

### Welcome!

25. Juni 2025

Innovative Krankenhausplanung – "Rückblick, Aufbruch Zukunft gestalten"

Integrierte Projektabwicklung (IPA) mit Mehrparteienverträgen

Dr. Wolfgang Breyer Fachanwalt für Bau- und Architektenrecht



#### Content

- 1. Analysis of bilateral Contractual Relations
- 2. International Developments
- 3. Development of IPA in Germany
- 4. Multi-Party Contracts (MPC): Project Flow Phase Models
- 5. Organization Decision-making
- 6. Remuneration
- 7. Culture
- 8. Methods

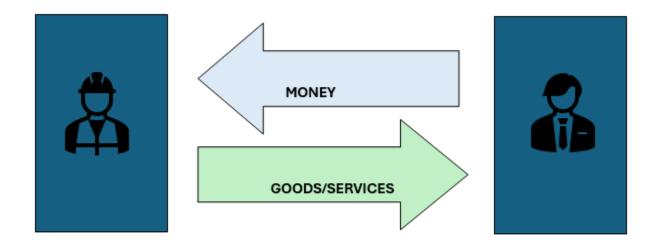


### 1. Analysis of bilateral contractual relations



# Analysis of bilateral contractual relations

Relationship of Exchange





# Analysis of bilateral contractual relations

- Major factor effecting Contractor client relationship is contract – Bi lateral agreement
- Bilateral contracts = Adversarial relationship
- Nature of bilateral contractual relationship: In order to maximize its own profit, Contractor will deliver as little as possible to meet the contractual requirements
- Employer interest exactly the opposite!





# Analysis of Bilateral Contractual Relations

Limitations of traditional project delivery models for complex construction projects But: Purchase contract is also bilateral relationship?

- Example Purchase of a car is a bilateral contract. Purchase price is agreed in exchange for car.
- However, purchaser knows exactly what it is getting when signing the contract as the finished vehicle can be described in 100% detail with 100% certainty
- No room for delivering less than what was agreed

Construction projects (particularly major projects) are:

- Unique
- Have not yet been developed.

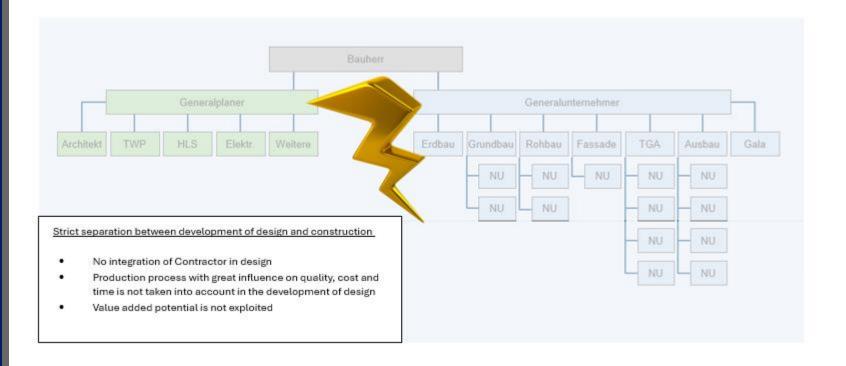
Process of development starts prior to construction and it is impossible to describe the "product" in 100% detail **even after detailed drawing are done** 

Substantial "grey area" and room for interpreation



### Analysis of Bilateral Contractual Relations

Limitations of traditional project delivery models for complex construction projects





### Analysis of Bilateral Contractual Relations

Limitations of traditional project delivery models for complex construction projects

- No incentive for value added
- The objectives of the respective bilateral contract are being pursued in the individual economic interest of the parties involved.
- Financial resources are rigid after conclusion of contract
- Potential to innovate is not leveraged by collaboration between all project participants
- Hierarchal organisation structure complicates communication, decision making and risk management
- Collaboration hindered





The Latham Report - "Constructing the Team" | 1994

Latham identified inefficiencies in the construction industry and condemned existing industry practices as:

"Against each other"

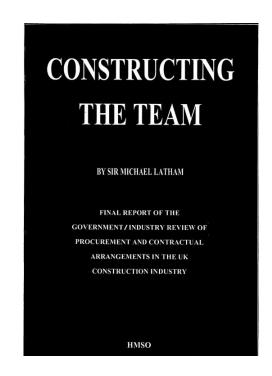
"Ineffective"

"fragmented"

"incapable of meeting customer requests"

"lack of respect for one's own employees"

- Project Partnering Contract (PPC 2000)
- Framework Alliance Contract (FAC1)
- New Engineering Contract (NEC)





The Egan Report - "Rethinking Construction" | 1998

#### Partnering as a key element of the Egan Report

#### **Common goals**

Way to resolve disputes

Continuous improvement

Measuring progress

Sharing profits

#### The best practice guides on partnering

#### (Trusting the Team, etc.) show that:

30% savings are common and up to 50% cost reduction and 80% time savings are possible.





