

## A method box for road development and urban expansion

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Saaremaa, May 28, 2008



# The challenge for Road Developers



- Urban expansion
  - as economies grow, land is rapidly developed for commercial, residential and industry purposes
  
- Road development
  - Road Administrations can sometimes hardly keep up with these developments, financially, technically and in terms of planning and sustainability
  - A technical design is not enough to deal with this complex environment....



## Introduction to the Method Box

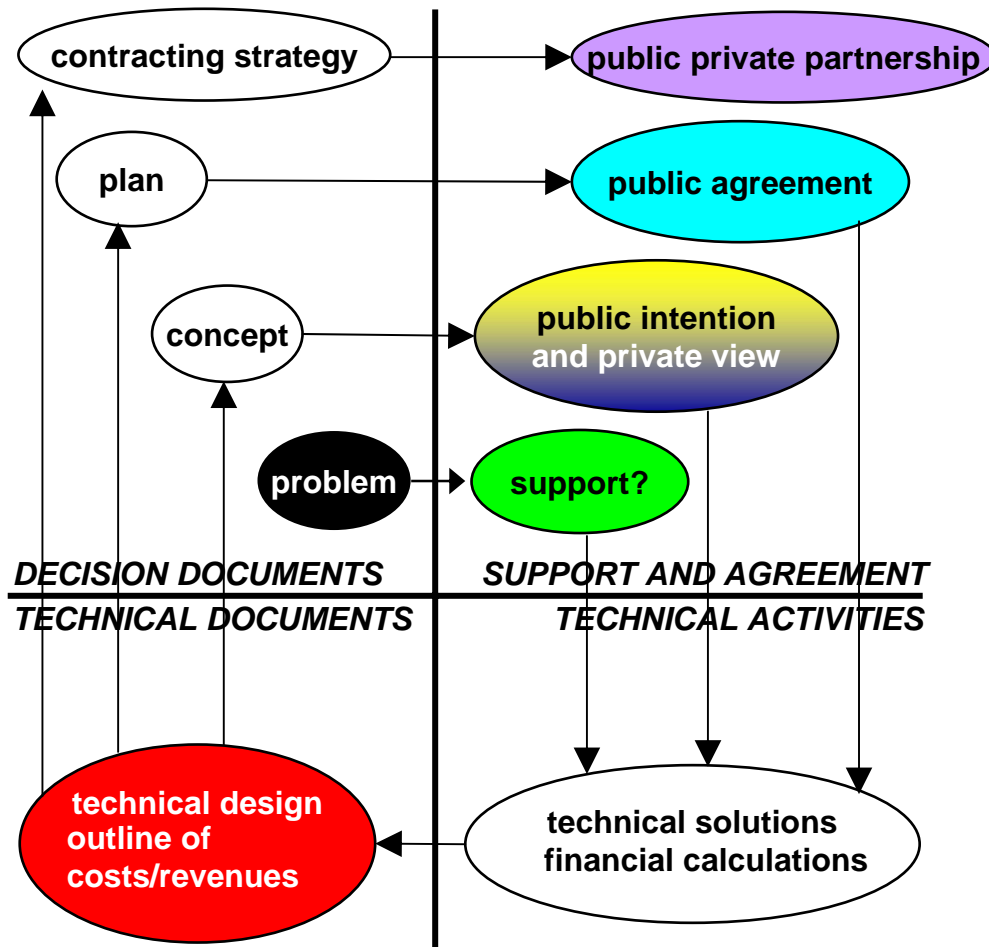
- the Method Box puts technical road design and planning in a context of processes and strategies needed to get to implementation
- the Method Box is a collection of instruments which can be used in various stages of a complex investment project, therefore one can selectively pick the instruments needed in a specific stage of a specific project
- Having said al this.....

**LET'S START!**

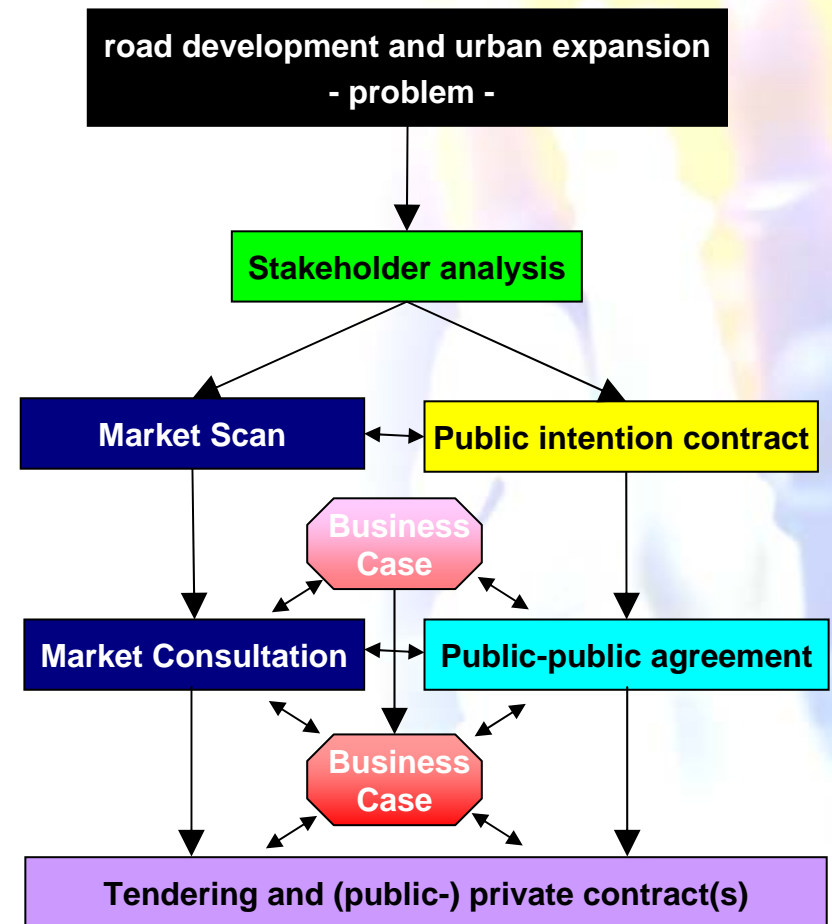


# Method Box overview

## PROCES



## SUPPORT-AND-AGREEMENT-PRODUCTS

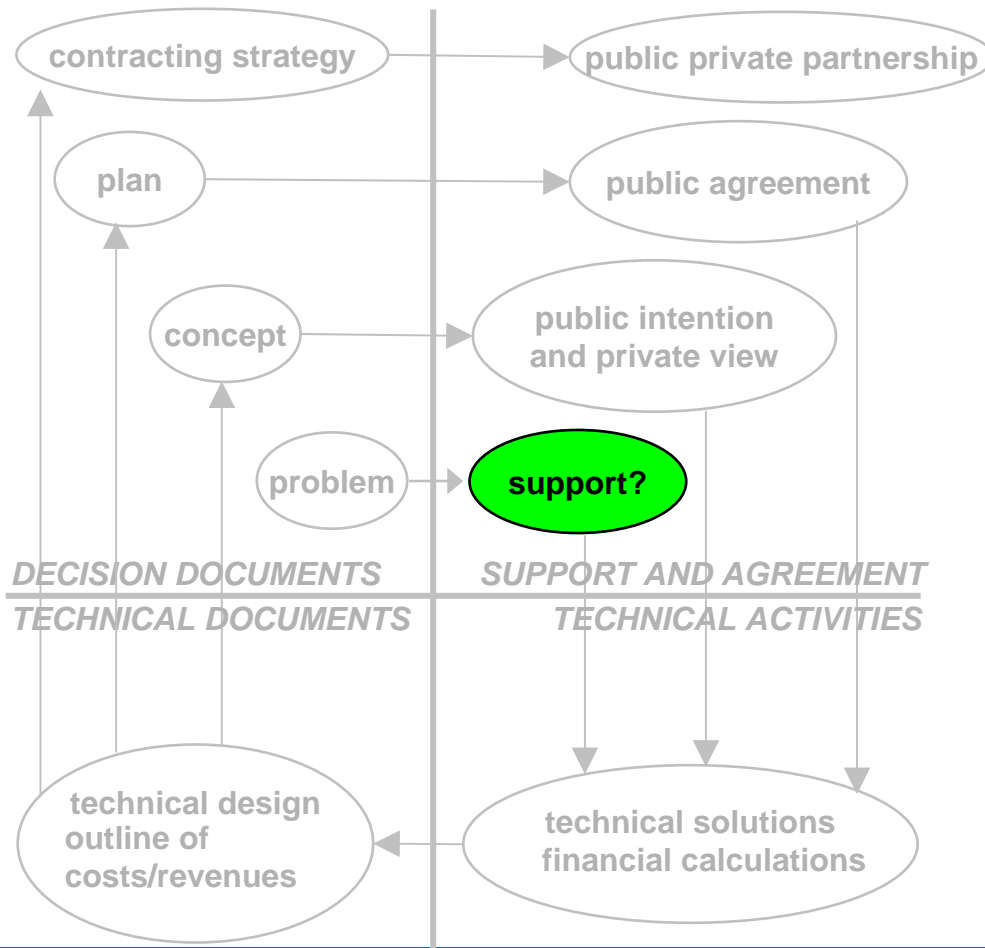


# Checking support: stakeholder analysis

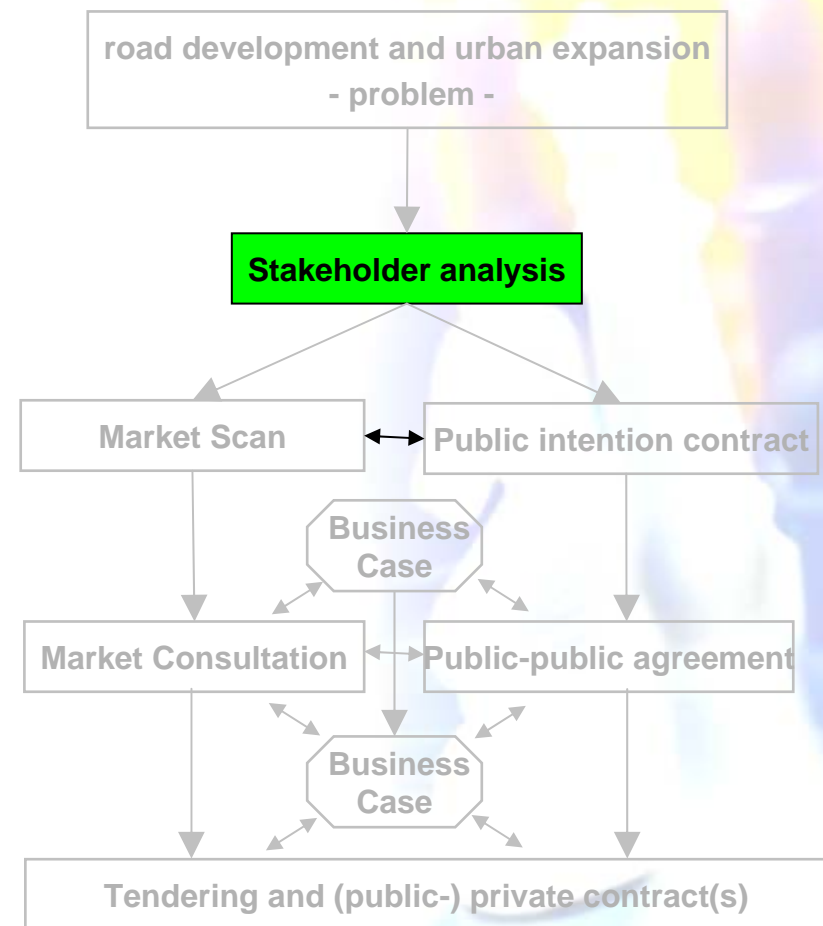


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## PROCES



## SUPPORT-AND-AGREEMENT-PRODUCTS



Partners for Roads

## Why is a stakeholder analysis important? **investmentservices**

- a stakeholder analysis defines the project-environment where technical solutions evolve in implementation partnerships
- stakeholders can influence the project result and may be an important key to project failure or success
- a profound stakeholder analysis may lead to new (future) stakeholders nobody thought about in the first place
- a profound stakeholder analysis is the basis for stakeholder management: eliminate harmful influences and reinforce supportive behaviour

