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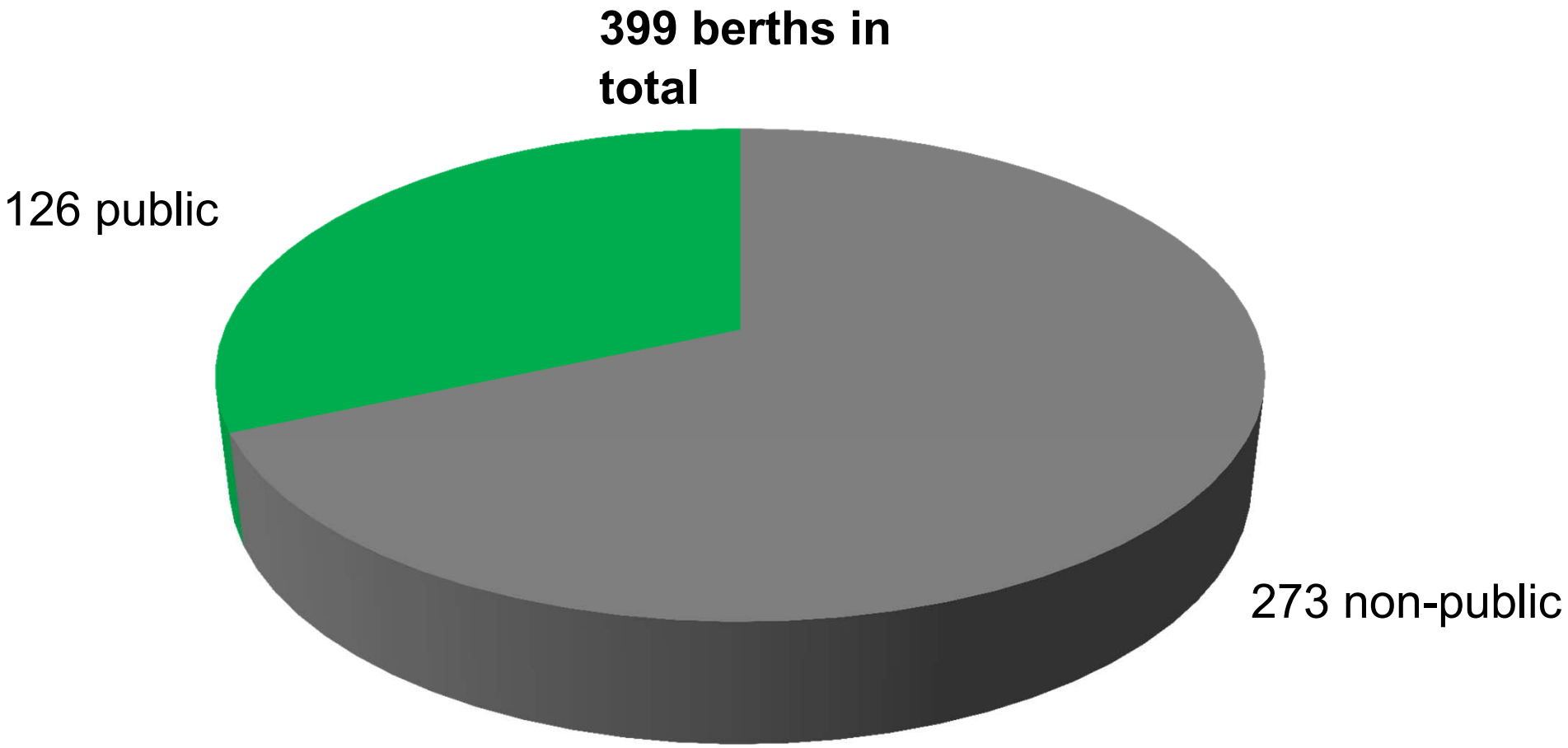
Guidelines for a demand-oriented berth development in Austria

