

LIPS2015 Barcelona

Lean in Public Sector Construction Conference

Session 4

Projektbündnis: Adopting Australian Project Alliancing in Switzerland

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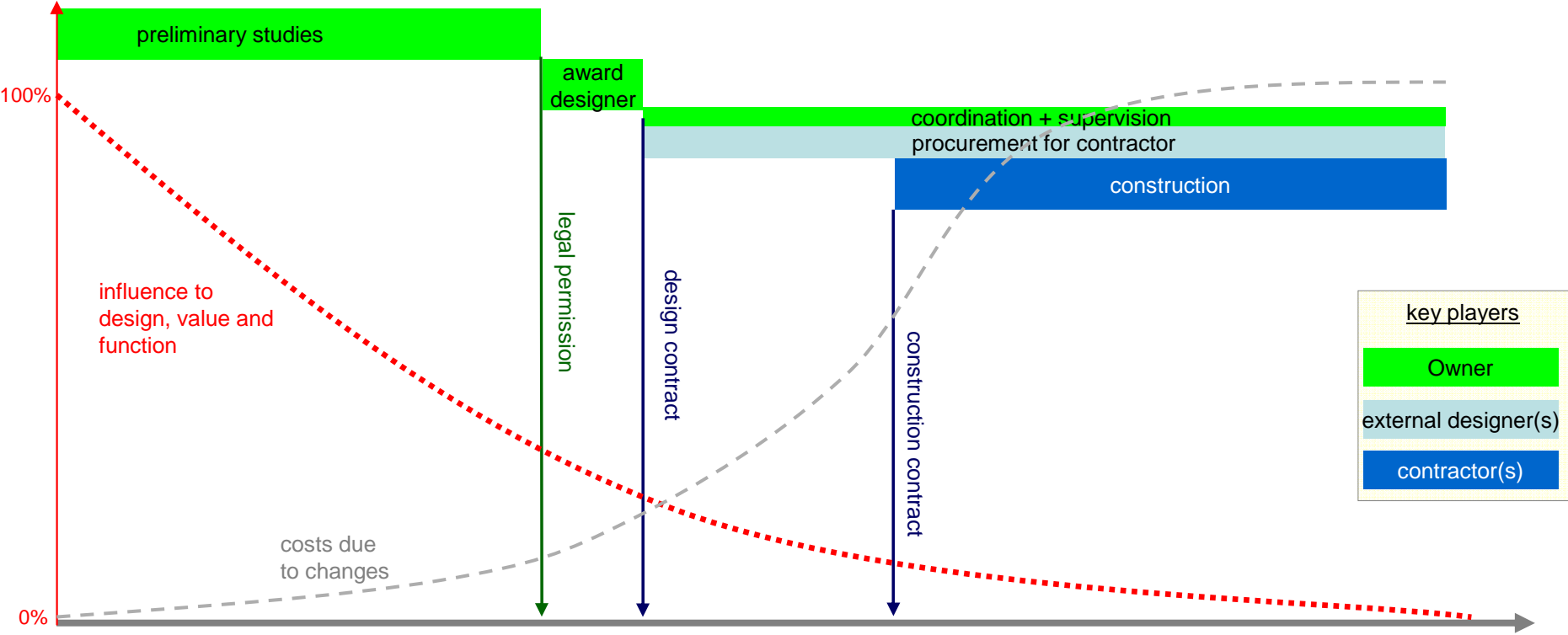
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Overview

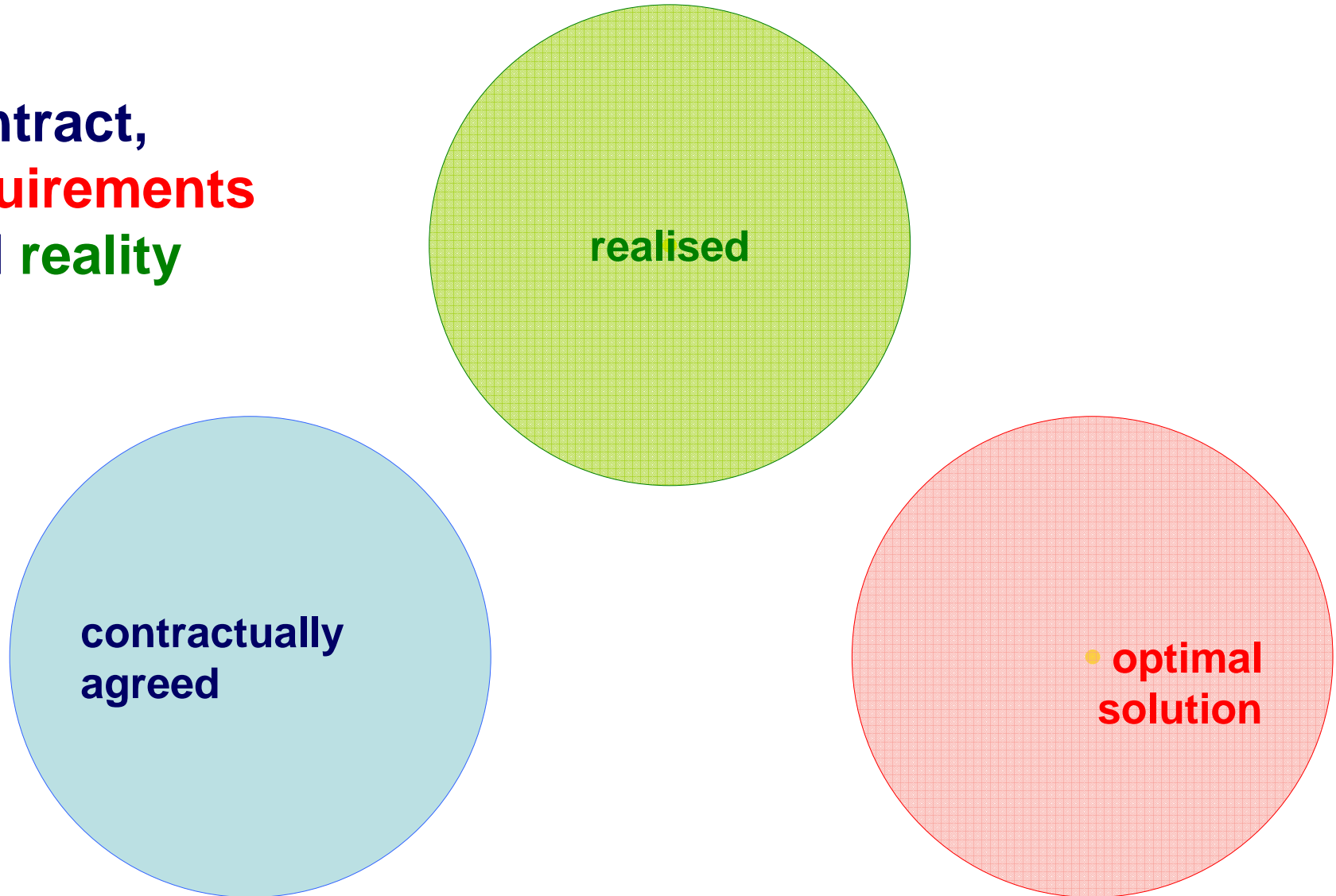
1. **Situation in the Swiss Construction Industry**
2. **Systemic Mechanisms Causing Vicious Cycles**
3. **Alternative Contractual Approach: Projektbündnis**
 - origin and historic background
 - basic mechanisms and key elements
 - dissemination, challenges, current status
4. **Summary and Outlook**