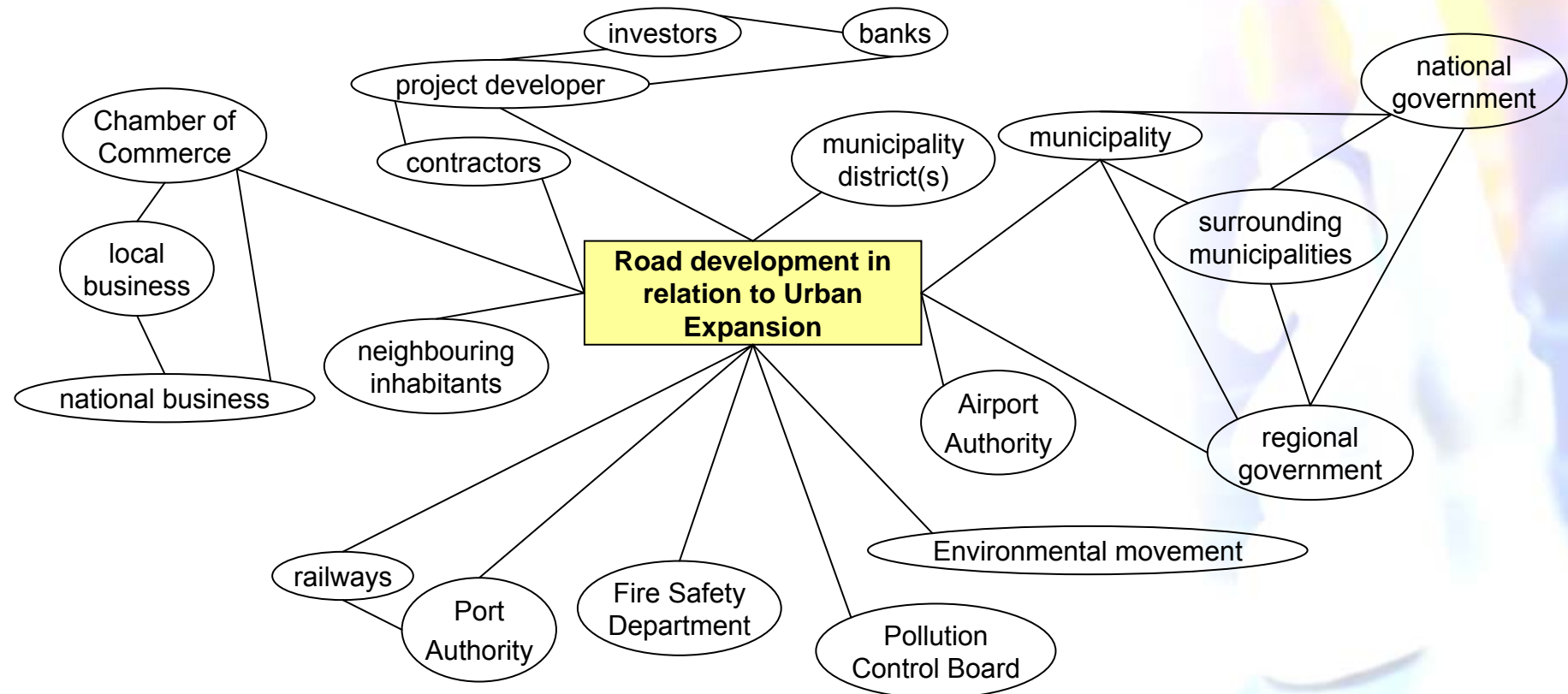


# Step 1: stakeholder identification (example)



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**Direct relationships..... and indirect relationships**  
**Present stakeholders..... and future stakeholders**



**Partners for Roads**

# Step 2: stakeholder qualification

## WHAT?

example

— sense of urgency

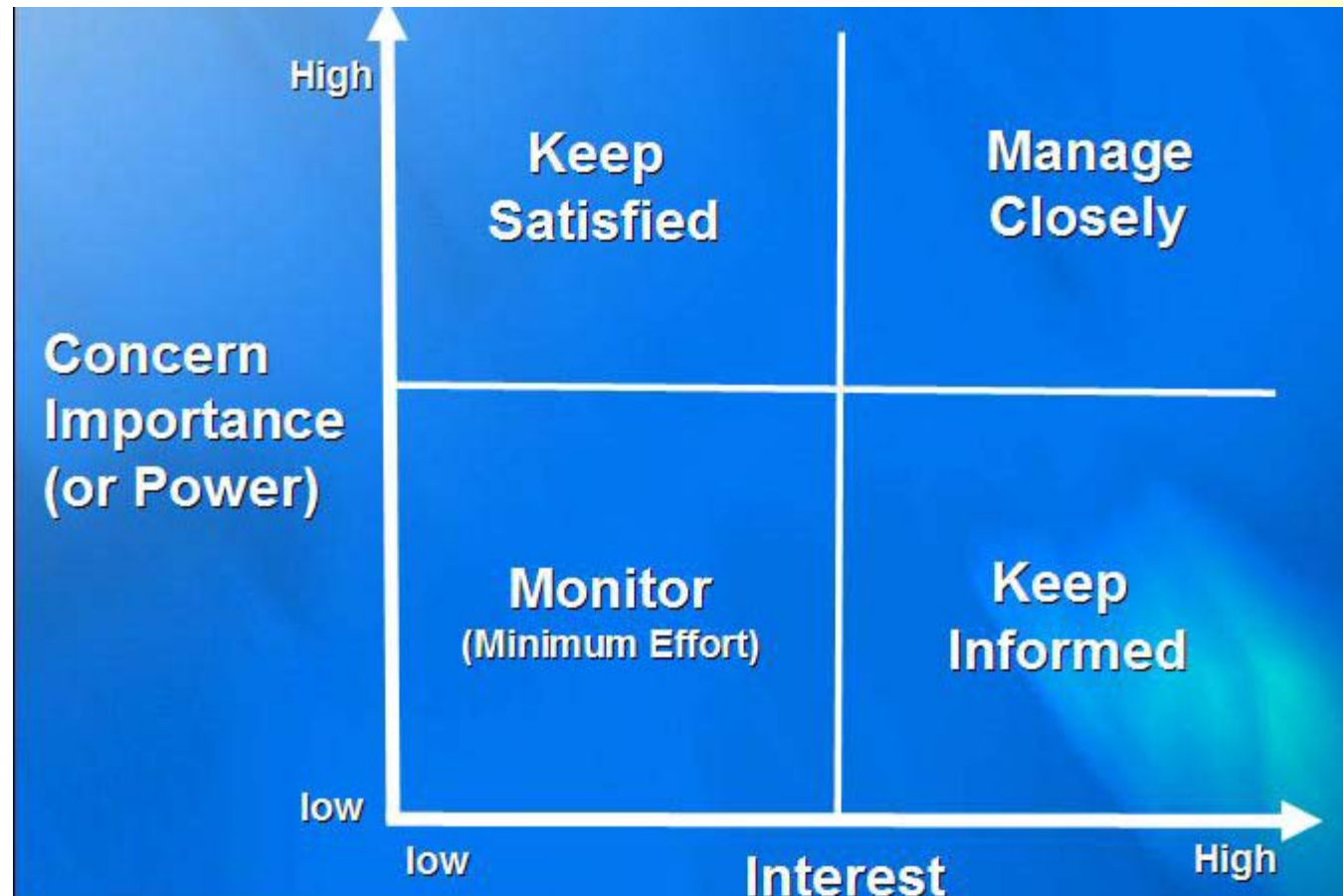
Stakeholder	Interest	Goals	Resources	Limits
Project Developer	High, value of real estate	Return on investment, reputation	Capital, know how	Infra risk maximization
Municipality District	High, spatial quality	Spatial quality, economic growth, full employment	Planning instruments, capital (?)	Financial resources, know how
Regional Government Municipality				
Port Authority	Level of interest depends, transportation	Optimal modal shift	Capital, access to other stakeholders	No direct investments in real estate
...				
...				
...				
...				

## HOW?

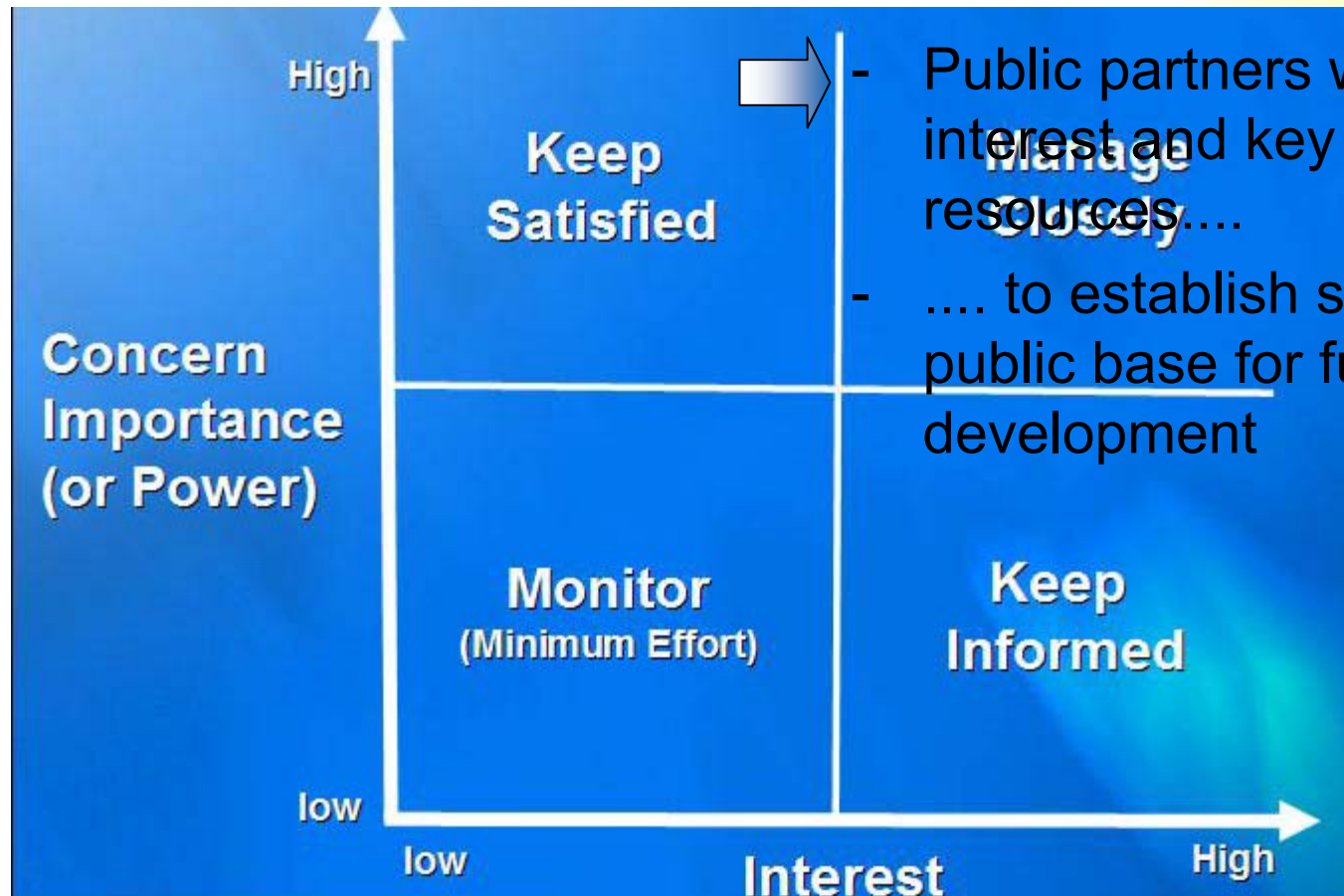
- study available documentation (spatial plans, annual reports, etc)
- TALK TO THEM!