Ulf Meinel
Vienna, 08.11.2018

Initial situation

Number of berths in Austria



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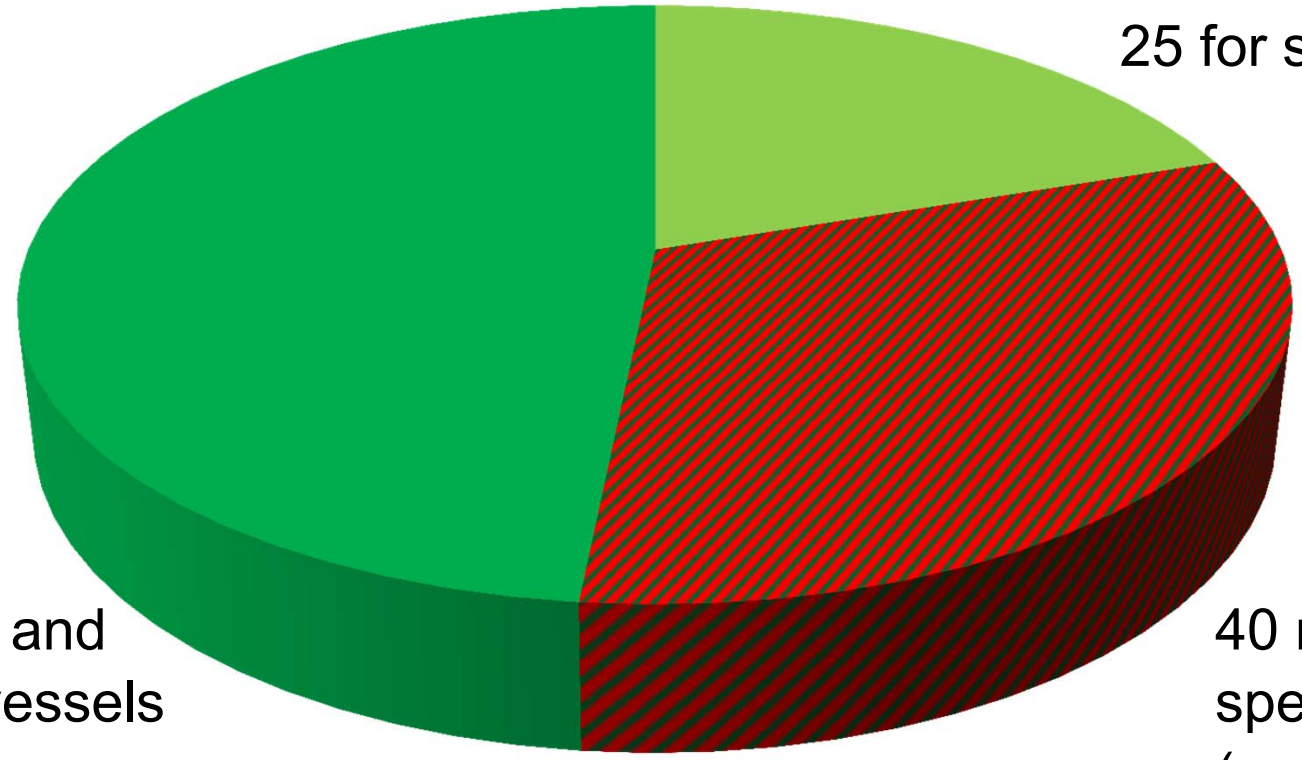
Number of public berths in Austria

126 public berths in total



25 for small craft

61 for cargo and passenger vessels for common purposes

40 restricted to specific purposes (waiting berths, emergency berths etc.)

Distance between public berths for cargo and passenger vessels for common purposes

Ø distance berth ↔ berth: 5.1 km

Ø travel time motor cargo vessel upstream: 34 minutes

maximum distance berth ↔ berth: 29 km (in the section East of Vienna)

Ø travel time motor cargo vessel upstream: 4 hours, 8 minutes

→ distances do not reveal anything about the quality of the berths

River bank construction of public berths for cargo and passenger vessels for common purposes

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53 x inclined

8 x vertical or partially vertical
(thereof 6 x in Vienna)