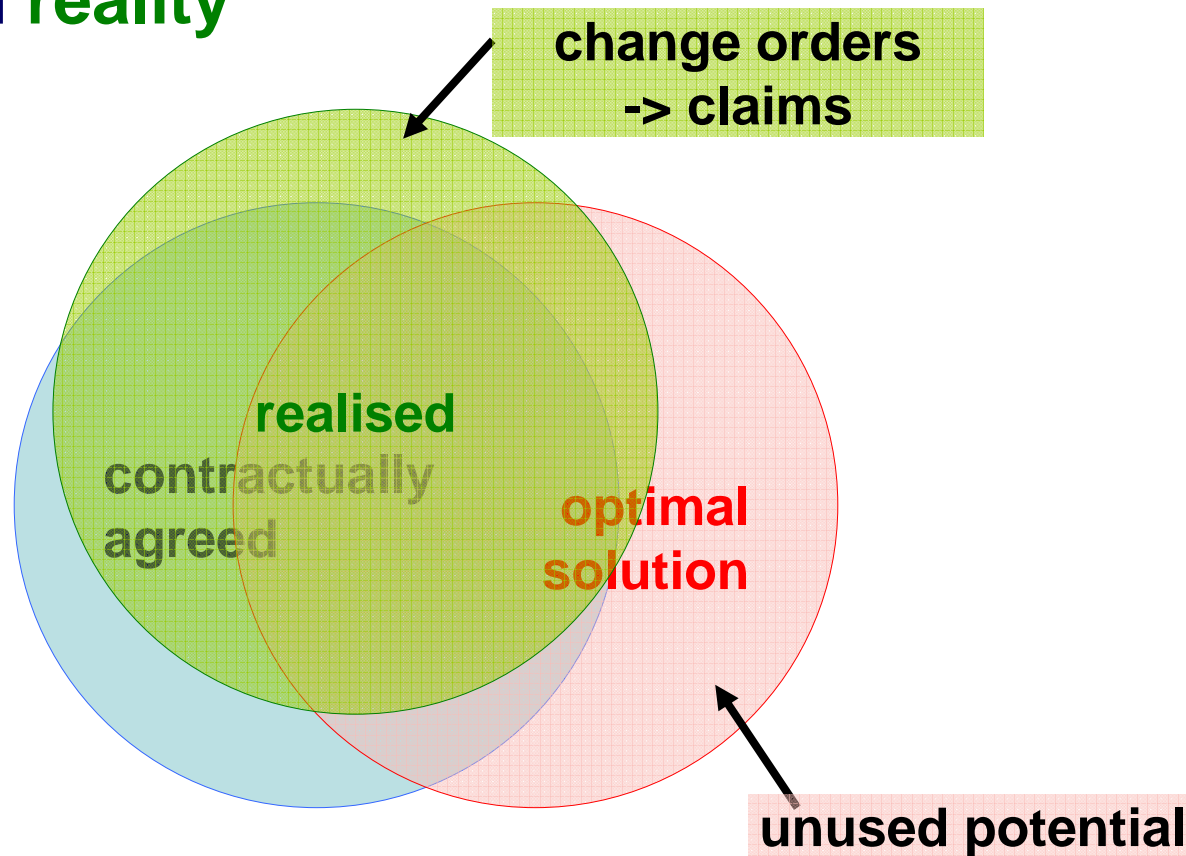
common practice in Switzerland: design-bid-build (DBB)



**Contract,
requirements
and reality**



Contract, requirements and reality



Traditional contracts in construction

Principal-Agent-Problem

One party (agent) is acting on behalf of another party (principal) whereat it is tempted to utilise **asymmetry in information** to its **self-seeking advantage**.

Forms of appearance:

- opportunism
- moral hazard
- adverse selection



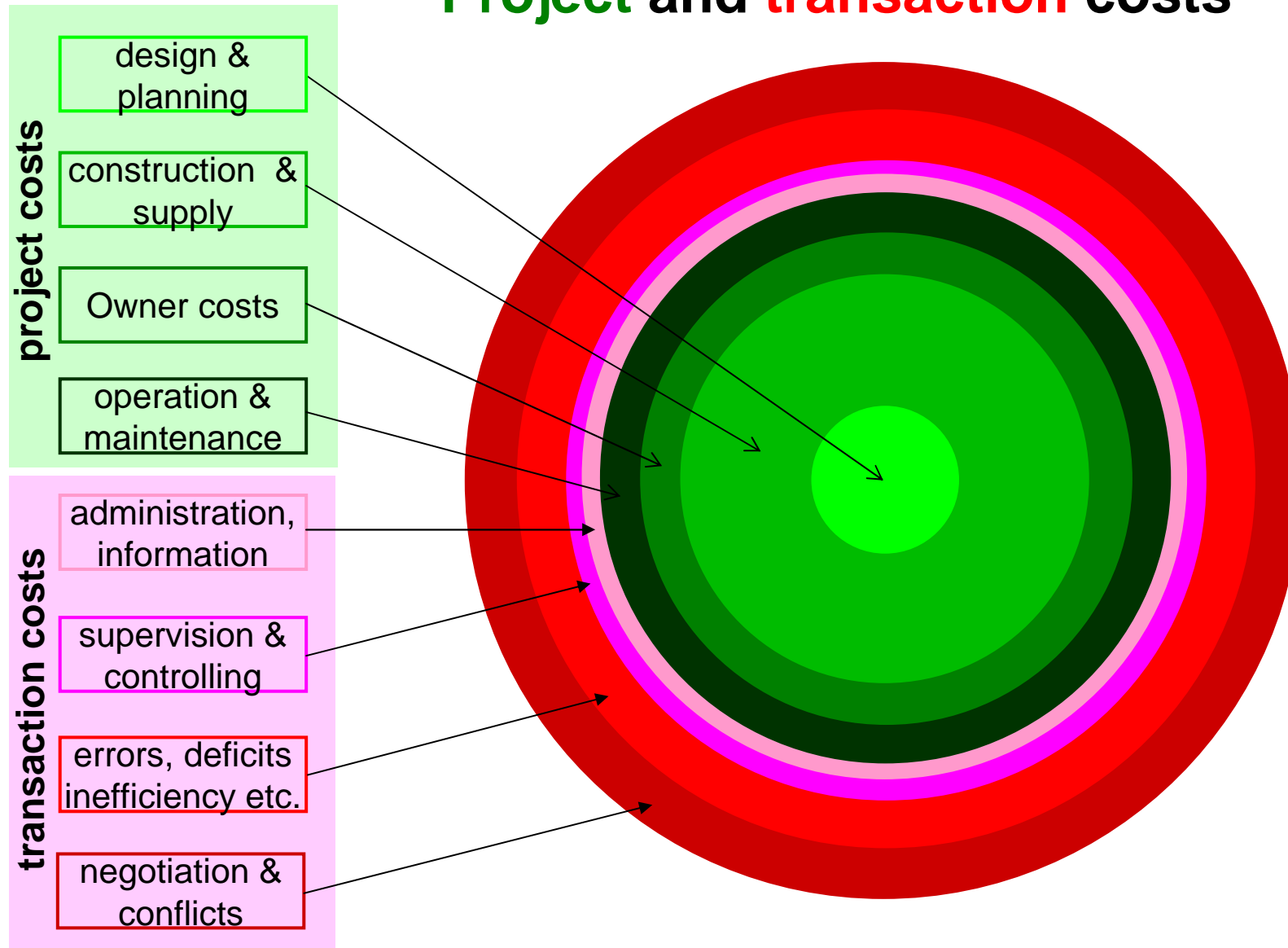
Traditional contracts in construction

Prisoner's Dilemma (game theory)

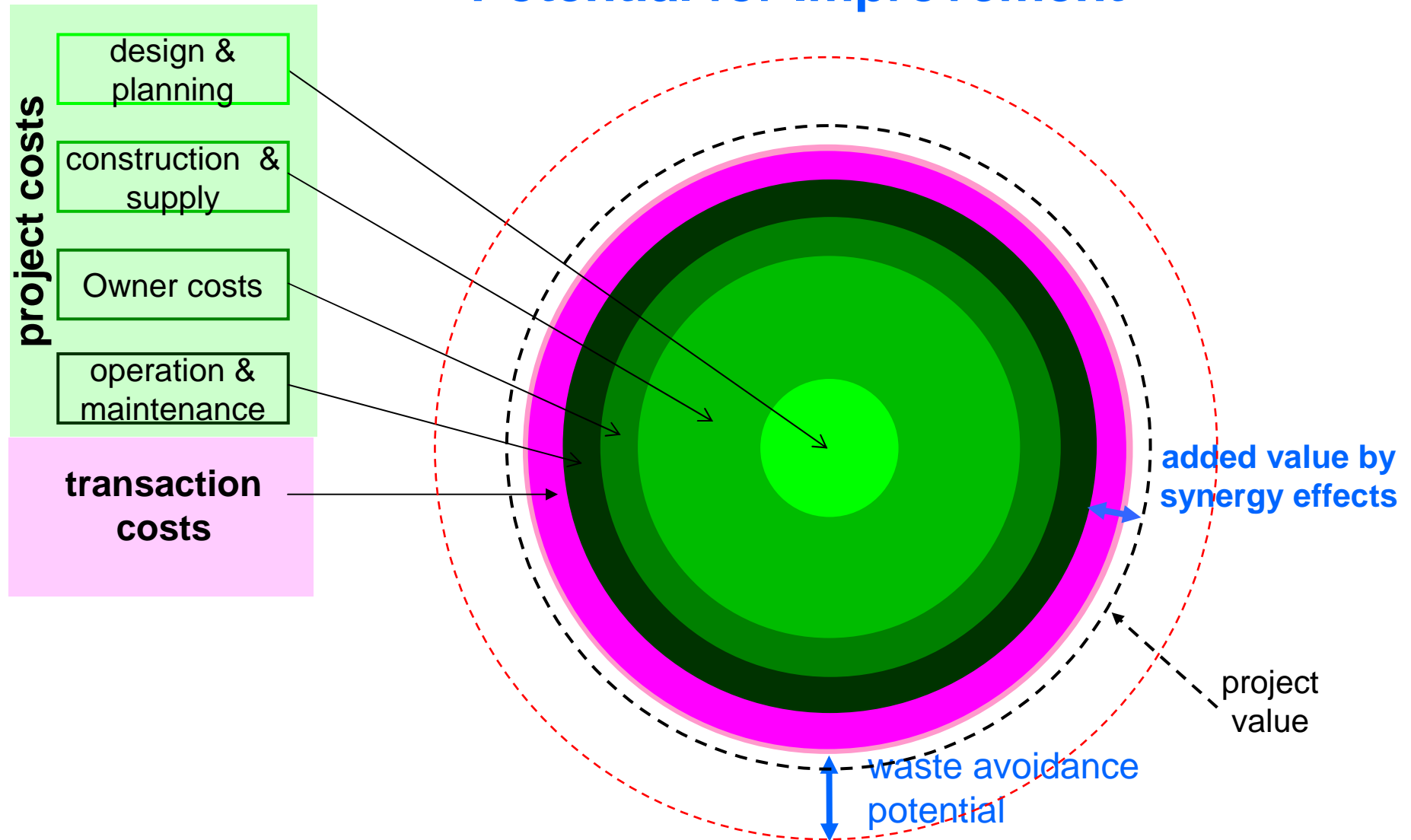
Situation in that the decisions of two rationally acting parties are **interdependent** and both have an influence on the result, but there is **uncertainty** with regard to the behaviour of the other.