# Step 3: stakeholder management



# Step 4: find public partners



- Public partners with high interest and key resources....
- .... to establish strong public base for further development

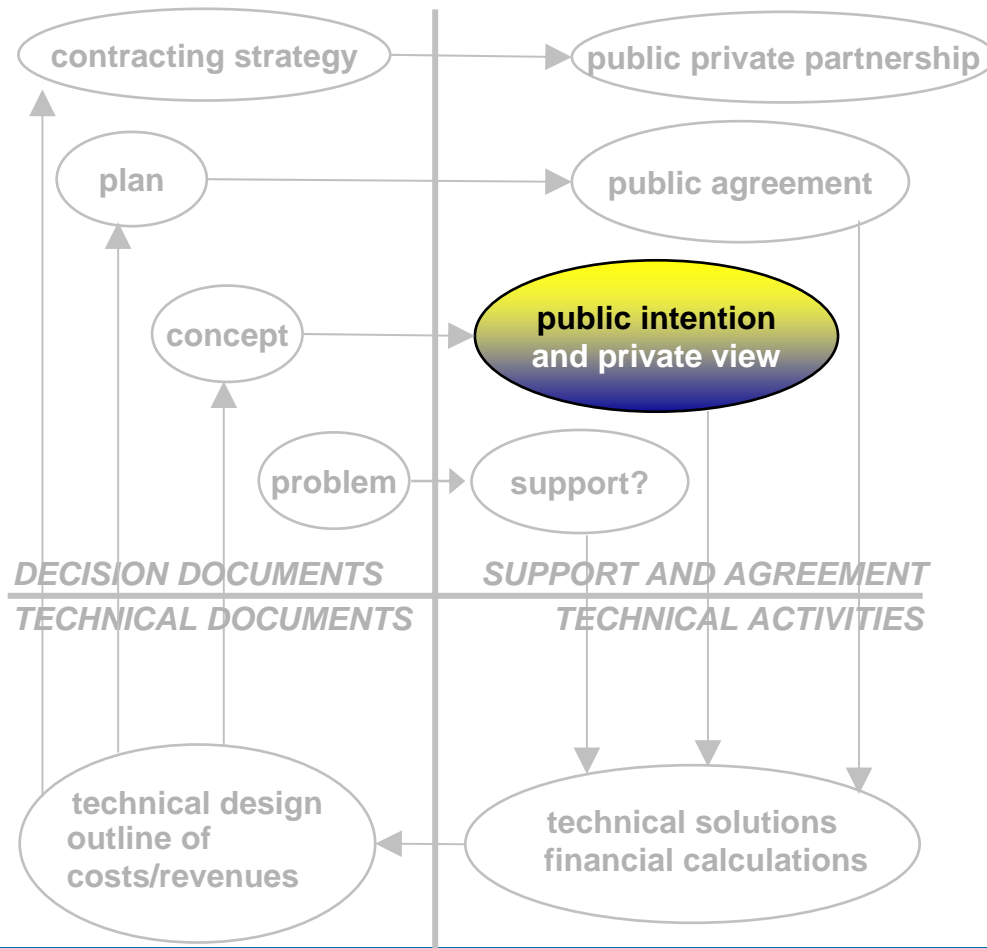


# Private view: market scan and consultation

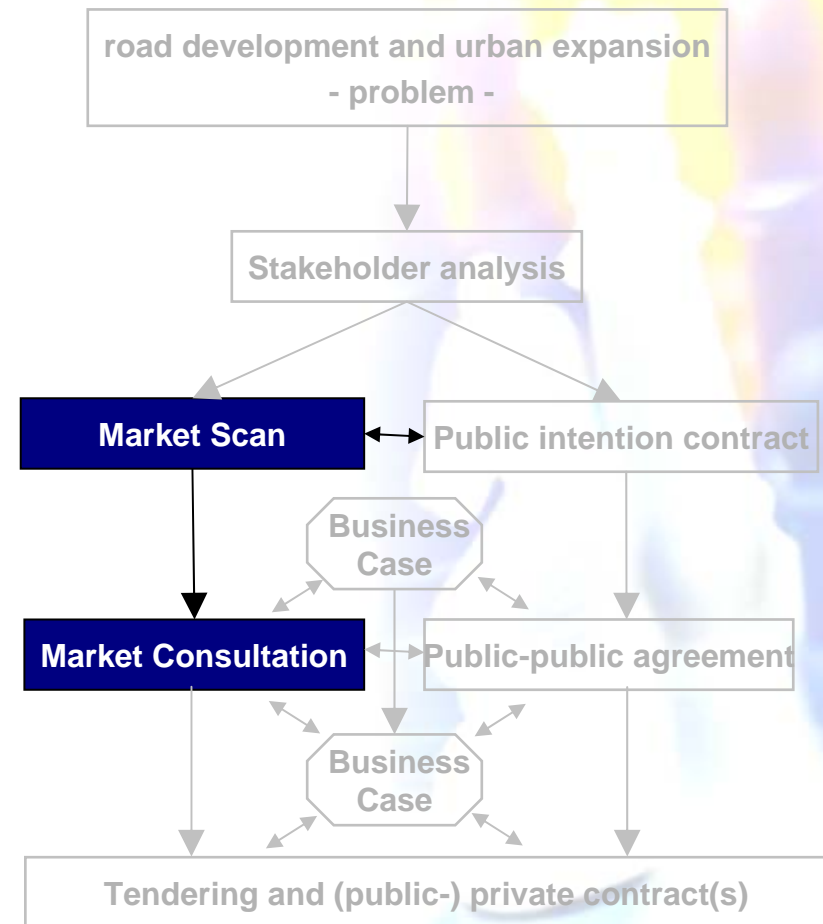


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## PROCES



## SUPPORT-AND-AGREEMENT-PRODUCTS



Partners for Roads

# Market Scan

- Get a view if an early market involvement brings added value to the project;
  - in terms of money (cheaper)
  - in terms of time (faster)
  - in terms of quality (better)
- A four stage approach
  1. write memo about market scan approach (scope, who to involve)
  2. list possible options for added value
  3. evaluate these options (opportunities, risks)
  4. final report with conclusions

**Example:**

combination of road development and

- development of new industrial zone
- solar energy panels in acoustic screen
- ....



## When market consultation?

- if the public sector needs to get a better view of the market “appetite”
- if a better view of feasible tendering and contracting strategies is needed
- If the public sector is not certain about the proposed solutions
- if the project is voluminous with a large number of stakeholders
- if the project is complex and/or involves innovative technical aspects
- NOT to rescue a stagnated project!



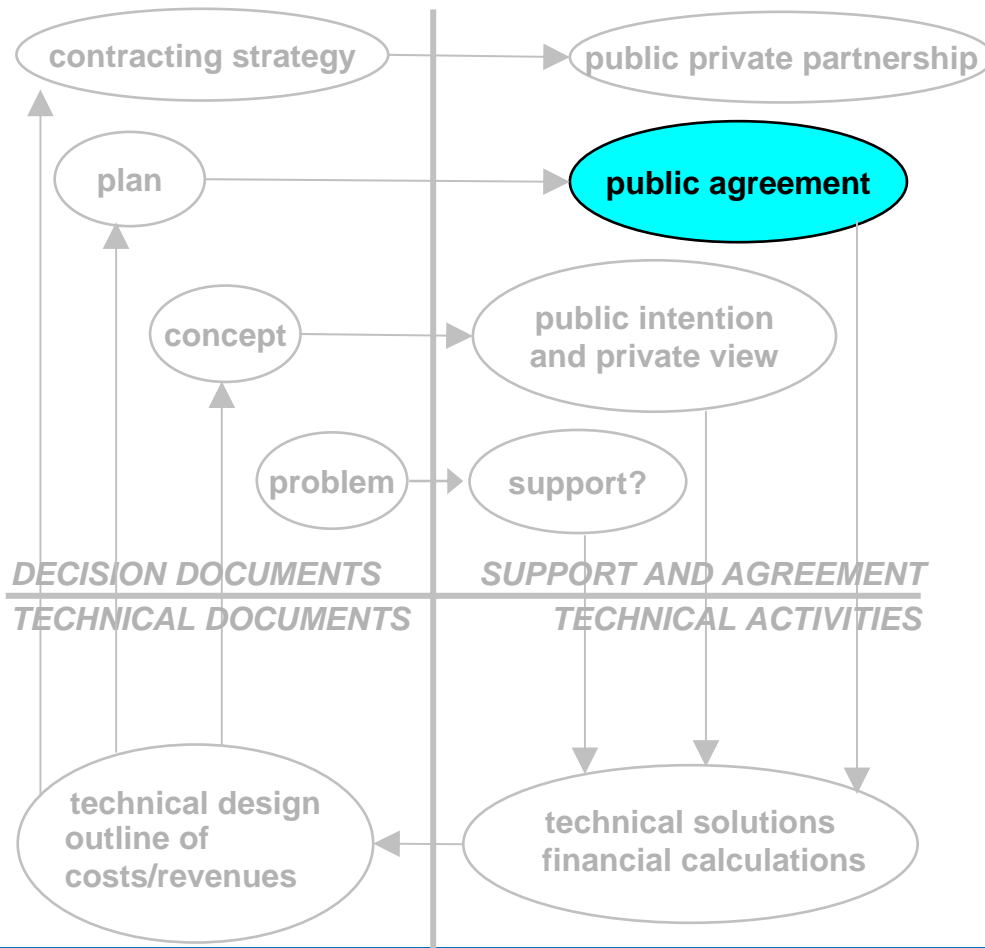
# How to consult the market?

- Marktscan
  - internal scan to get an answer to the question if the market can create surplus value and if a market consultation therefore is useful
- Market consultation document
  - motivation, goal, methodology, planning, costs
  - question(s) for the market
- Market invitation
  - pre-selection or not (depends on specific know how needed)
  - make sure participation in market consultation does not lead to a preferred position in a possible tender!
- Market consultation
  - oral, by letter, interactive
- Report of market consultation
- Publish results of market consultation