Multi-Party Contracts (MPV)

Overview Developments Abroad



Quelle:

Lahdenperä 2012, Making sense of the multi-party contractual arrangements of project partnering, project alliancing and integrated project delivery. In: Construction Management and Economics (30), S 57-79.



Background Australian Alliancing

Development and history

**Early 1980s** – U.S. Army engineers rethought solutions to litigation and unproductivity in the construction industry

**1998** - First Partnering Model (without contractual agreement or legal enforceability) to prevent litigation

**Early 1990s** – Introduction of alliancing, especially in oil and gas fields in the North Sea

**1992** - British Petroleum entered into separate agreements with gain-pain-share elements in addition to individual contracts

**1997** - Application in more than 100 infrastructure projects

Quelle: Breyer et al. Alternative Vertragsmodelle zum Einheitspreisvertrag für die Vergabe von Bauleistungen durch die öffentliche Hand, in: Zukunft Bau, ein Forschungsprogramm des Bundesministeriums des Inneren, für Bau und Heimat; In Pursuit of Additional Value. A benchmarking study into alliancing in the Australian Public Sector.



Background Australian Alliancing

Development and history

**1994-1998** – Further development of alliancing principles

Government of Australia deliberately promoted the use of PAs through guidelines, such as National Alliance Contracting Guidelines

#### **Crucial to success:**

The PA team must be integrative and cooperative

The focus must be on project-wide solutions

The commercial agreements must be aligned with the success of the project

The agreed target costs must be chosen correctly

**2006** – Alliancing became a common project delivery method due to market developments, revision of principles

Quelle: Breyer et al. Alternative Vertragsmodelle zum Einheitspreisvertrag für die Vergabe von Bauleistungen durch die öffentliche Hand, in: Zukunft Bau, ein Forschungsprogramm des Bundesministeriums des Inneren, für Bau und Heimat; In Pursuit of Additional Value. A benchmarking study into alliancing in the Australian Public Sector.



Background Australian Alliancing

Standard contract template?

Basically project-specific contract creation, no standard contract Templates from public bodies:

- Victorian model "Project Alliancing Agreement" published by the
   "Victorian Department of Treasury & Finance"
- AAA Modell PAA "Alliance Association of Australasia Reference Model PAA"

Quelle: Breyer et al. Alternative Vertragsmodelle zum Einheitspreisvertrag für die Vergabe von Bauleistungen durch die öffentliche Hand, in: Zukunft Bau, ein Forschungsprogramm des Bundesministeriums des Inneren, für Bau und Heimat.



Background Australian Alliancing

Criticism

- Selection processes
- gain/pain model
- No-dispute Clause
  - → lack of "performance incentives" and therefore lack of accountability
  - → Cutting off legal recourse
- Inconsistent legal agreements and contract models
- Lack of expertise in project management, alliance advisers and coaches
- Public procurement law must be adapted

Quelle: Breyer et al. Alternative Vertragsmodelle zum Einheitspreisvertrag für die Vergabe von Bauleistungen durch die öffentliche Hand, in: Zukunft Bau, ein Forschungsprogramm des Bundesministeriums des Inneren, für Bau und Heimat.



Background IPD

Basic principles

#### **Key elements IPD:**

- ➤ Early involvement of the main contracting parties
- ➤ Shared risks and rewards
- ➤ Multi-party contract
- ➤ Shared decision-making and control
- ➤ Disclaimers between main contracting parties
- ➤ Jointly developed and agreed project goals

Quelle: Breyer et al. Alternative Vertragsmodelle zum Einheitspreisvertrag für die Vergabe von Bauleistungen durch die öffentliche Hand, in: Zukunft Bau, ein Forschungsprogramm des Bundesministeriums des Inneren, für Bau und Heimat



Background IPD

Development and history

- Building Information Modeling (BIM)
- Lean Management
- Starting point 2003 first project
- 2006 first publications
- 2007 Publication of guidelines for the project delivery model
- ➤ 2007 ConsensusDOCS 300: First Standard Multi-Party Contracts
- > 2009 AIA C191-2009: AIA's own contract series