→ vertical river bank constructions
- few in number
- concentrated in Vienna

Importance of vertical river bank constructions

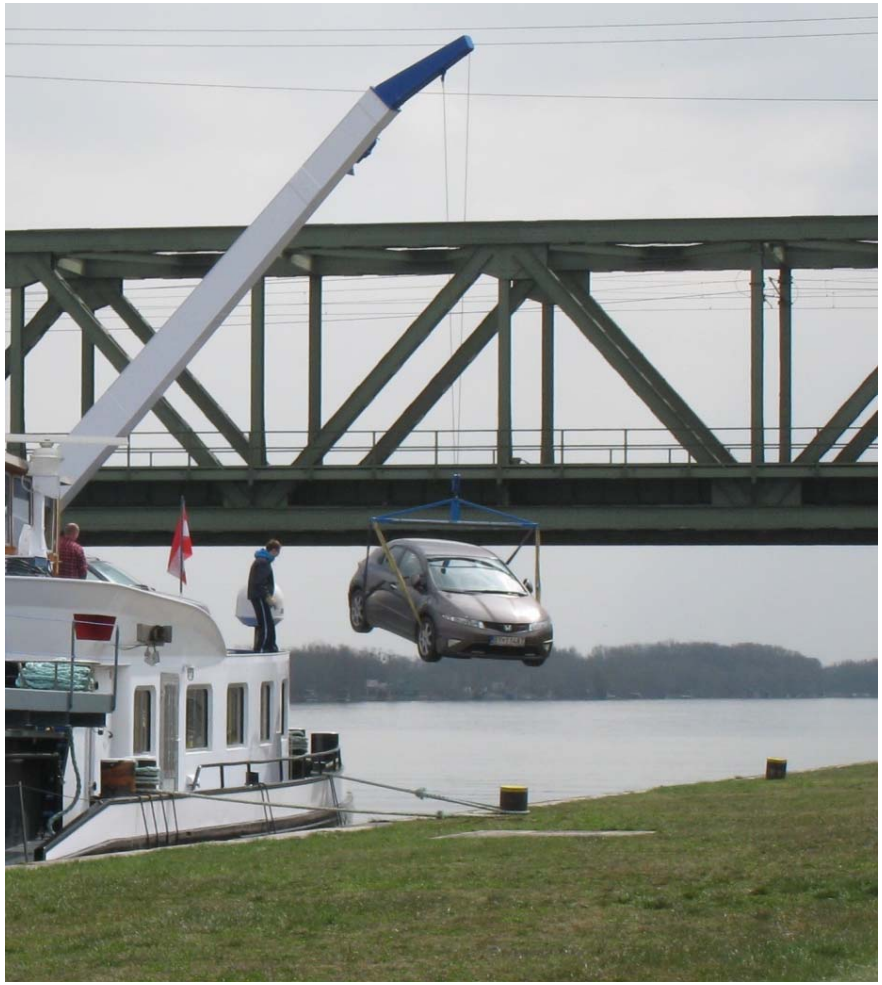
higher **safety** during berthing process, embarking and debarking of crew and passengers