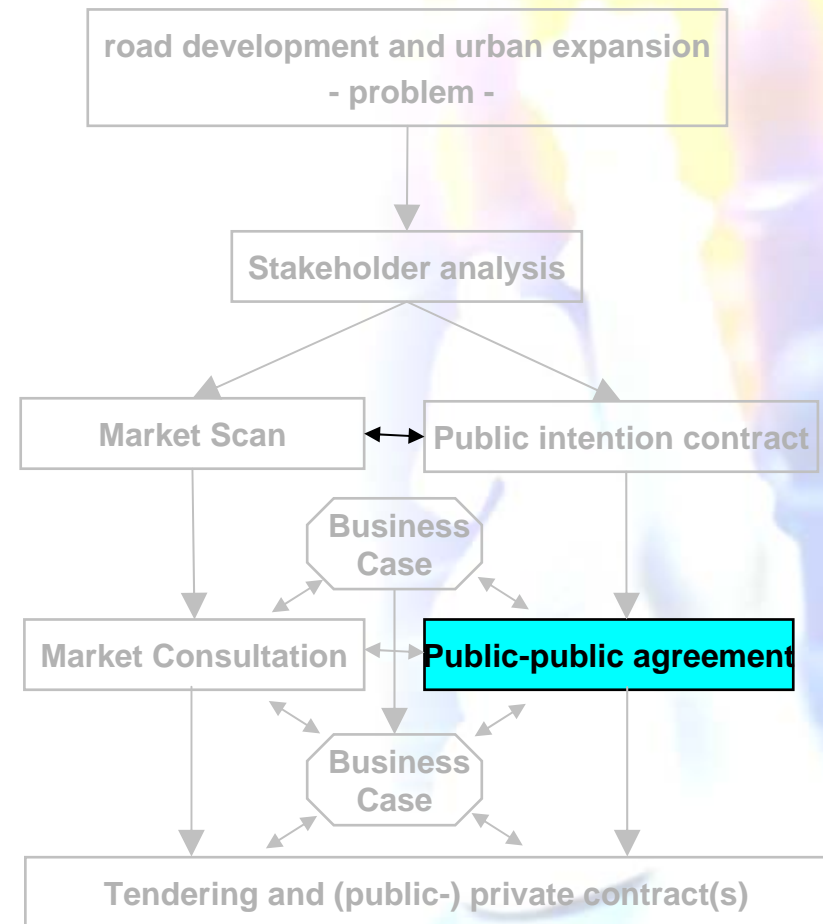


# Public-public agreement

## PROCES



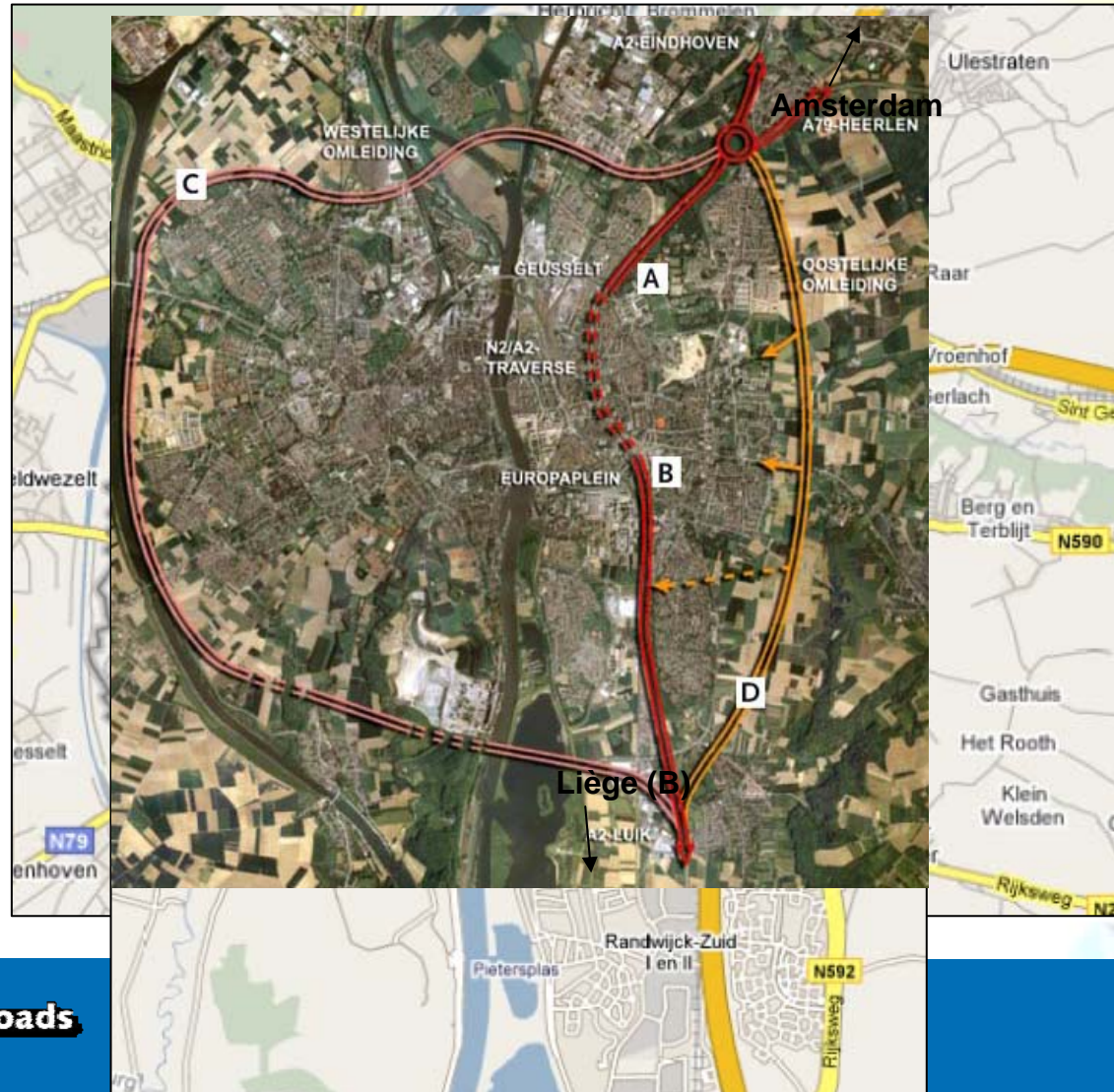
## SUPPORT-AND-AGREEMENT-PRODUCTS



# Example: A2 Maastricht



# A2 Maastricht



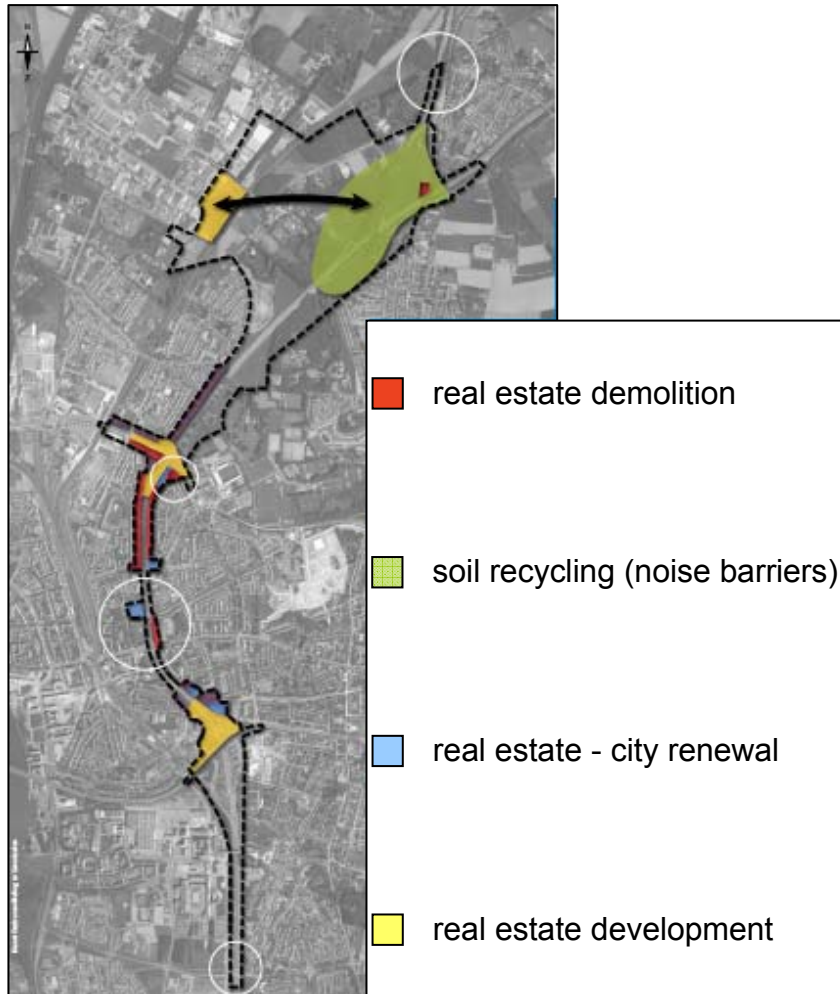
# A2 Maastricht



- Development zone
- Infrastructure: Reconstruction of A2 motorway
    - full connection A2 en A79
    - linking road between A2 and Beatrix Harbour
    - tunnel 2x 4 lanes
    - city boulevard



# A2 Maastricht

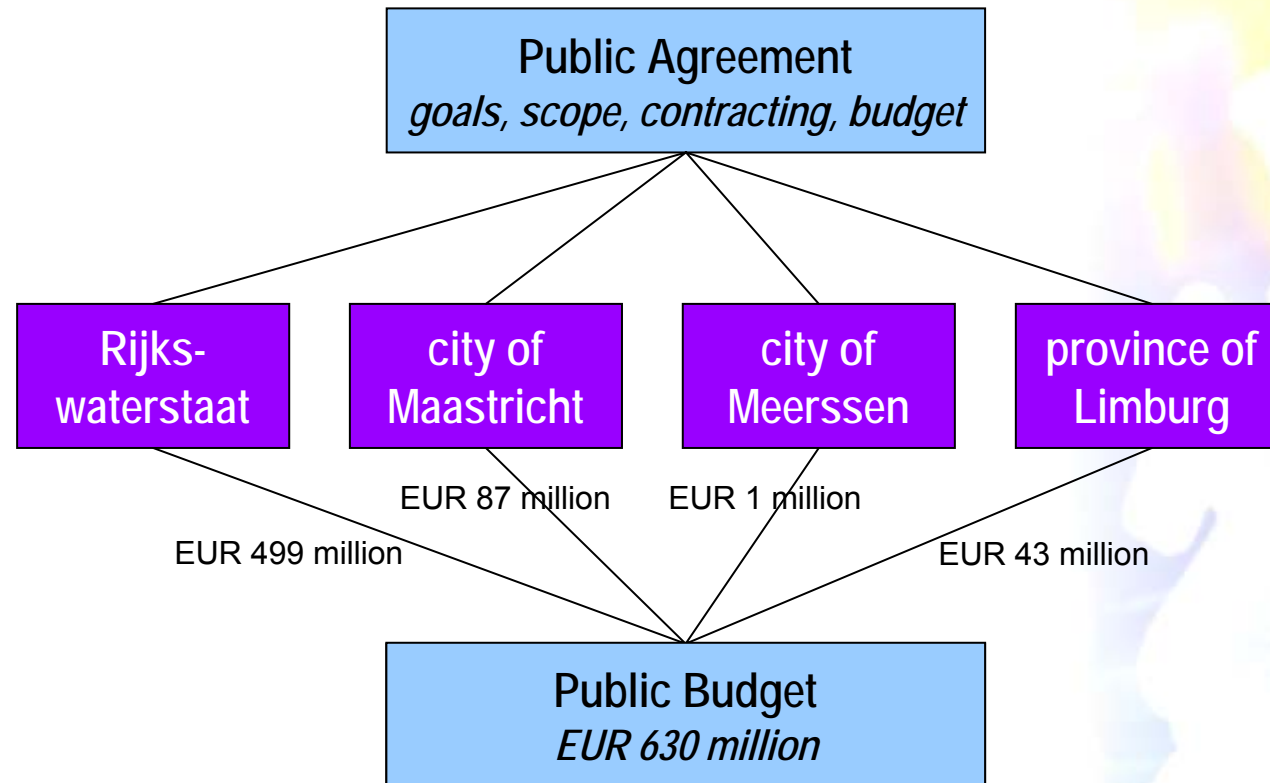


## Development zone

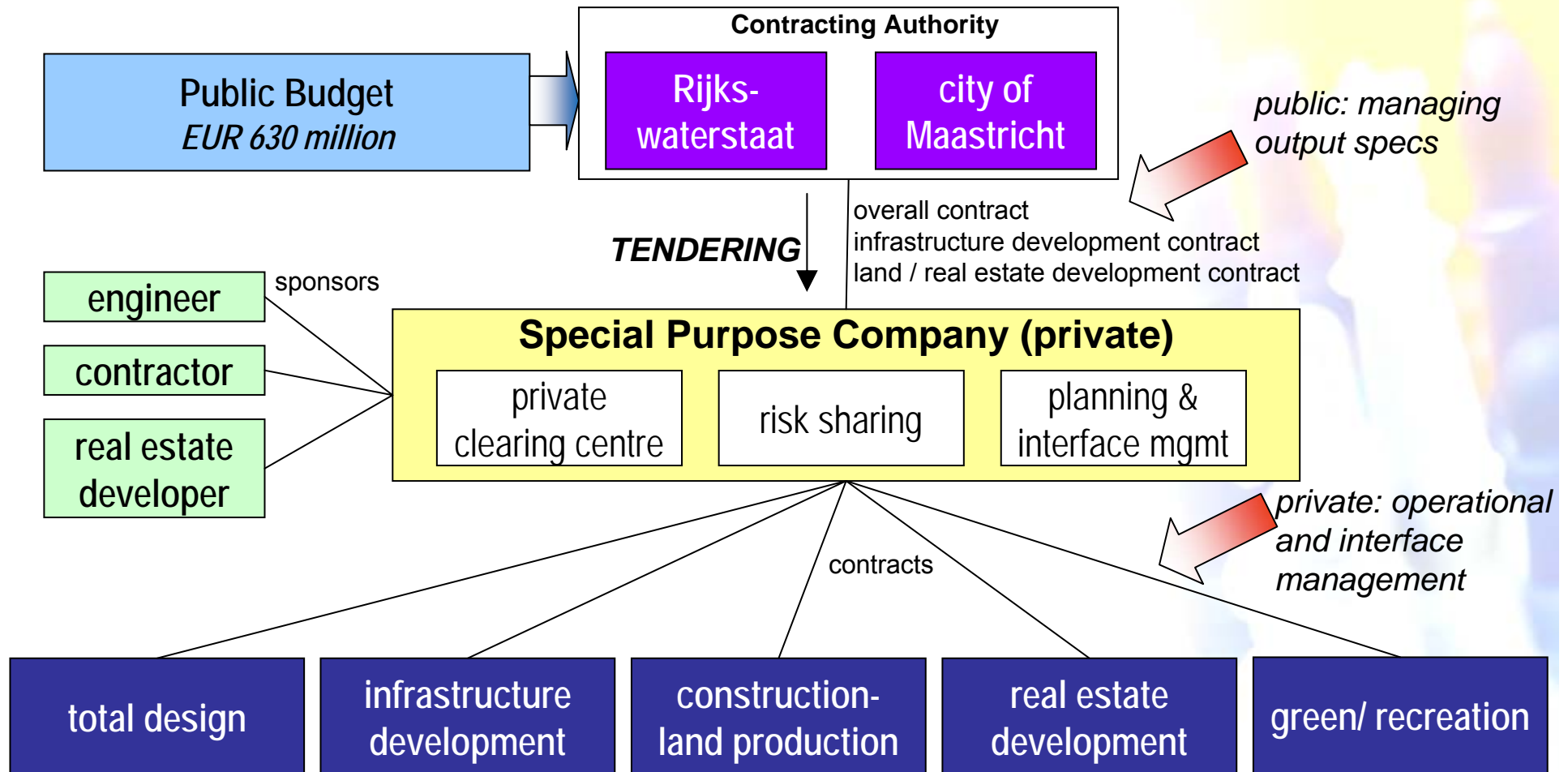
- Urban Development
  - 600 houses
  - 30.000m<sup>2</sup> commercial facilities
  - options for extra real estate