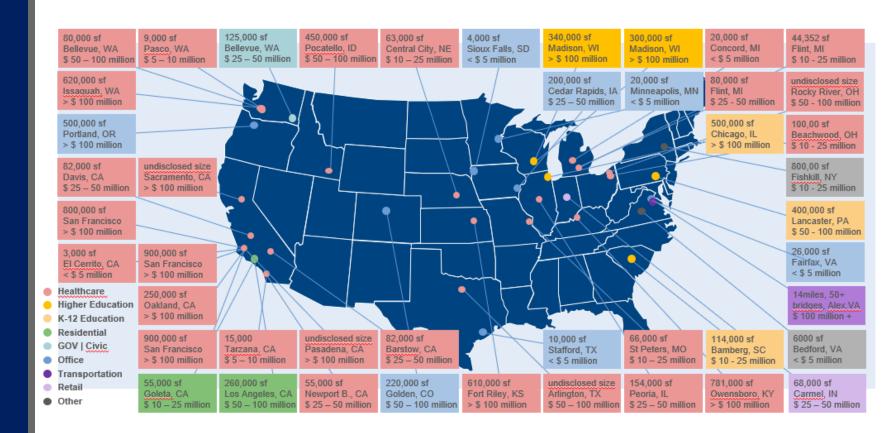
Quelle: Breyer et al. Alternative Vertragsmodelle zum Einheitspreisvertrag für die Vergabe von Bauleistungen durch die öffentliche Hand, in: Zukunft Bau, ein Forschungsprogramm des Bundesministeriums des Inneren, für Bau und Heimat



Multi-party contracts

Project Alliancing in the USA - Overview of IPD Projects as of 2010

(Founding of the Lean Construction Institute in 1997, first IPD projects from 2003)







Multi-party contracts

Milestones in the development of multi-party contracts

. First presentation of MPV (Introduction of PPC 2000 and IPD)

Legal Summit ECE Group GmbH & Co. KG

2015

2016

2019

2020

Foundning of IPA Centre (originally 'Team Building Initiative')

 Decision by ECE Group GmbH & Co. KG to realise the first major project based on MPV 'Kongresshotel Hafencity' Construction of a new luxury hotel with 500 rooms in Hamburg, approx. 150 million euros

'Smartcity' Springpark Valley Development: Construction of a mixed-use office and residential complex in Bad Vilbel; value > EUR 1 billion

'Carossa Quartier' Kauri CAB Development Berlin GmbH: Development of a large residential complex in Berlin; volume approx. 350 million euros

'SOL-1', Bayer AG: New construction of a pharmaceutical production plant in Leverkusen; value > 200 million euros

• 'Groß-Berliner-Damm 149': New building for the Federal Institute for Materials Research and Testing; value > 200 million euros

'New 25', REWE GmbH / Wilhelm Brandenburg GmbH: Construction of a meat products factory in Erlensee; value > 400 million euros

 Research report 'Alternative contract models to the standard price contract for the award of construction services by the public sector' for the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)

. 'BIZ', trust administration IGEMET GmbH New construction of an education centre in Berlin

21



Multi-party contracts

Milestones in the development of multi-party contracts

'S3' Siemensstadt Module C.1.1, Siemens AG: Construction of the new urban quarter in Berlin;
 'Luisenblock West', Federal Office for Building and Regional Planning (BBR): Completion of the modular office building in Berlin; value > 70 million euros

• 'Federal Institute for Materials Testing and Research' : New building in Berlin; value > 200 million euros

• 'Paul Ehrlich Institute', Federal Institute for Real Estate: New building in Langen; value > 400 million euros

'ITZ-Bund', Federal Agency for Real Estate: New building in Ilmenau; value < 10 million euros</li>

. 'BEA' - interim accommodation for the Federal President

Gäubahn North with Pfaffensteigtunnel, other DB-AG projects, Extension of Bundestag Luisenblock Ost

• 1st Bundeswehr Project : Marinearsenal Wilhelmshaven

Katharinenhospital Flensburg: New clinic building - Value: > EUR 350 million

2nd Bundeswehr project: Flugplatz Holzdorf (CH 47 Helikopters)

Zentralklinikum Magdeburg

2025

2024

2022

2023

22



Siemensstadt, Germany

Siemens Real Estate - Implementation of the Siemensstadt Square Berlin-Spandau project:

The first sub-project of Siemensstadt will be handled on the basis of a multi-party contract drafted by Breyer Rechtsanwälte PartmbB. The firm is currently involved in a total of 11 ongoing IPA multi-party contract projects and is expanding its position as an industry leader in IPA multi-party contracts with the support of Siemensstadt Square.