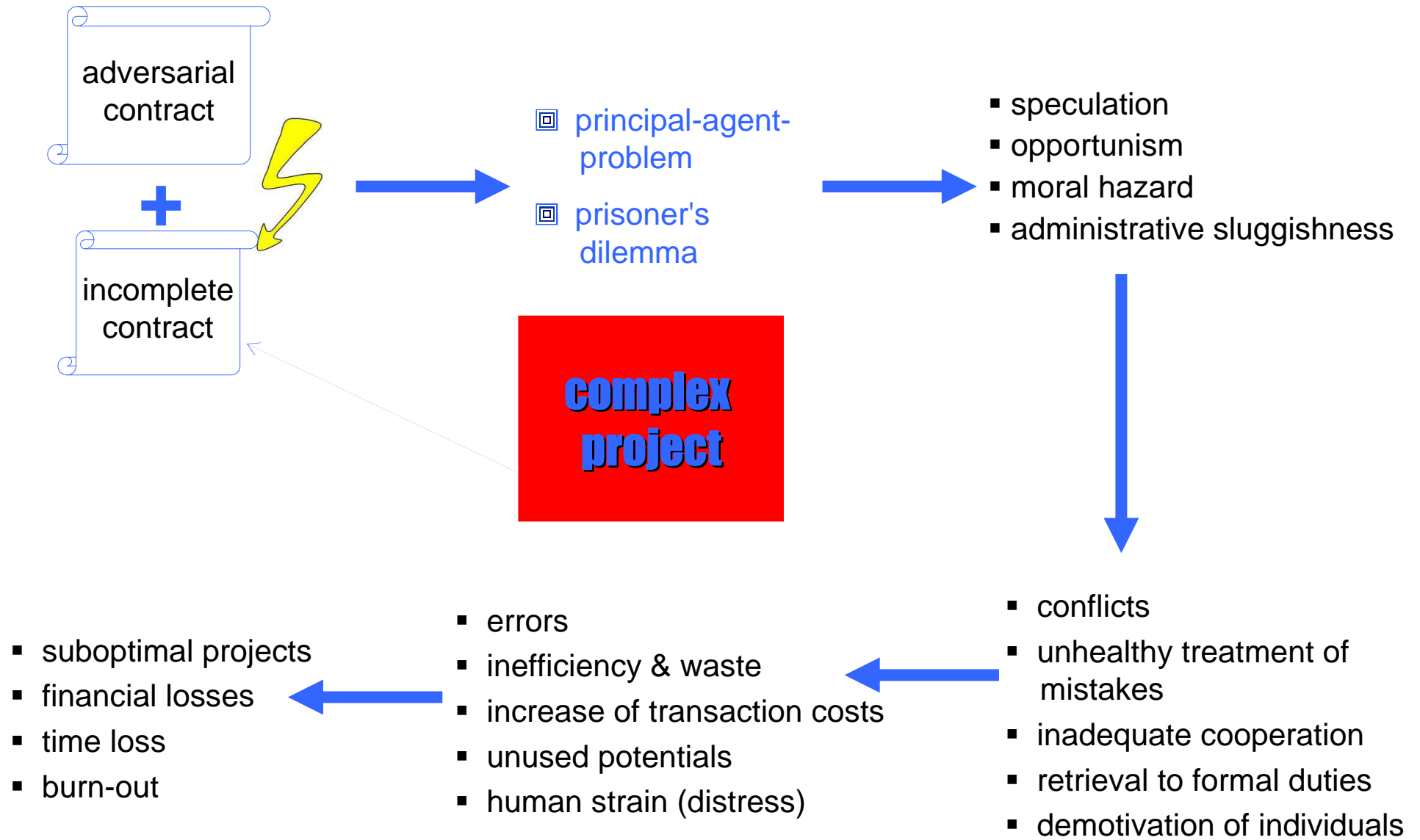
Project and transaction costs



Potential for Improvement



Vicious cycle for complex projects realised by traditional contracts



Traditional contracts in construction

What could be changed?

- profit-or advantage seeking
- ~~■ divergence of interests~~
- ~~■ limitation of responsibility~~
- ~~■ asymmetric information~~
- ~~■ uncertainty regarding the behaviour of the other participants~~



How to change effectively?

- compensation model with realistic incentives for profit
- tying compensation directly to the targets of the Owner
- integration = joint responsibility of the key participants covering several project phases
- transparency (organisation, open books, decisions)
- joint decisions (& rules for internal conflict resolution)