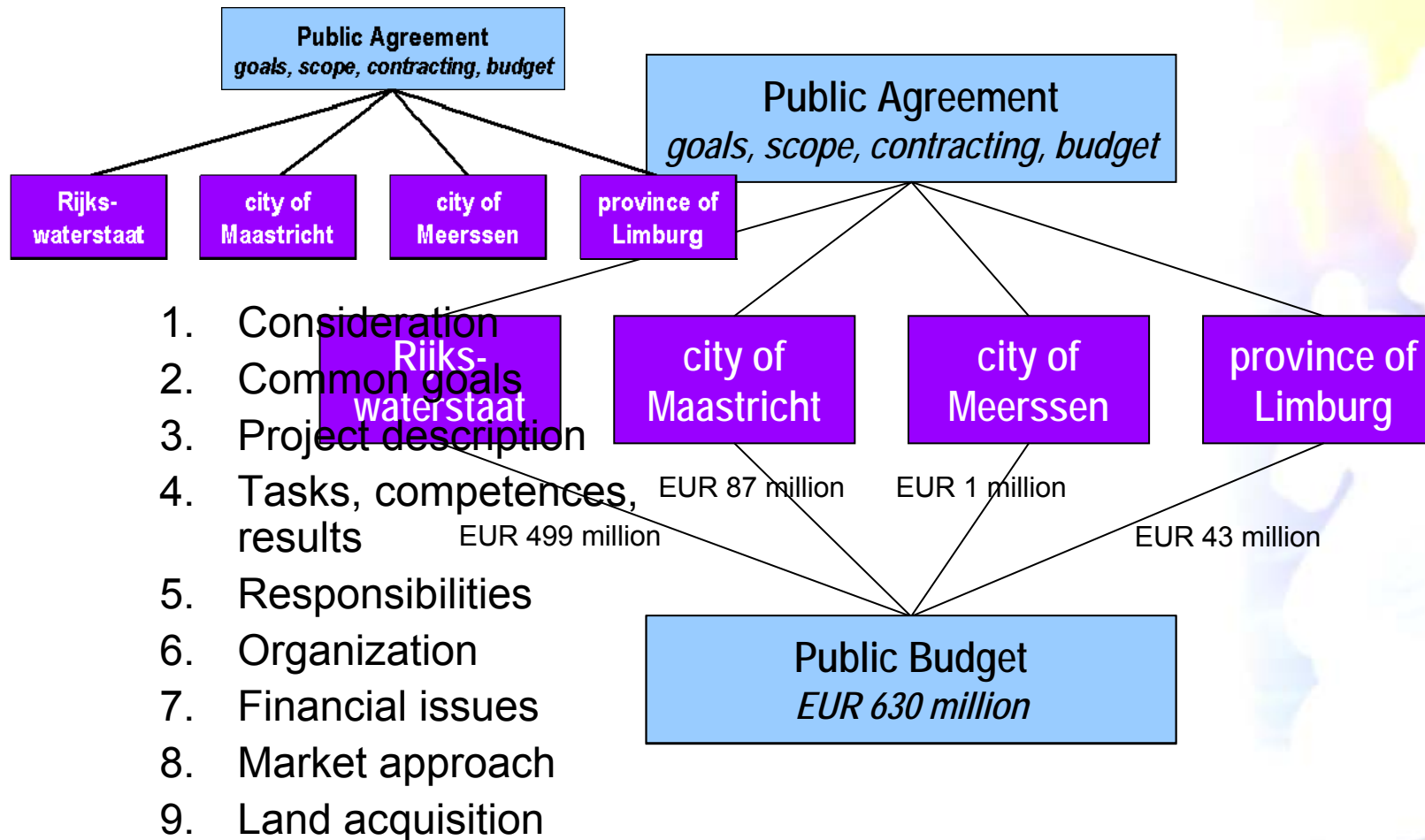
# A2 Maastricht

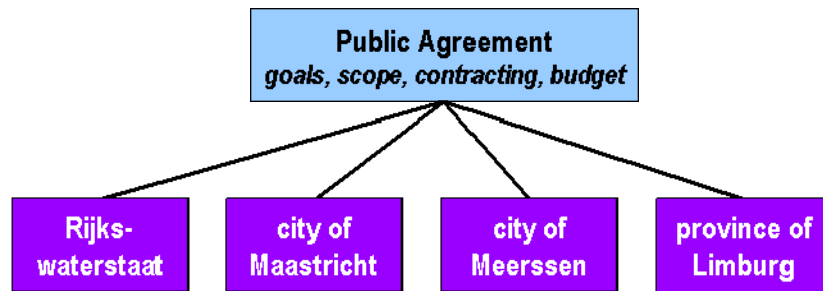


# A2 Maastricht



# What's in the public-public agreement?

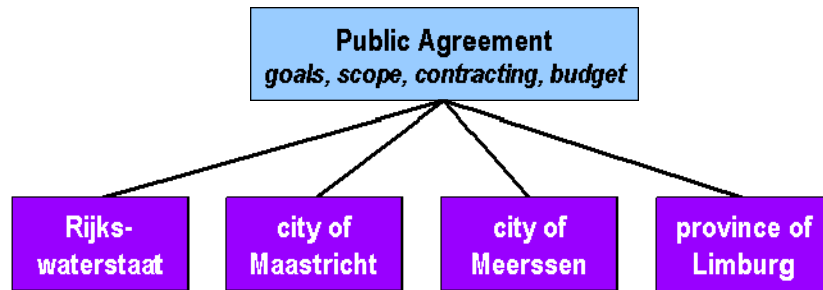




1. **Consideration**
2. Common goals
3. Project description
4. Tasks, competences, results
5. Responsibilities
6. Organization
7. Financial issues
8. Market approach
9. Land acquisition

- *recognition of sense of urgency*
- *choice for combined solution for infrastructure and land development*
- *recognition of interdependence en synergy of interests*
- *agreement to work together on an integral solution*
- *agreement to involve private partners in time*
- *recognition of each of the partners public responsibilities*



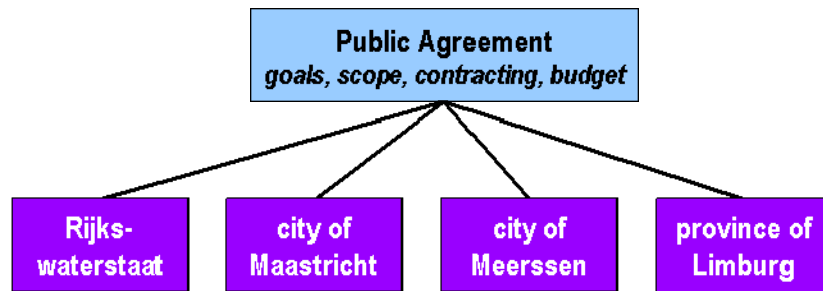


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- *improve traffic flow, accessibility and quality of life*
- *work together on all products needed for formal public procedures (zoning plans, traced out road procedure) and procedures to involve the market*
- *make assumptions of every partner explicit*
- *assurance of total finance, completion of public procedures and procedures to start tendering not later than 2006*



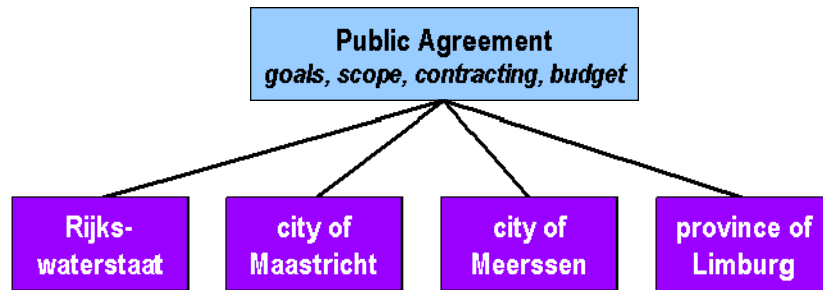
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- *scope*
- *alternatives*



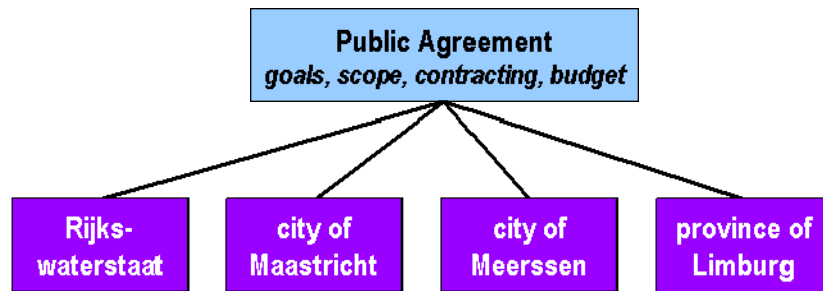


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- *each party agrees to put in sufficient man power, budget and administrative availability to assure the completion of all procedures before the deadline*
- *therefore, the public parties will draw up a step-by-step plan including all activities to be carried out in order to complete all procedures*
- *each party will take public decisions in relation to its role as public authority on time*
- *the zoning plan and the traced out road procedure will be developed simultaneously will be interconnected*



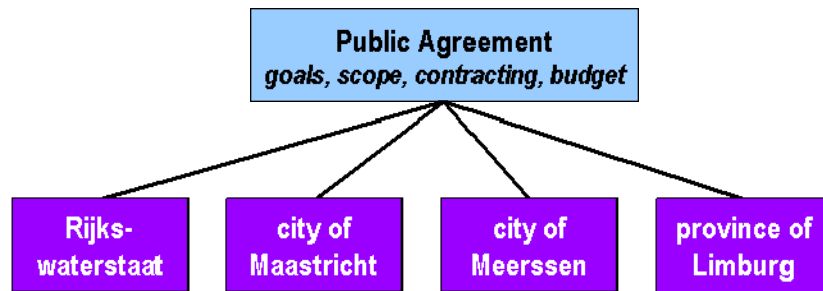
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- *The central government is responsible for the traced out road procedure*
- *The municipalities are responsible for the zoning plan procedures*
- *The province will use its approval instrumentation to achieve the goals of the project*
- *a to be established project organization will be in charge of the PPP-model and tendering procedure*
- *this common project organization will also be in charge of the integral planning and business case*



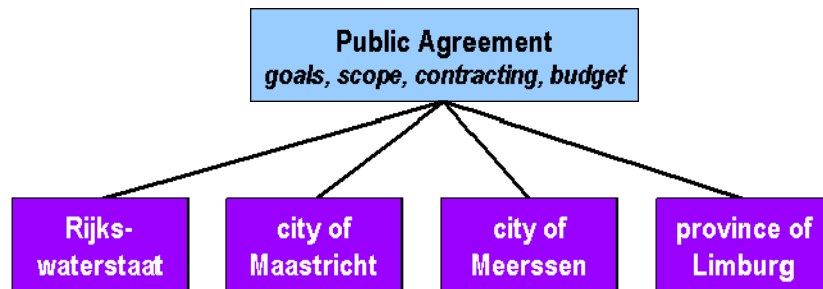


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- *Steering committee*
  - every party appoints a representative
  - city of Maastricht is chairman
- *Project organization*
  - consists of staff carrying out the work
  - city of Maastricht is initiator
- *Costs of planning phase*
  - each party will defray its own costs including the costs of its people working in the project organization
  - project management costs will be divided according to a cost distribution formula



# What's in the public-public agreement?

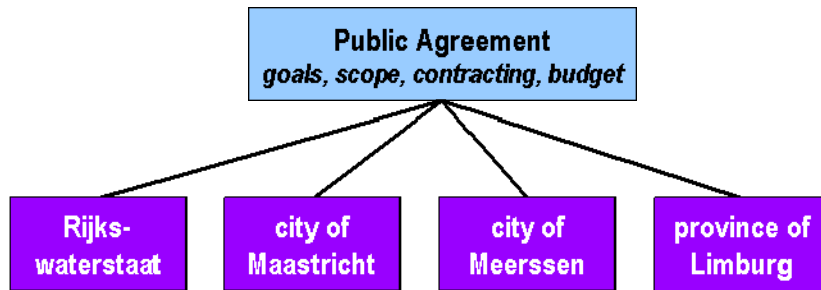


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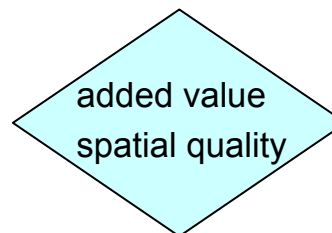
- *city of Maastricht contributes EUR 87 million*
- *city of Meerssen contributes EUR 1 million*
- *province of Limburg contributes EUR 43 million*
- *Rijkswaterstaat contributes EUR 499 million*
- *parties agree to spend positive cash flows from land development on the improvement of the overall quality of the project area*



