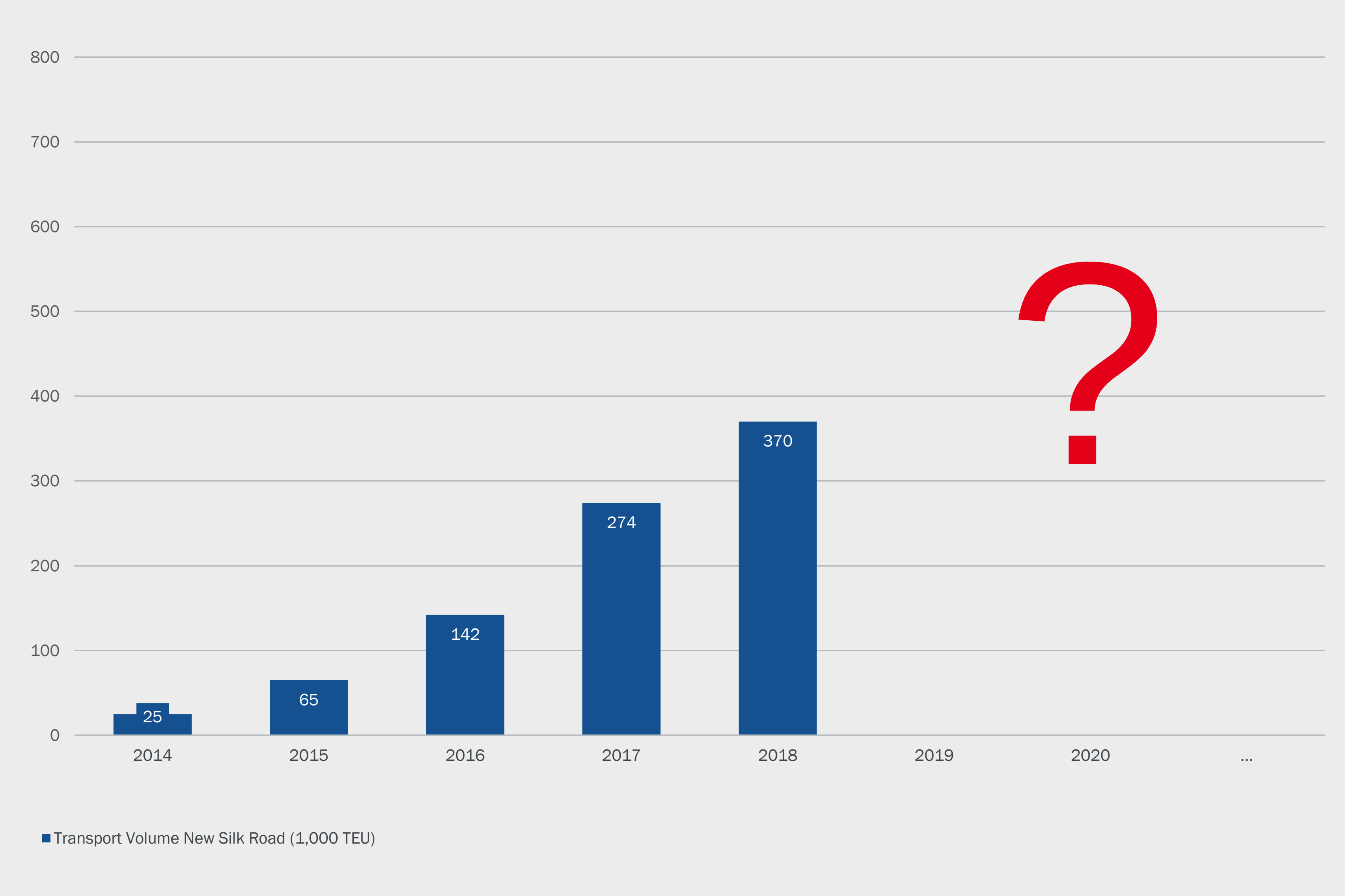
NEW SILK ROAD - WILL FORECASTED DEMAND AND PROPOSED INFRASTRUCTURE CAPACITIES ALIGN?