possibility for **transhipment of a car**

better **accessibility for rescue teams** in case of emergency

better conditions for realising service features, e.g. onshore power supply

Car transhipment sites



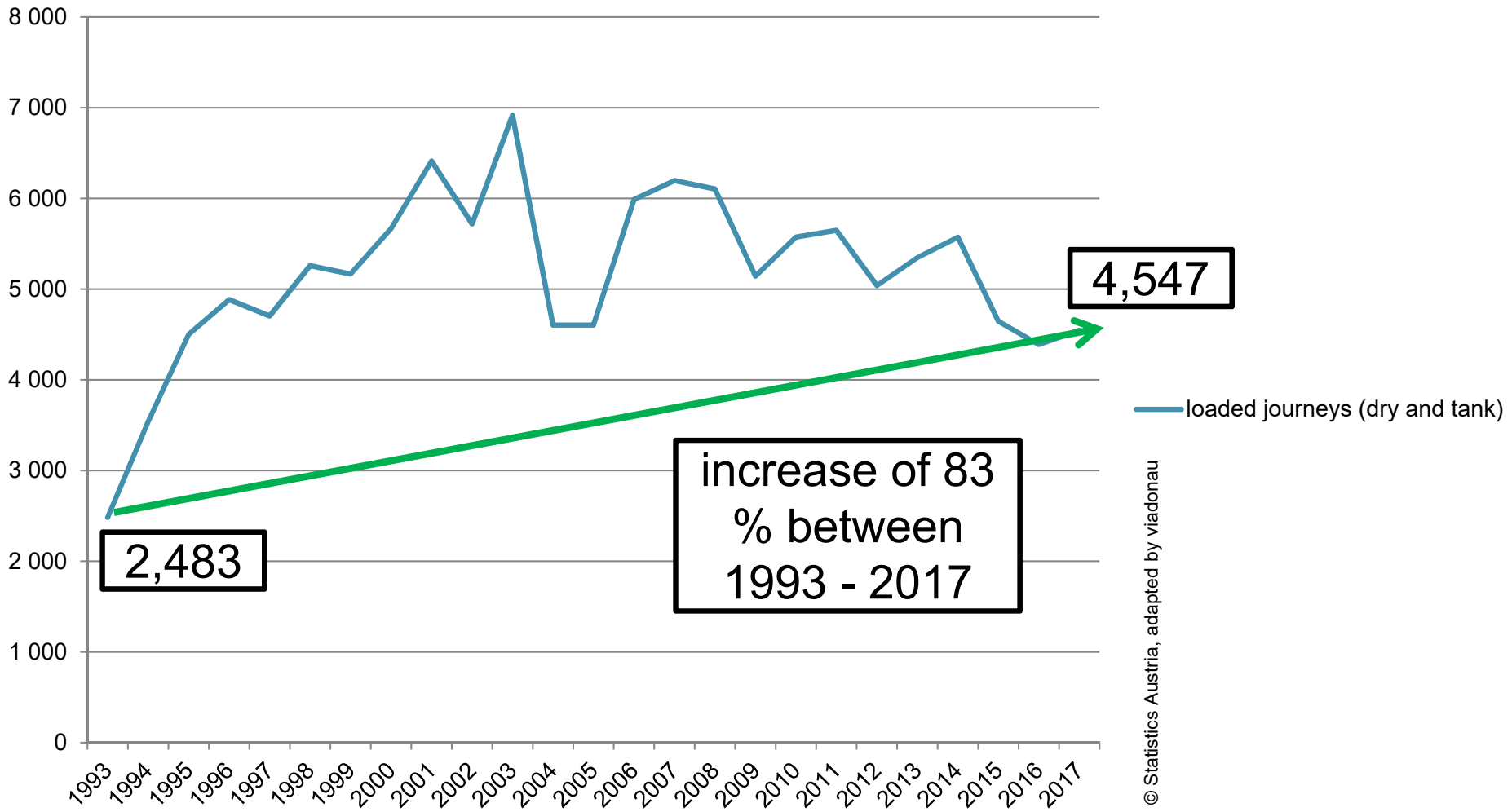
currently **few possibilities for the transhipment of cars**

(limited to berths with a vertical river bank construction)

Onshore power supply

currently **no onshore power supply** at public berths for cargo and passenger vessels outside of ports

Loaded journeys of motor cargo vessels (dry and tank)



→ growing demand for well-equipped berths

Implementation concept for a demand-oriented berth development

Development priorities – Cluster A: Constructional measures

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Restoration of damages & continuous preservation monitoring

focus on berths with vertical river bank construction (highest demand)

- documentation of damages (frost, collisions etc.)
- restauration of damages
- implementation of a monitoring routine to avoid major damages in the future

Upgrade & provision of additional service features

- examining alternatives to inclined river bank constructions (sheet pile walls, dolphins etc.)
- examining possibilites for
  - car transhipment
  - onshore power supply

Development priorities – Cluster B: Traffic management

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Demand-oriented limitation of the maximum time allowed for berthing

focus on attractive and highly frequented berths

- monitoring of berthing time by transponder signals
- informing Navigation Surveillance in case of exceedance of maximum time allowed for berthing

→ giving mores vessels the possibility to berth

Electronic berth space monitoring & reservation tools

feasibility analysis and implementation plans for tools helping skippers to plan where and when to berth

- display of the occupation status of a berth on ENCs

→ enabling skippers to reserve a required berth prior to arrival

Development priorities – Cluster C: Onshore power supply

Demand survey & costs-benefit analysis

- identification of berths
  - with the highest demand
  - where the highest benefit can be expected (e.g. nearby residential areas)
- cost-benefit analysis together with external experts