# What's in the public-public agreement?



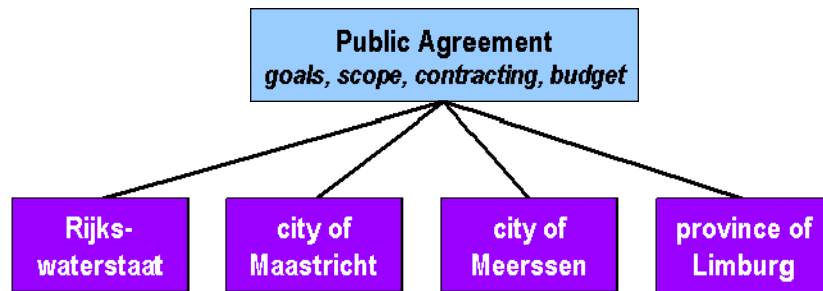
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8. **Market approach**
9. Land acquisition



- *private sector involvement is based on qualifications in the field of innovation, quality, cost effectiveness and its capacity to realize the project*
- *parties will determine the most efficient PPP-approach after signing the public agreement*
- *PPP-criteria are:*
  - *transparent risk-valuation and risk coverage by private sector*
  - *profit sharing if development revenues are higher*
  - *at least 3 market consortia in tendering procedure*
  - *PPP should be evidently cheaper and deliver better quality than a traditional approach (PPC / PSC)*



# What's in the public-public agreement?



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- *Municipality of Maastricht acquires the required land in private purchases based on market prices*
- *The municipality of Maastricht will deduct capital invested in land acquisition from its EUR 43 million contribution to the project*



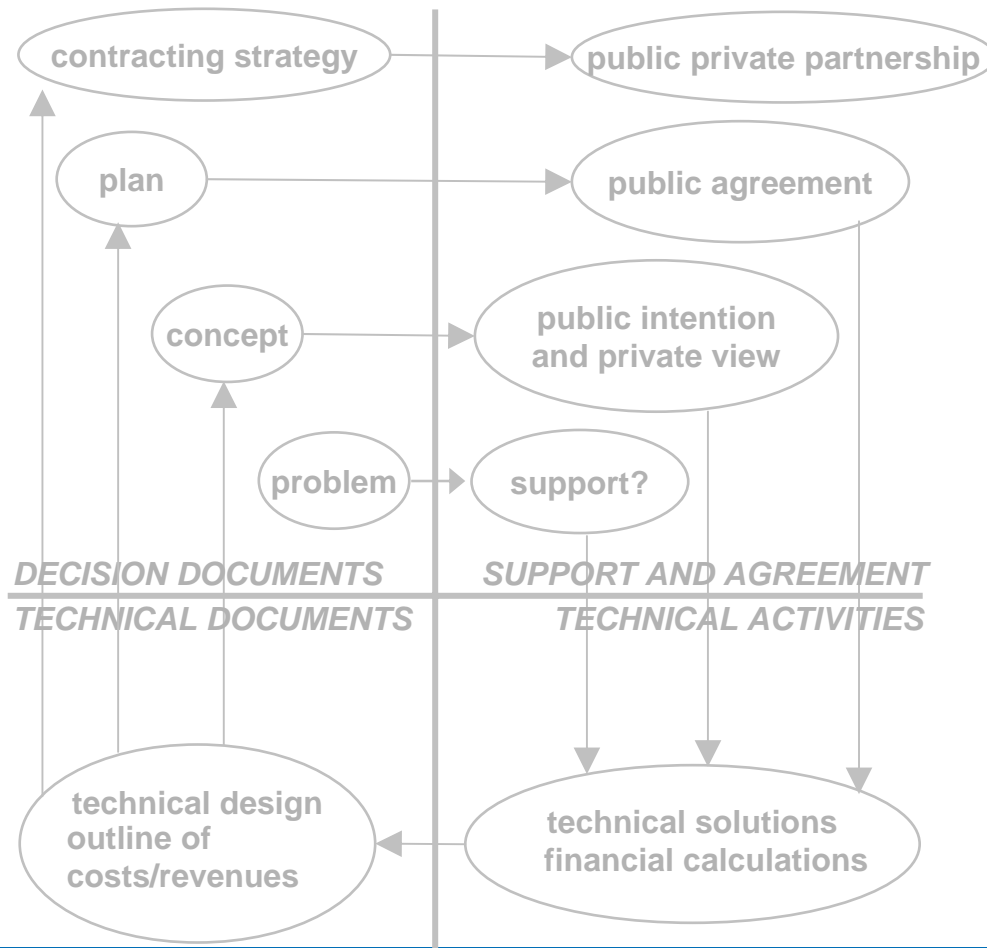
## Final remark

- The nature, content and intensity of a public-public agreement depends on
  - the level of interaction between urban expansion and road development
  - the sense of urgency for each of the public stakeholders
- Getting to a public agreement takes time
  - getting to a public agreement in the Maastricht case took about 2 years!

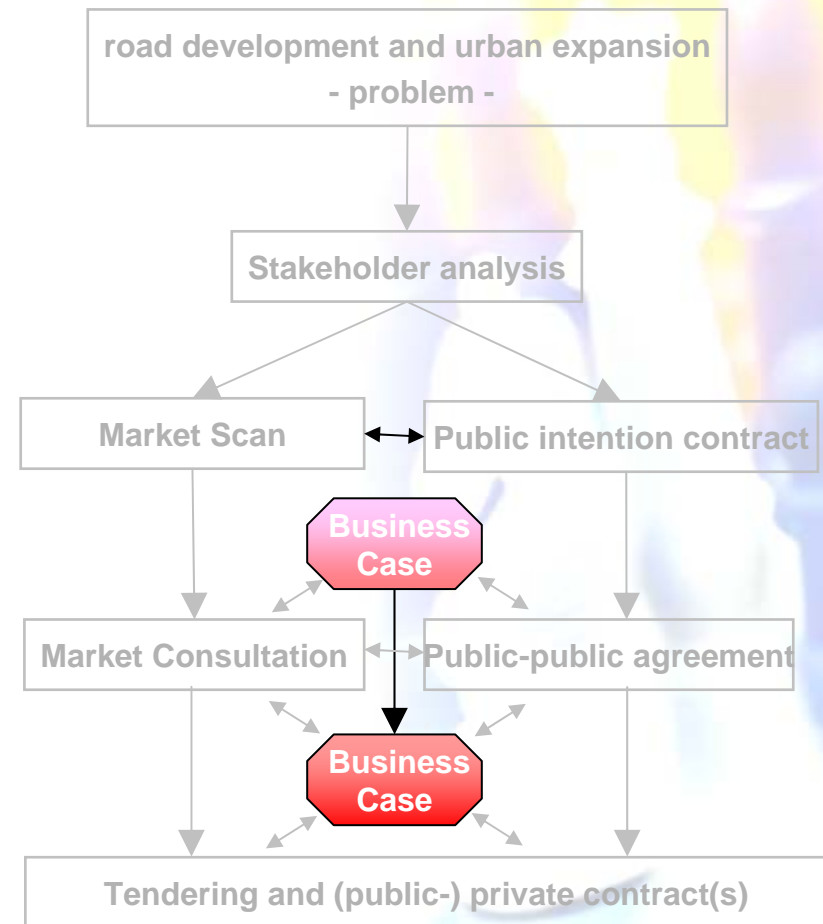


# The Business Case

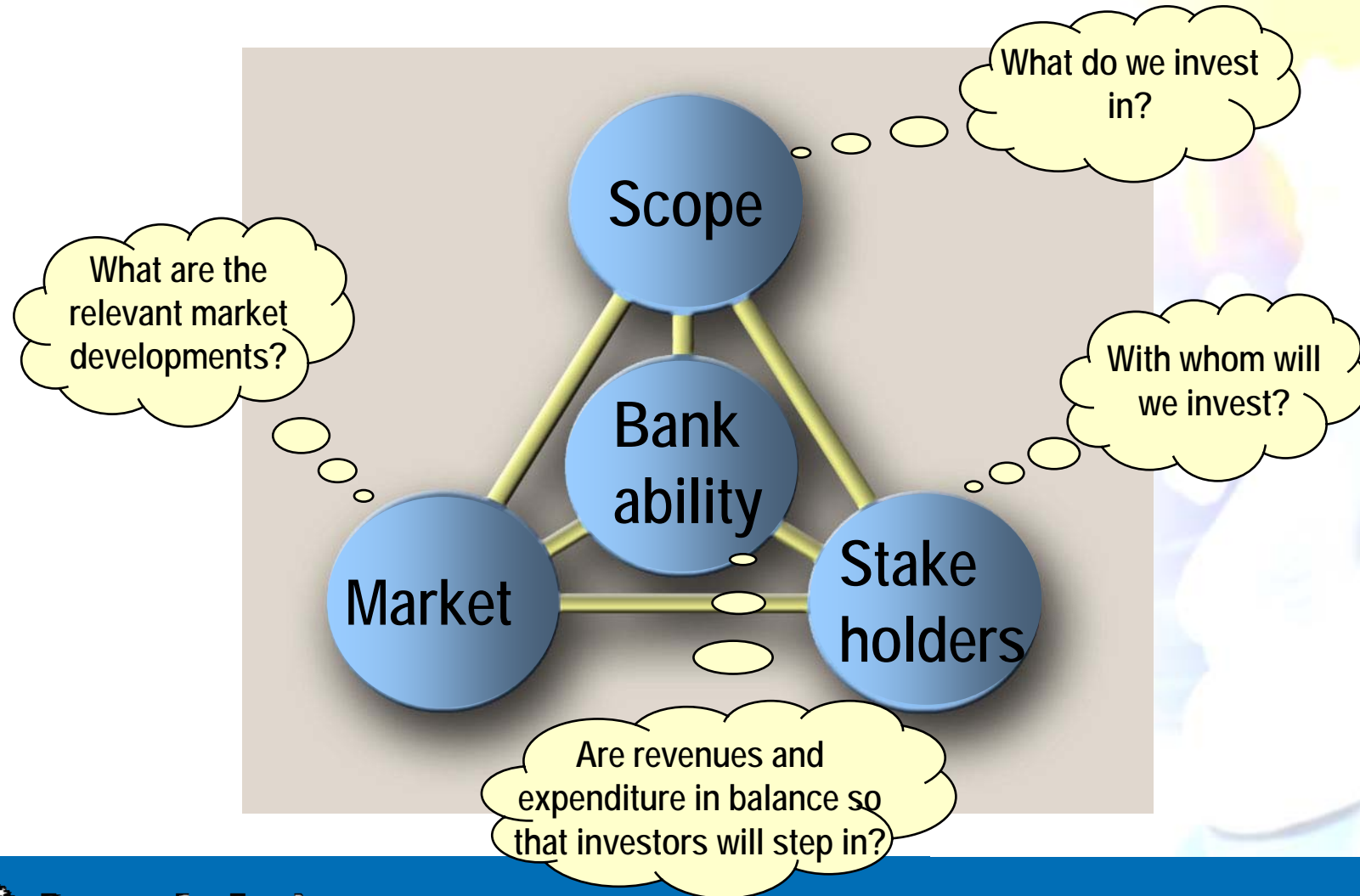
## PROCES



## SUPPORT-AND-AGREEMENT-PRODUCTS



# What is a Business Case?



# Business Case

- Road Administrations traditionally think in terms of expenditure and public budgets
- A business case explores opportunities for alternative financial resources:
  - under which circumstances are land/real estate developers willing to contribute to road development investments?
  - are DBFM/DBFMO concept feasible so that road development investments create a direct cash flow as a basis for direct capital investments?
  - Can key stakeholders create extra financial value and agree how to divide this extra value?
  - Input for public-public and public-private contracting