European Silk Road Summit 2019
November 26, 2019

STATUS QUO



Source: Roland Berger

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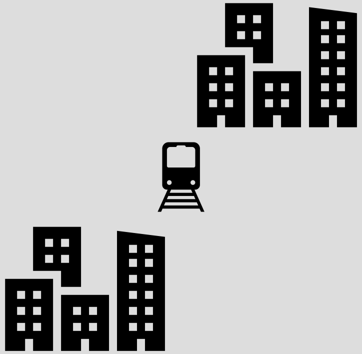
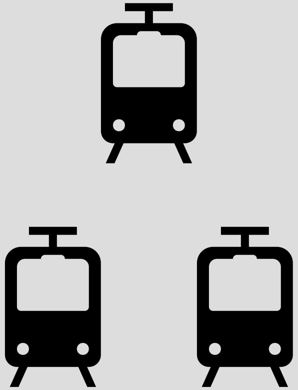
UNCERTAINTIES

Number of connections?



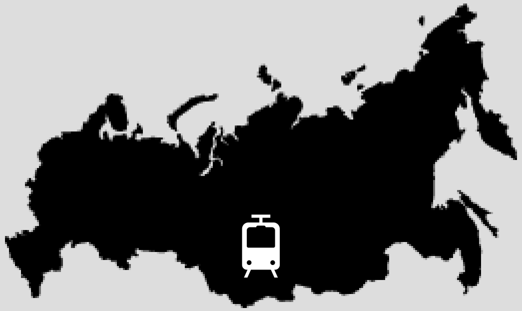
- Served regularly?

Number of trains?



- Length?
- Load factor?

Railway segments?



- Regional trains?

CORRIDORS

Source: Prognos based on Google Maps

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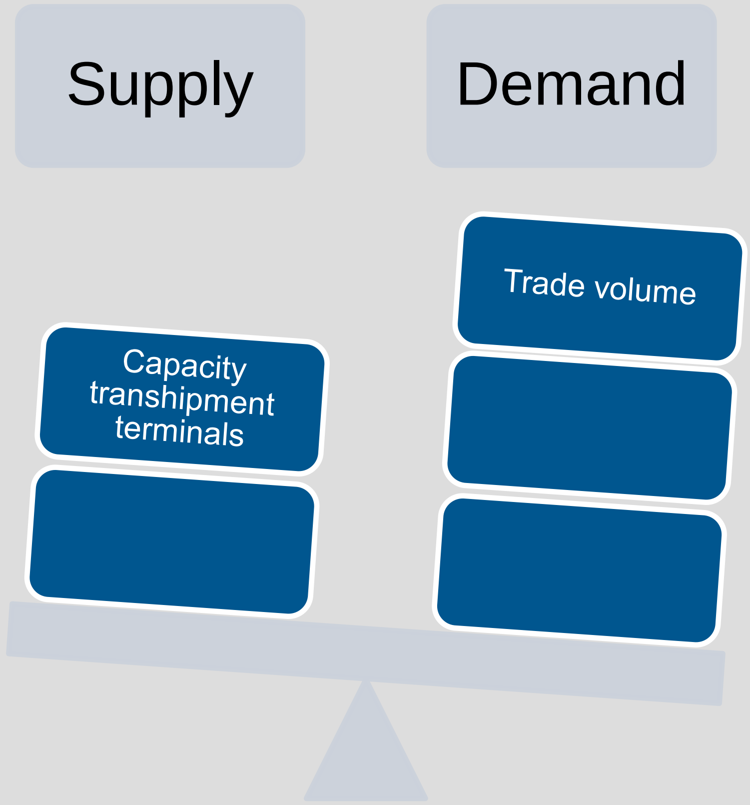
CAPACITIES

	Border Crossing								Total
	RU/FI	RU/EU	BY/PL	UA/PL	UA/SK	UA/HU	GE/RO	GE/TR	
Current Transhipment Capacity	195	450	570	330	425	175	300	625	3,070
Planned Transhipment Capacity	195+	1,000	1,900	330	2,000	175+	2,500	1,450	9,550+

