractor: 
  - 50%
  - 40%
  - 30%
  - 20%
  - 10%
  - 0%

- Client: 
  - 50%
  - 40%
  - 30%
  - 20%
  - 10%
  - 0%

Options: cl, co, both, nobody, other
Element 2 & 3

Element 2: Clear and predefined processes and regulations for project changes

• Project change processes with time schedule (who, when, what) as part of the contract
• Predefined requirements for documents and justifications
• Contract change as far as possible before execution
• Proactive detection of necessary changes by client and contractor

Element 3: Fair risk handling

• Fair risk distribution:
  a) risk to the party, which can manage it best;
  b) each party must state the risks early, the other party has to bear
• Risk list, starting from the design phase up to the contract phase
• Corporate handling of new risks in the execution phase → risk committee
Element 4 & 5

Element 4: Joint data systems for data concerning both parties

- Joint data collection, treatment and documentation
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- Static data (contract)
- Dynamic data (performance, time schedule, costs, workflow report)

→ Joint data = less conflicts

Element 5: Clear responsibility on the client and the contractor’s side

- Clear project organization on clients and contractors side
- Duties and responsibilities have to be transparent on both sides
- Linking client and contractor with an open information line

→ Clear responsibility and organization and good information assures quick decisions