# Financial Model as the heart of the business case



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## ASSUMPTIONS

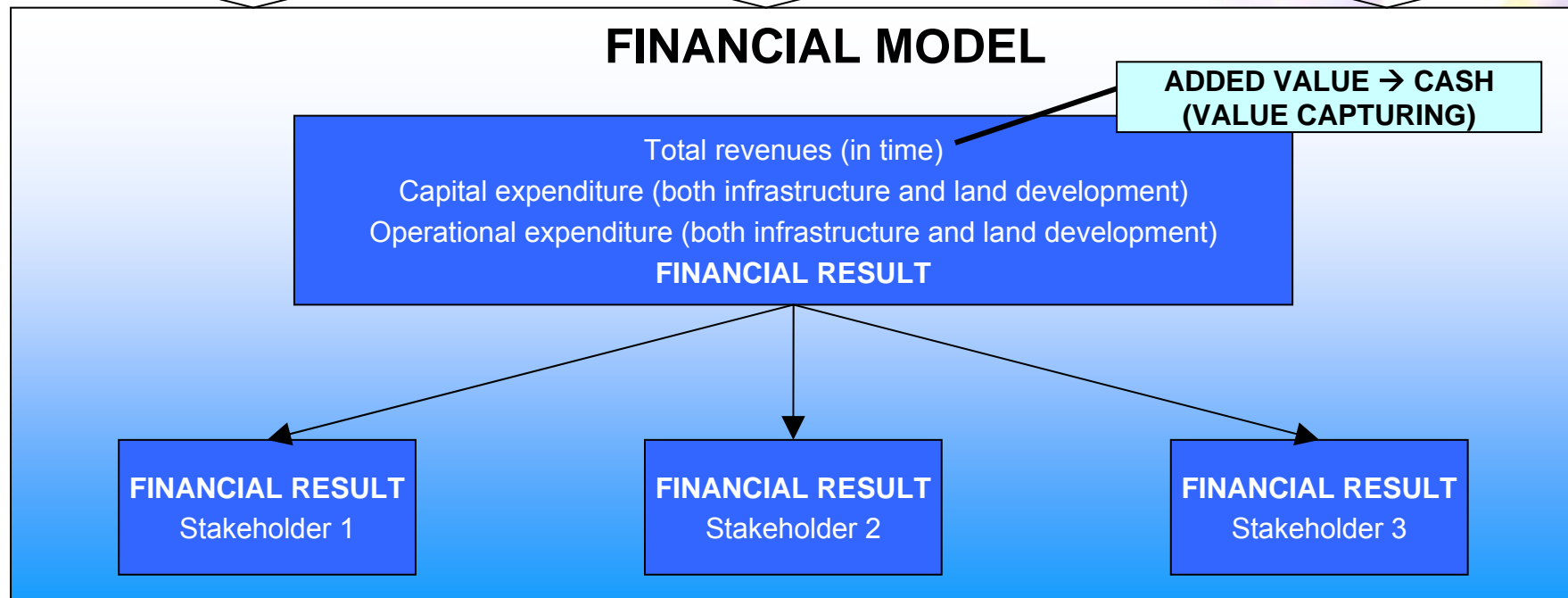
- scope (example)
- technical design (example)
- noise barriers (example)

## RISKS

- technical, financial, legal, etc.
- risk management measures

## SCENARIOS

- economical scenarios
- market scenarios

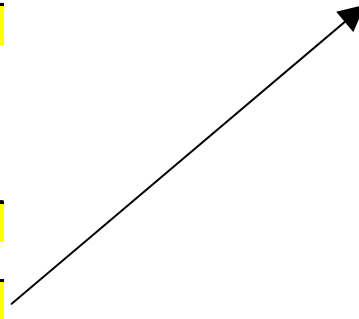


Partners for Roads

# Financial Model Example

<b>Profit &amp; Loss</b>	<b>Total</b>
<i>x EUR 1.000.000</i>	
Regular revenues	0,00
Incidental revenues	0,00
<b>Total revenues</b>	<b>0,00</b>
Operational costs	0,00
Depreciation	0,00
Amortization	0,00
<b>Total operational costs</b>	<b>0,00</b>
<b>Operational result</b>	<b>0,00</b>
<b>Total financial costs</b>	0,00
Interest income	0,00
<b>Net financing costs</b>	<b>0,00</b>
<b>Pre-tax result</b>	<b>0,00</b>
Taxes	0,00
<b>Net result</b>	<b>0,00</b>

<b>Cash flow</b>	<b>Total</b>
<i>x EUR 1.000.000</i>	
<b>Operational activities</b>	
Operational result	0,00
Financial expenditure	0,00
Taxes	0,00
Depreciation	0,00
Change in working capital	0,00
<b>Operational cash flow</b>	<b>0,00</b>
<b>Investment activities</b>	
Investments in infrastructure	0,00
Investments in land development	0,00
<b>Investment cash flow</b>	<b>0,00</b>
<b>Financing activities</b>	
Debt redemption	0,00
Debt withdrawal	0,00
Dividends	0,00
<b>Financing cash flow</b>	<b>0,00</b>
<b>Movement in cash</b>	<b>0,00</b>

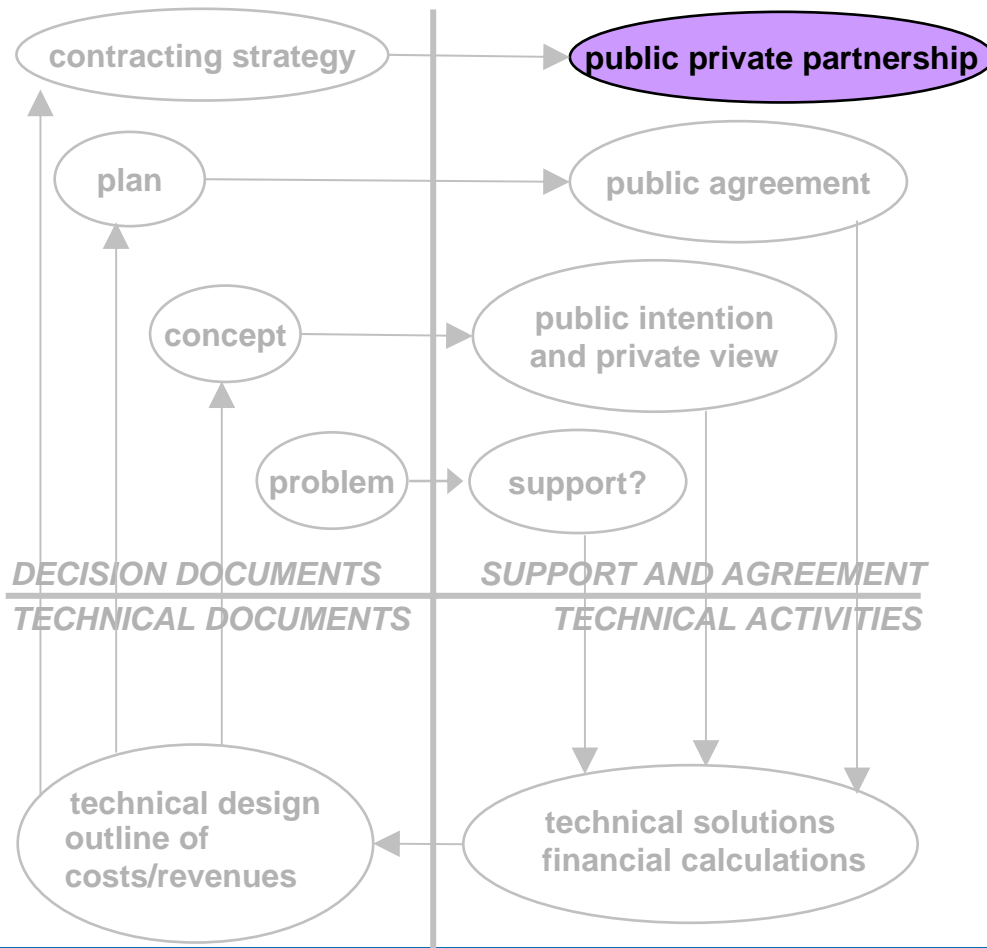


# PPP:

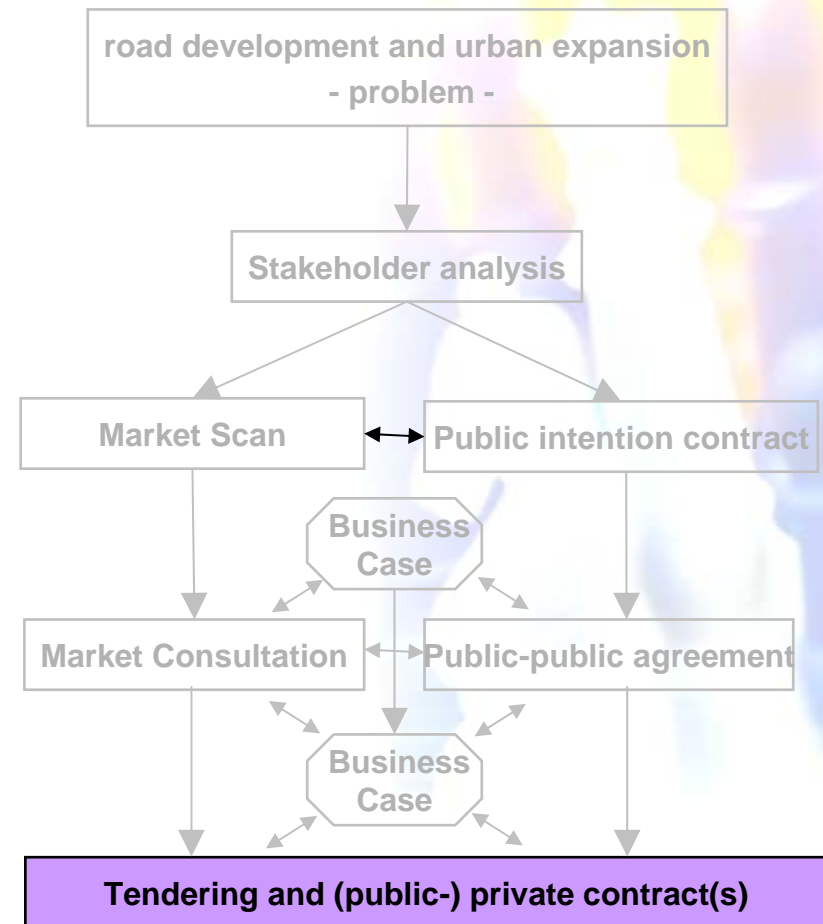
## tendering and (public-)private contracting **investmentservices**



### PROCES



### SUPPORT-AND-AGREEMENT-PRODUCTS



# Contracting strategy

Depends on:

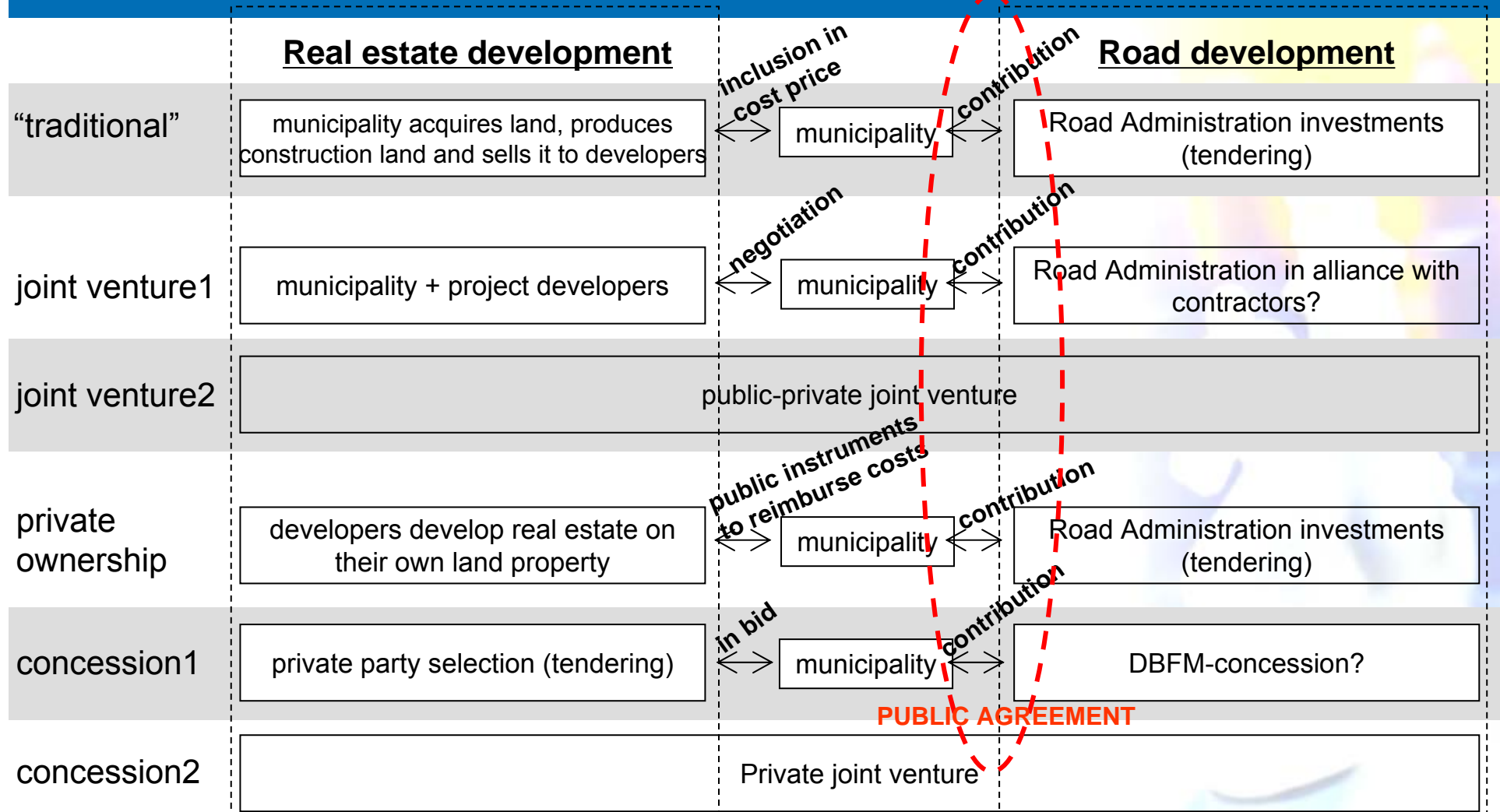
- outcome of stakeholder analysis
- market scan and market consultation
- interdependence of real estate development en road development
- land ownership