Strategy and measures for the Austrian Danube

- consideration of the international context regarding technical standards, payment system etc.
  → transnational harmonisation

Development priorities – Cluster D: Financing

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Strategy for the total inventory of public berths

- monitoring of usage intensity via transponder signals
- ongoing dialogue with Supreme Navigation Authority and Navigation Surveillance
- consideration of financial and personnel resources

→ prioritisation for future developments in cooperation
with Supreme Navigation Authority

Management and charging concept

Concepts for a partial refinancing of investments and management of berths

- consideration of possible future refinancing models (charging of usage of certain berths with additional service features or of particular services at
public berths)

Achievements and next steps

List of public berths for cargo and passenger vessels on the Austrian Danube

River-km Danube	River bank	Name of the berth	Length (m)	Main sign	Additional information	Width of the berthing area on the water	Max. time allowed for berthing	River bank construction
2 219,7	R	Freinberg	700	E.6	Liegedauer max. 24h (max. time allowed for berthing 24h)	50 m	24 h	inclined
2.212,6	R	Untere Laende Esternberg	400	E.5.1 40	ausgenommen Kleinfahrzeuge (small craft excluded)	40 m		inclined
2.199,6	R	Klosterfeld	780	E.5.1 50 60	ausgenommen Kleinfahrzeuge (small craft excluded)	50 m 60 m		inclined
2.184,7	R	Inzell	750	E.5.1 30	ausgenommen Kleinfahrzeuge (small craft excluded)	30 m		inclined
2.178,1	L	Obermühl	270	E.5.3-3 P	ausgenommen Kleinfahrzeuge (small craft excluded)	III		vertical
2 162,7				lock Aschach				
2.159,9	R	Öffentliche Lände Aschach	520	E.5.1 30	ausgenommen Kleinfahrzeuge (small craft excluded)	30 m		inclined / vertical
2.159,1	R	Aschach	1.076	E.5.1 50	ausgenommen Kleinfahrzeuge	50 m		inclined

- **showing most important information** about berths (location, lenght etc.)
- **publication** on http://www.viadonau.org/en/economy/the-danube-transport-axis/berths/

→ enabling skippers to

- plan their berthing
- find alternative berths nearby in case berth of 1st choice is blocked

Information tool for monitoring berthing duration

DONAU RIVER INFORMATION SERVICES

Liegezeitüberschreitung (1. Meldung)

Name	
MMSI	
Lände	Nordbahnlände
ISRS	ATVIE00001BER3R19297
Einfahrt	09.10.2018 02:32:39 (Zeitpunkt der Einfahrt)
Liegedauer	48 Stunden
Erlaubte Liegedauer	48 Stunden
Timestamp	11.10.2018 02:31:05 (Zeitpunkt der letzen gültigen Positionsmeldung)

- **monitoring of the berthing** via transponder signals at berths with a limited time allowed for berthing in Linz and Vienna
- **e-mail-notification to Navigation Surveillance** in case of exceedance of maximum time allowed for berthing

→ avoidance of blockage of highly frequented berths

Traffic management – quick wins (cooperation with Supreme Navigation Authority)

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limiting maximum time allowed for berthing to 48 hrs. at berths with a vertical river bank construction (excluding tank berths)

→ avoiding blockage of highly frequented berths

redesignation of the former Öffentliche Fahrgastlände (formerly exclusively dedicated to passenger vessels)

- now also allowed for cargo vessels
- new name: Brigittenau III

→ provision of an additional berth with vertical river bank construction for cargo vessels

Examination of damages on berths with vertical river bank constructions in Vienna

- **documentation of damages** due to frost, collisions, vegetation etc.
- **underwater survey**
- **cost-estimation** for necessary restaurations