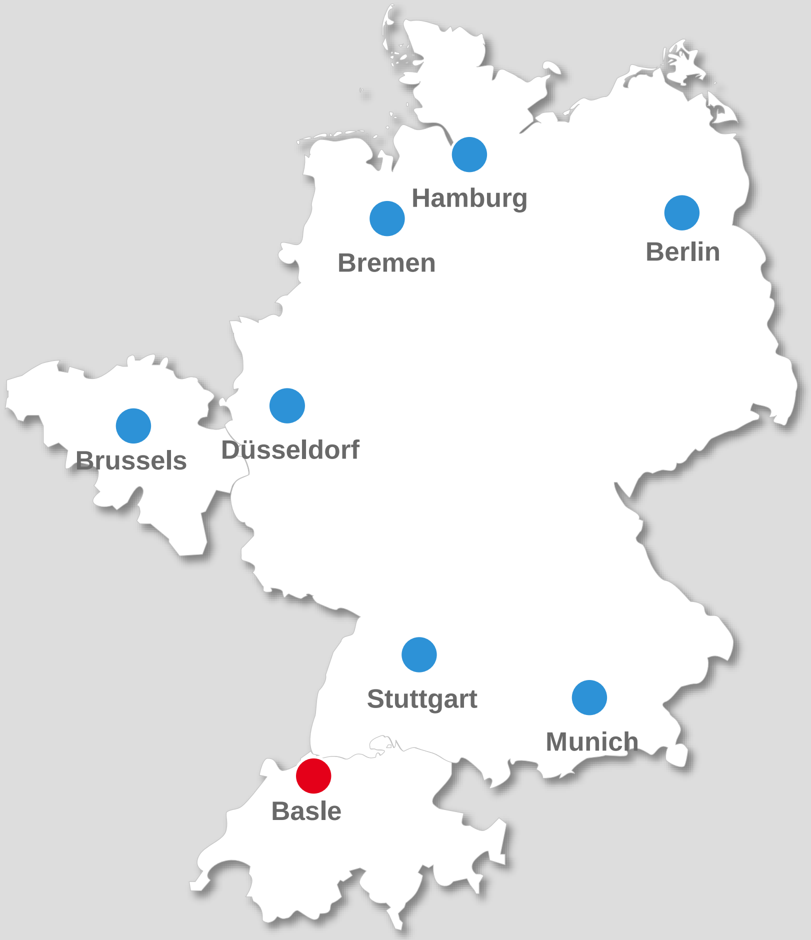
in 1,000 TEU; Source: Own Research

What demand (= shifted trade volume) is necessary to fill up supply (= transhipment terminals) to capacity?



BACKGROUND

- Prognos is a Swiss economic research and strategy consulting firm founded 1959 in Basle, Switzerland
- About 160 experts working in interdisciplinary teams linking economic, natural and social science competences in 9 locations in Switzerland, Germany and Belgium
- Mobility & Transport team (former ProgTrans) with long-standing experience on corridor studies, especially in the railway sector
- Development of a transport flow model for Breitspurplanungsgesellschaft in Austria that could be adapted for this task



FUTURE DEMAND

	2020	2035
East Asia to Europe	5.4 m TEU	7.8 m TEU
Europe to East Asia	2.8 m TEU	3.6 m TEU
TOTAL	**8.2 m TEU**	**11.4 m TEU**

Selected O/D pairs; 1 TEU = 10.25 tonne; no air freight

RESULTS

	Border Crossing								Total	Total Trade Volume Equivalent
	RU/FI	RU/EU	BY/PL	UA/PL	UA/SK	UA/HU	GE/RO	GE/TR		
Capacity 2020	195	450	570	330	425	175	300	625	3,070	
Thereof needed for Non-Silk Road Traffic	*195*	*5*	*130*	*150*	*190*	*30*	*100*	*n.a.*	*605+*	
Capacity left	0	445	440	180	235	145	200	625	2,270	**28%**
Capacity 2035	195	1,000	1,900	330	2,000	175	2,500	1,450	9,550	
Thereof needed for Non-Silk Road Traffic	*195*	*10*	*225*	*195*	*290*	*50*	*100+*	*n.a.*	*870+*	
Capacity left	0	990	1,675	135	1,710	125	2,400	1,450	8,485	**74%**