Projektbündnis ≈ Project Alliance

▣ adoption of key principles of the Australian Project Alliance

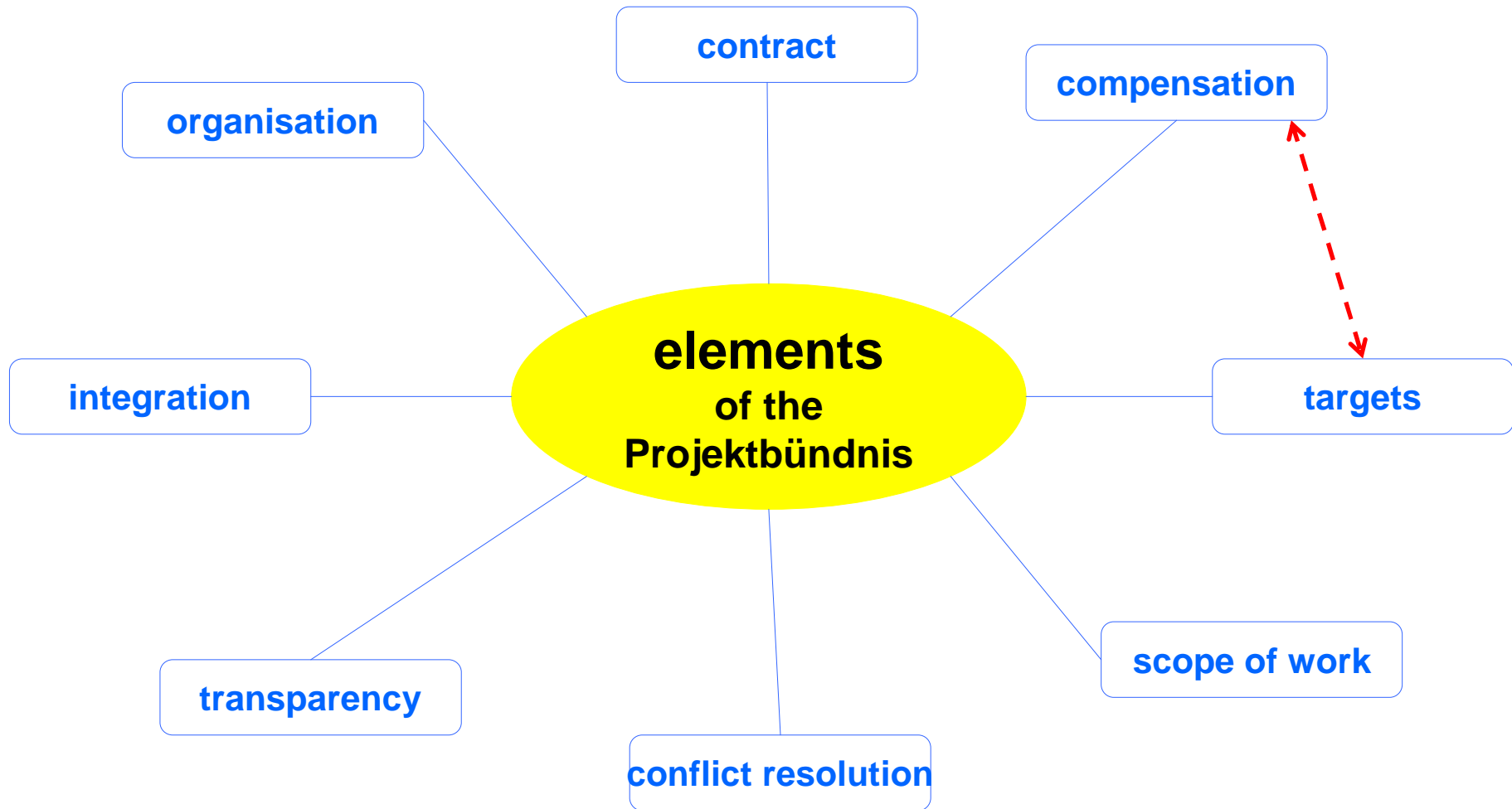
- evolved from the oil & gas industry
- more than 400 alliance projects since late 90s
- success and satisfaction amongst the participants statistically proven plus paramount achievements in numerous individual projects

▣ adaption to Swiss law

▣ basic approach:

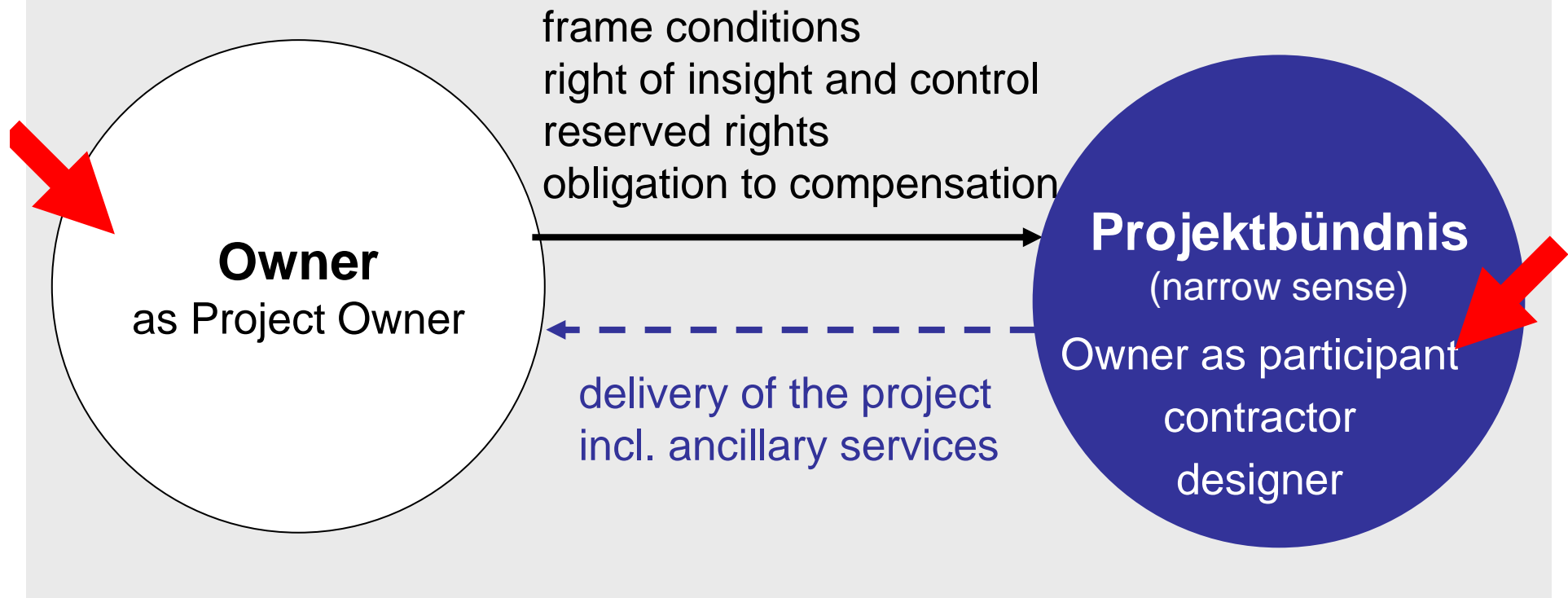
Owner and key participants establish a project related company through that they become jointly responsible for realisation of the project. Depending on the project results with regard to the jointly agreed targets the profit of the Non-Owner partners is determined.