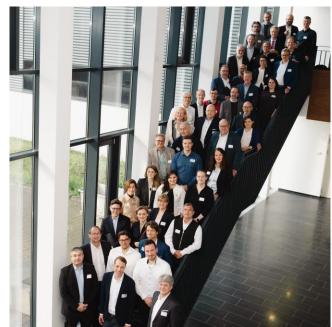




Bundesbau signs multi-party contract for major project in Berlin-Adlershof

The Bundesbau Baden-Württemberg (BBBW) is building a new building for the Federal Institute for Materials Research and Testing (BAM) in Integrated Project Management (IPA) in the Berlin-Adlershof Technology Park.

On 25 April 2023, the BBBW signed a multi-party contract in Berlin together with the partners for the planning and execution of the major project. The contract for the new building with the Federal Institute for Real Estate as the client is around 200 million euros. The IPA team is supported by the consulting firms Yukon Projects GmbH, ECE Group Services GmbH & Co. KG and Breyer Rechtsanwälte PartmbB.





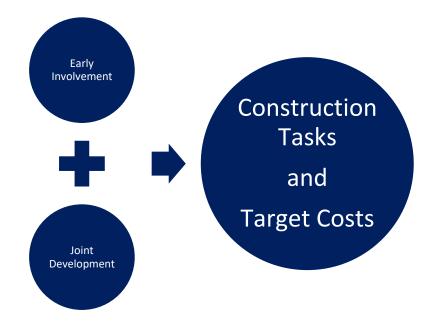
# 4. Multi-Party Contracts (MPC): Project Flow – Phase Models



### Project Flow – Phase Models

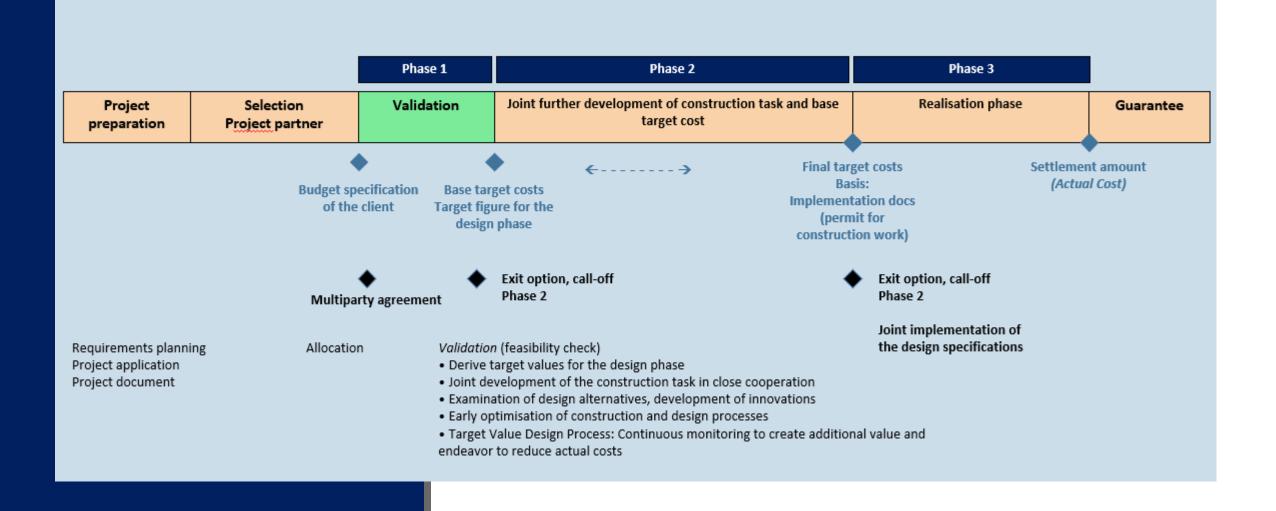
Multi-party contracts 2phase model vs 3-phase model

Phase model of project execution



Early involvement and joint development of the construction task and target costs







### 5. Organization Decision-Making



# Organization Decision-making

Multi-party contracts

Project organization, decision-making, escalation and conflict management

(4) Formal mediation procedure e.g. mediation

(3) Decisions at management level in line with project objectives

Decisions at project management level in line with project objectives in accordance with the unanimity principle

(1) Decisions at team level in line with project objectives Senior Management Team

Representatives of the client and the other parties

Project management team

(1 overall project manager and other members) Representatives of the client and the other parties

Extended project team

All parties involved (user representatives, client representatives, other project participants,...)