# Options for contracting and financial clearance (based on Dutch practice)

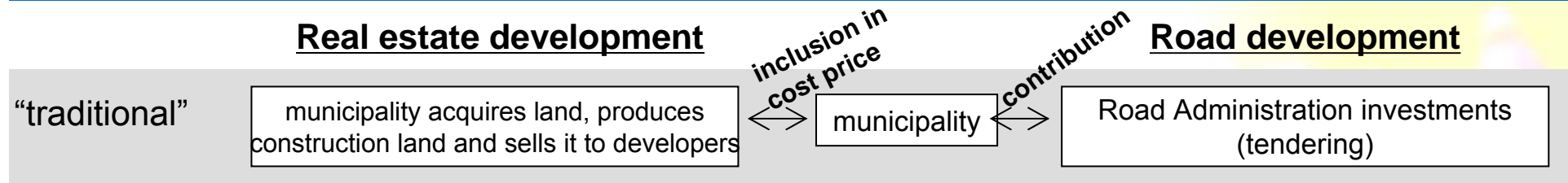


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Partners for Roads

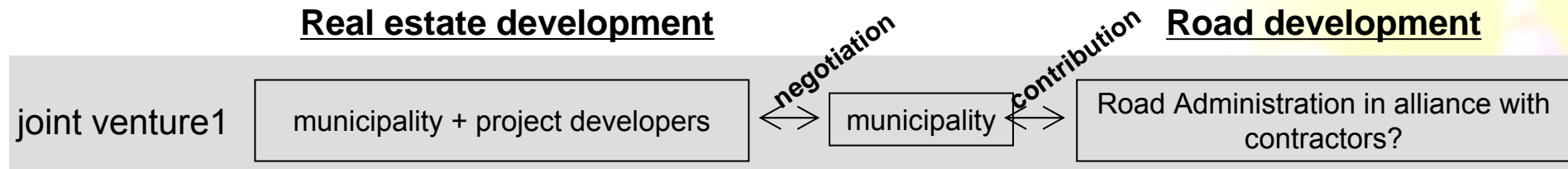
# “Traditional” model



- If scope of the two projects is diverse (time, scale)
- Land/real estate development and road development are separate projects
- Municipality in charge of land development project (production of construction land, to be sold to project developers)
- Road Administration in charge of road development
- Contribution from municipality is possible financial interface between the two projects



# Joint venture 1



- If scope of the two projects is diverse (time, scale) Land/real estate development and road development are separate projects
- Municipality develops land in close cooperation with project developers
- Road Administration in charge of road development (traditional or alliance)
- Contribution from municipality or joint venture is possible financial interface between the two projects



# Joint venture 2

## Real estate development

## Road development

joint venture2

public-private joint venture

- If scope of the two projects is comparable (time, scale)
- Municipality, Road Administration, project developers and infra contractors join in one big joint venture
- Joint venture is in charge of both real estate and road development
- Maximum value capturing as both revenues and infrastructure expenditure are part of JV
- Road Administration faces real estate risks!!!



# Private ownership

## Real estate development

## Road development

private ownership

developers develop real estate on their own land property

public instruments to reimburse costs

municipality

contribution

Road Administration investments (tendering)

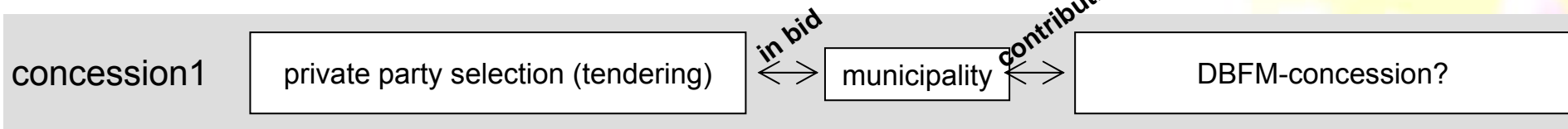
- If scope of the two projects is diverse (time, scale) Land/real estate development and road development are separate projects
- Construction land is private property and therefore both construction land production and real estate development are private investments
- Road Administration in charge of road development (traditional or alliance)
- Municipality has no revenues to cover its expenses (including contribution to road development) except public cost-reimbursement instruments



# Concession 1

## Real estate development

## Road development



- If scope of the two projects comparable (time, scale)  
Land/real estate development and road development are separate projects
- Construction land is public property (municipality)
- Municipality does not invest in production of construction land, but tenders the complete land development
- Road Administration in charge of road development (might be a Design-Build-Finance-Maintain concession)
- Municipality generates income from land tendering which may be partly used as a contribution to the infrastructure investments





# Concession 2

## Real estate development

## Road development

concession2

Private joint venture

- If scope of the two projects is comparable (time, scale)
- Construction land is public property (municipality)
- Municipality and Road Administration tender the whole project (real estate and road development) to a private consortium
- Maximum value capturing and financial clearance
- Road Administration does not assume real estate development risks
- Private sector not always capable to accept this kind of large, complex projects with many interfaces

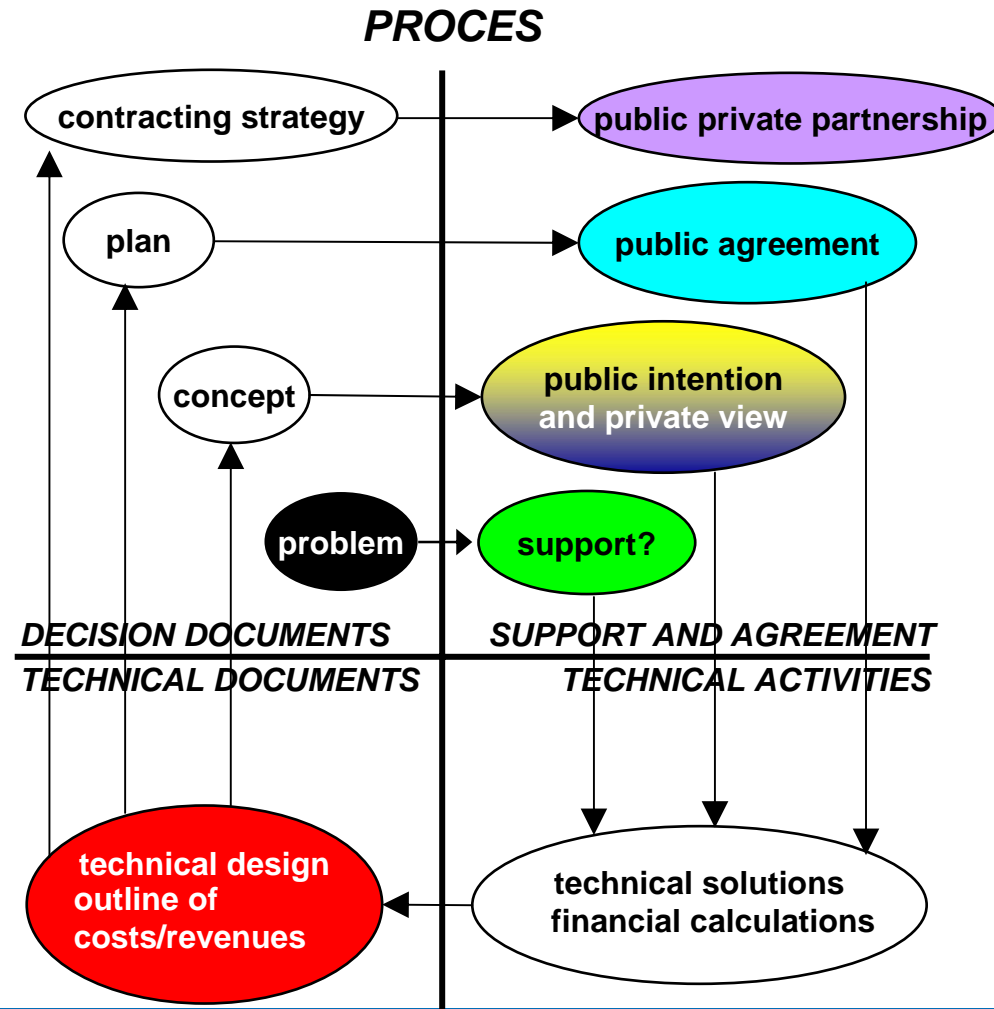


## Conclusion contracting strategy

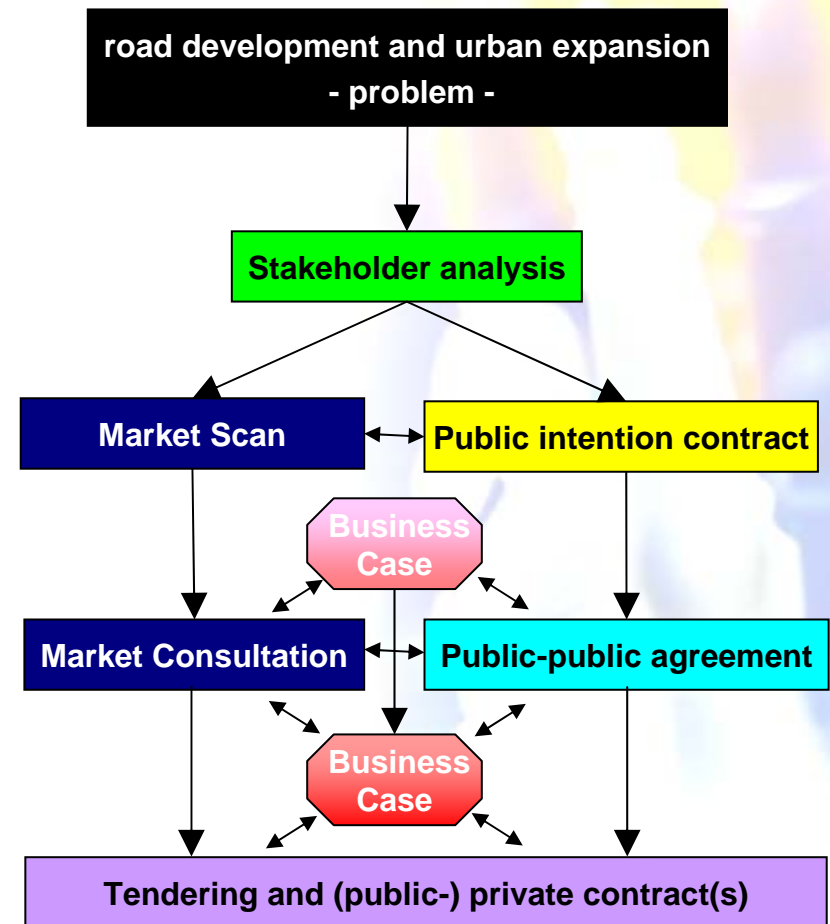
- There are many contract types and many ways to involve the market
- Despite the possible specific position of private parties (land ownership, strong lobby, et cetera), **the** reason for early market involvement should be more added value for the project



# Method Box overview



## SUPPORT-AND-AGREEMENT-PRODUCTS



## Final remarks

- This method box is based on best practices in the Netherlands
- Mind that the process to find out how urban and road development can be better combined is an ongoing search process, also in the Netherlands
- Use whichever part is helpful for your specific project and adapt the method to your specific context



# Final final remark

- Road development in close relationship with urban development may be an exhausting process:
  - find the right stakeholders
  - close the right agreements
  - convince, negotiate, calculate
- Sometimes, if it looks like a “mission impossible”
- Just remember that in the end of the day you will succeed, as long as you.....

NEVER EVER  
**EVER**  
 GIVE UP!