Projektbündnis – Contract: overview

Alliance Agreement (*Projektbündnis in the broader sense*)



Projektbündnis – Contract: differentiation

	difference to Projektbündnis
≠ joint-venture / consortium	Owner is not a partner
≠ PPP	! no clear definition for PPP - comprises generally financing - comprises generally concession for operation
≠ partnering	conventional transactional contract added by a codex concerning cooperation



Projektbündnis – internal organisation

Leadership Team (Bündnisrat)

- ◆ constitution on a basis of parity
- ◆ unanimous decision making
- ◆ defines policy and strategy

Management Team (Bündnisleitung)

- ◆ constitution by competence
- ◆ appointment by the Leadership Team
- ◆ operational management of the project

Alliance Team (Bündnisteam)

- ◆ constitution by competence
- ◆ organisation by the Management Team
- ◆ development and implementation of the best solutions



Projektbündnis – internal organisation

Responsibility and liability between the Partners

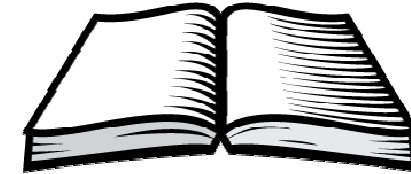
- general principle: **no blame!**
- internal solidarity
- general waiver of liability amongst the Partners

exceptions:

- a) mandatory law
- b) wilful default



Projektbündnis – transparency



- ▣ counteracts asymmetric information
- ▣ internally as well as towards the Owner
- ▣ basis for trust
- ▣ open books
 - > complete, detailed, clear documentation of costs
 - > complete documentation of project issues
- ▣ regular independent audits



Projektbündnis – scope of work & targets

1. mandatory requirements of the Owner

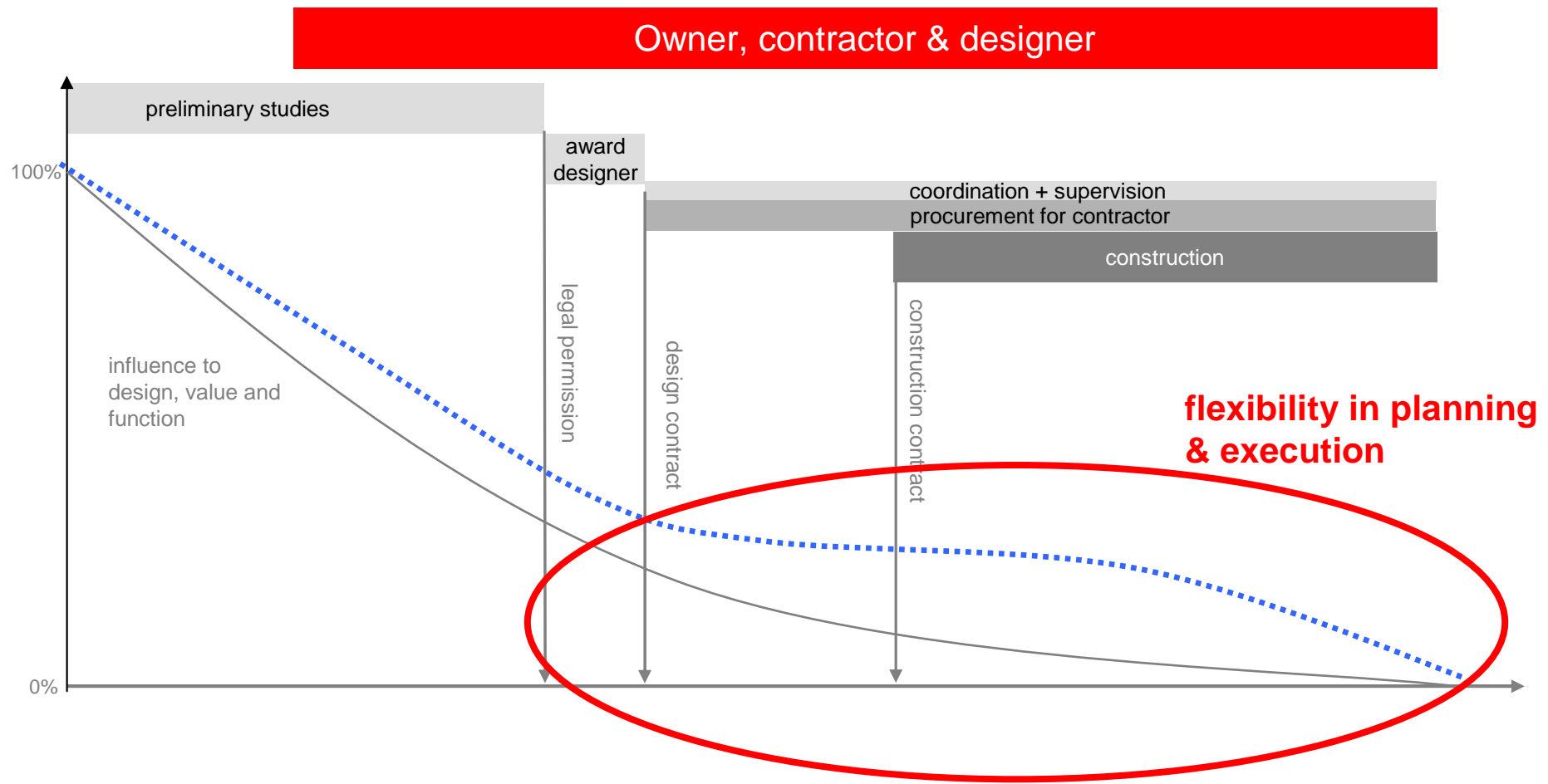
- ✿ functions, qualities, framework conditions, standards etc.
=> route of realisation: flexible
- ✿ definition of key result areas (KRAs) + weights

2. variable targets - jointly agreed

- ✿ pluralism of targets -> cost, time, KRAs
- ✿ performance measurement by key performance indicators
- ✿ => scale for compensation