→ decision basis for berth restorations

Feasibility study on the upgrade of berths in Linz and Vienna

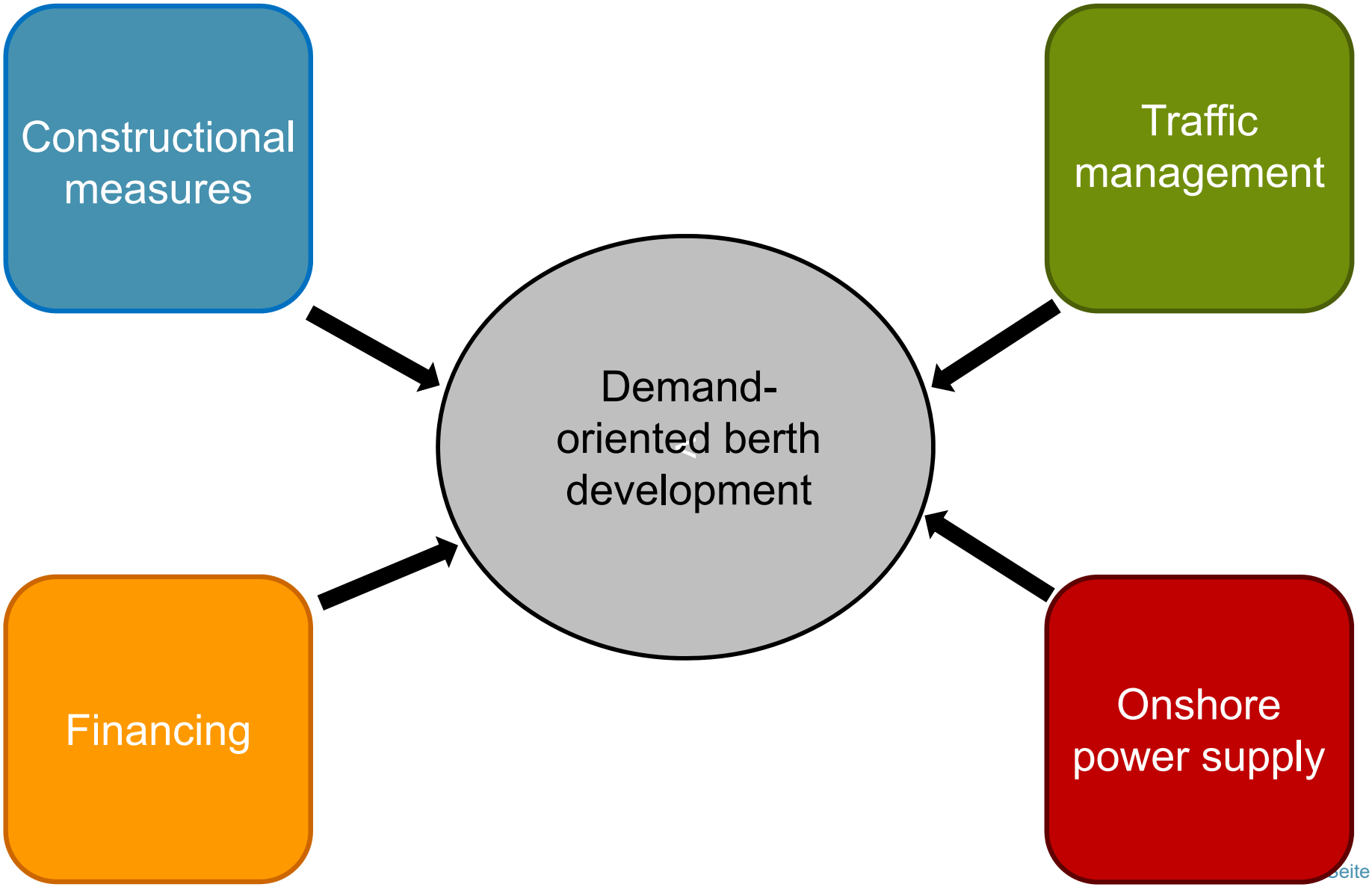
examination and assessment of **alternatives to inclined river bank constructions** in Linz and Vienna

- o sheet pile walls
- o dolphins with pontoon
- o dolphins with landing-stages

including possibilities for

- o the **transhipment of cars**
- o **onshore power supply**

→ decision basis for a future berth upgrade
→ detailed design of berth and application for required permits in 2019


Constructional measures
Traffic management
Demand-oriented berth development
Financing
Onshore power supply

End of the presentation – Question session

Contact

Ulf Meinel
Project Manager Transport Development
T +43 50 4321-1625
ulf.meinel@viadonau.org
Donau-City-Straße 1, 1220 Vienna, Austria