Project-related Conflict management





Multi-party contracts

Remuneration Model - Objective

- Primary goal: Alignment of the economic interests of the project participants with the achievement of the project goals
- This means that collaboration and decisions in the sense of "Best for Project" are in the economic interest of those involved
- Those involved should have an economic incentive to communicate problems and risks at an early stage
- The participants should have an economic incentive to develop proposals for good solutions and to proactively participate in finding solutions
- Those involved should have an economic incentive to act in a solution-oriented manner when problems arise and not to switch to confrontation or defence strategies



Multi-party contracts

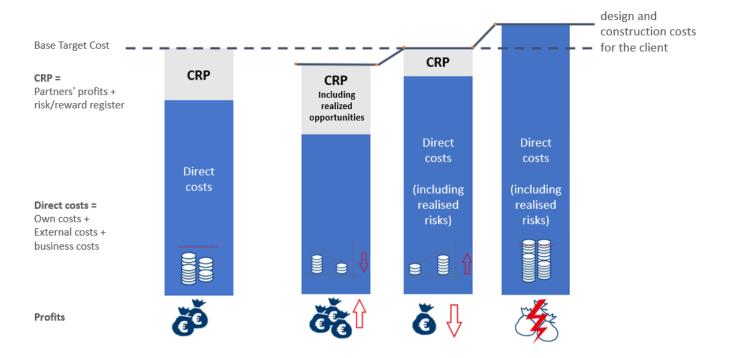
Compensation Model - Basic Principles

- The expenses of the parties involved are reimbursed on proof
- The profit shares of the participants are fixed at the beginning depending on the volume of services
- Joint development of the building task (construction target)
- Profit sharing of project participants based on actual costs and value creation targets



Multi-party contracts

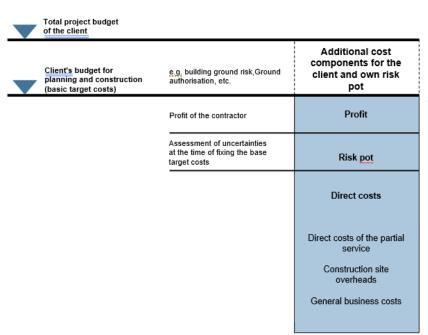
Compensation Model – Simplified Schematic Representation

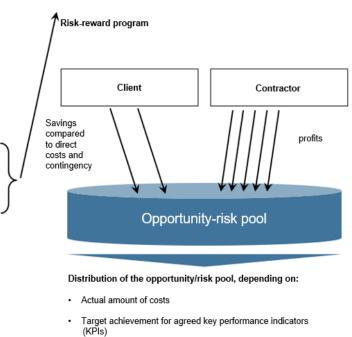




Multi-party contracts

Remuneration model – basic structure





· Previously agreed and determined shares for distribution



Multi-party contracts

Risk management - an integral part of cooperation

- Through economic incentives, the integrated organization and the use of collaborative methods, continuous risk management is carried out with the aim of:
  - Risk identification
  - Risk analysis / assessment
  - Risk treatment (avoid, reduce, insure)
  - Joint bearing of calculable residual risks



### 7. Culture



#### Culture

Multi-party contracts

Culture – Values and principles of cooperation

- Equal status of the participants
- Transparency, openness and honesty
- Trust
- Respectful and appreciative interaction with each other, reliability, mutual understanding of the goals and values of the other project participants and constructive conflict culture
- Readiness for continuous learning
- Collaboration through integrative action and willingness to support Common project goals take precedence over individual interests
- Willingness to achieve ambitious project goals through innovation and reduction of waste (operational excellence)
- Good communication
- "Entrepreneurial action" in the sense of the project / the project as a joint enterprise



### 8. Methods



### Methods

Multi-party contracts

Methods - Lean
Management — Building
Information Modeling





#### Methods

Multi-party contracts

Methods - Lean Management

#### **Target Value Design (TVD)**

Value-added planning methodology, in which the design of the project is compared with the client's value creation goals (conditions of satisfaction) in short cycles

#### **Co-Location | Big Room**

Establishment of shared office space for collaborative work on tasks by project participants, improving communication and team building

#### **Building Information Modeling (BIM)**

Planning based on a digital building model to better coordinate planning, avoid loss of information, increase transparency, etc.

#### **Last Planner System (LPS) and Cycle Planning and Control**

Lean construction methods for construction scheduling and control to achieve greater stability in the processes and improve the productivity of the project participants



Thank you!

### Danke