Projektbündnis – route of realisation



Projektbündnis – compensation

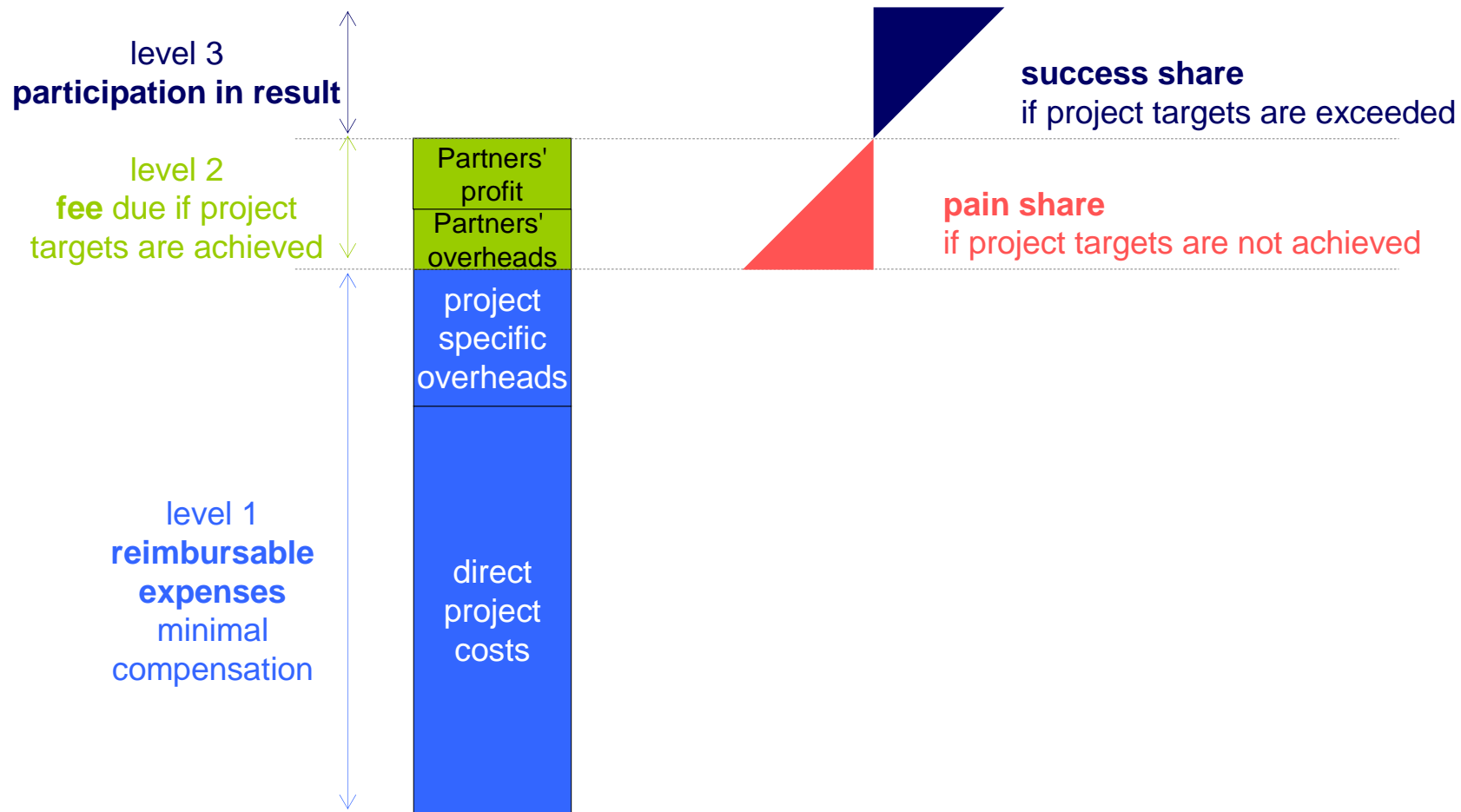


- ▣ principle: performance related profits
 - ▣ financial yields are only due
 - either for **all** or for **none** of Partners
 - if the project reaches various targets
- => stimulus to outstanding performance and innovation**
- => cooperative behaviour pays!**



Projektbündnis – compensation

3-stage compensation system



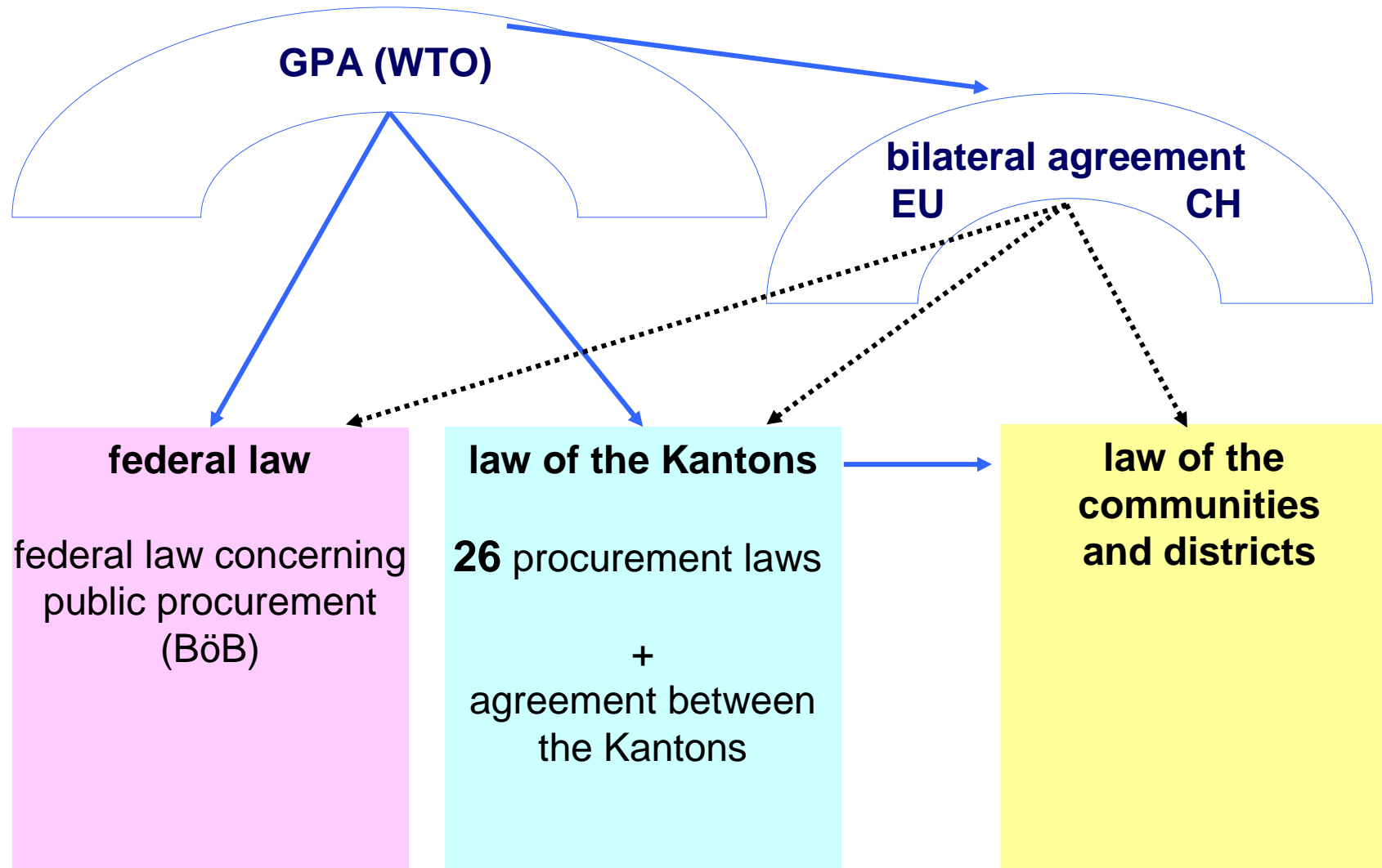
Projektbündnis – dissemination in Switzerland

Challenges and obstacles:

- **Swiss procurement law**
- **economical and psychological strain**
- **reluctance of being the 1st mover**
- **non default option**
- **political process**



Swiss Public Procurement Law



Projektbündnis – dissemination in Switzerland

Milestones

2012: first workshops / presentations at major public Owners

**2013: first Swiss publications +
public speech at the Swiss Society of Engineers and Architects**

2014: public talk at annual Swiss infrastructure congress

**2015: presentation at the biennial Swiss Construction Law Congress
commented basic agreement (to be published)**

initiative of the federal railway corporation considering a pilot project



Outlook: Change in the Construction Industry requires Mind Shift

▣ Contract Change

from transactional to relational contract
from shifting risks to managing them

▣ Organisation Change

from Principal to Partner
from Agent to Partner
from separation to integration

▣ Commercial Change

from quantity relation to performance relation

▣ Culture Change

from asymmetry to transparency
from moral hazard to responsibility
from conflict to consensus



Outlook: Potential for Optimisation in the Construction Industry

Why Projektbündnis? taking different perspectives

☐ Owner

- optimal, sustainable realisation of the project targets
- gain of information and competences



☐ contractor / planner

- superior possibility for commercial profit
- gain of information and competences



☐ participating individuals

- personal satisfaction + appreciation of the achievements
- individual development and increase of competences



☐ stakeholders

- acceptance, consideration and appreciation

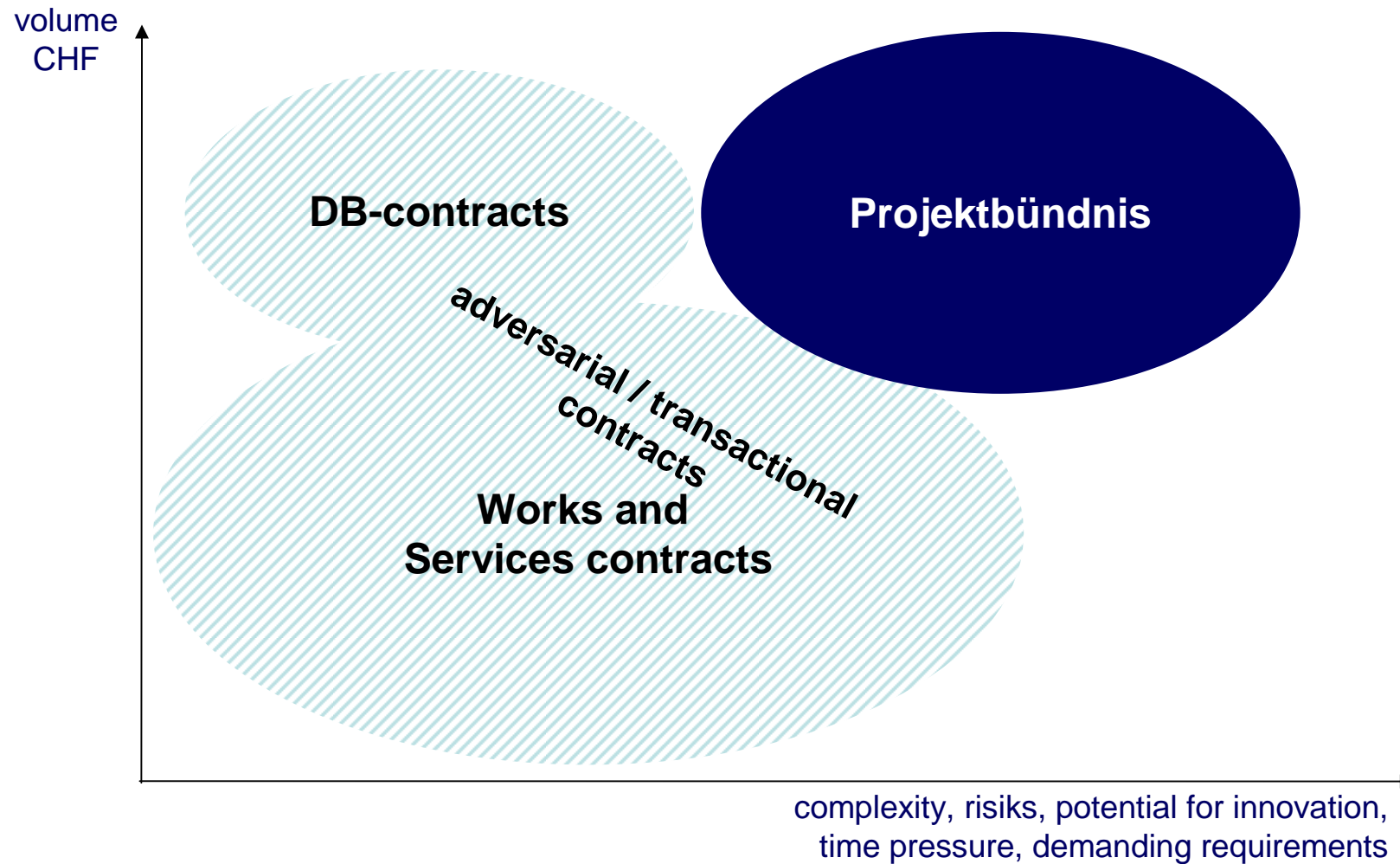


☐ national economy

- capacity and know-how building
- effective establishment of value



Outlook: Another member in the family of construction contracts





**Thank you very much
for your kind attention!**

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