CONCLUSIONS

- **There is a lot of room to grow and potential for growth on all corridors!**
- **Shift from other modes of transport alone will not be enough to realise planned growth**
  - It is rather unlikely that the shift needed from sea transport could be realised
- **Therefore, a cautious approach is needed: Most probably not all growth plans for transshipment points will be realised**
  - What is Plan B if New Silk Road promises do not materialise? How is a ruinous price competition avoided?
- **Also, instead of focus solely on China, trade opportunities with other countries should be scrutinized**
  - e.g. Russia, Turkey, Iran, India, Central Asia
- **Important question: Is the European railway network ready for such an intake?**
  - Facilities on the outer borders of the EU can fully use capacities only if the core network is able to handle the additional trains

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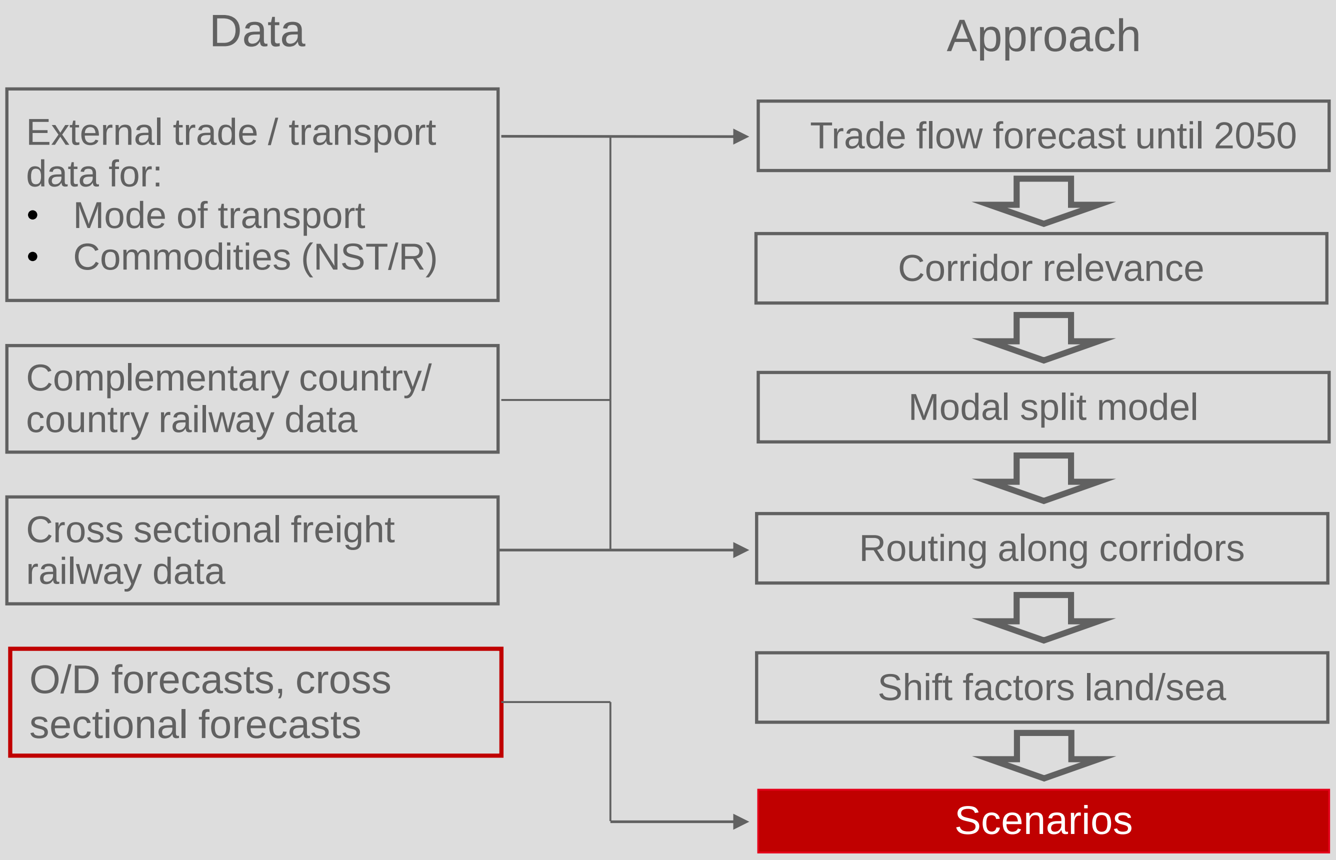
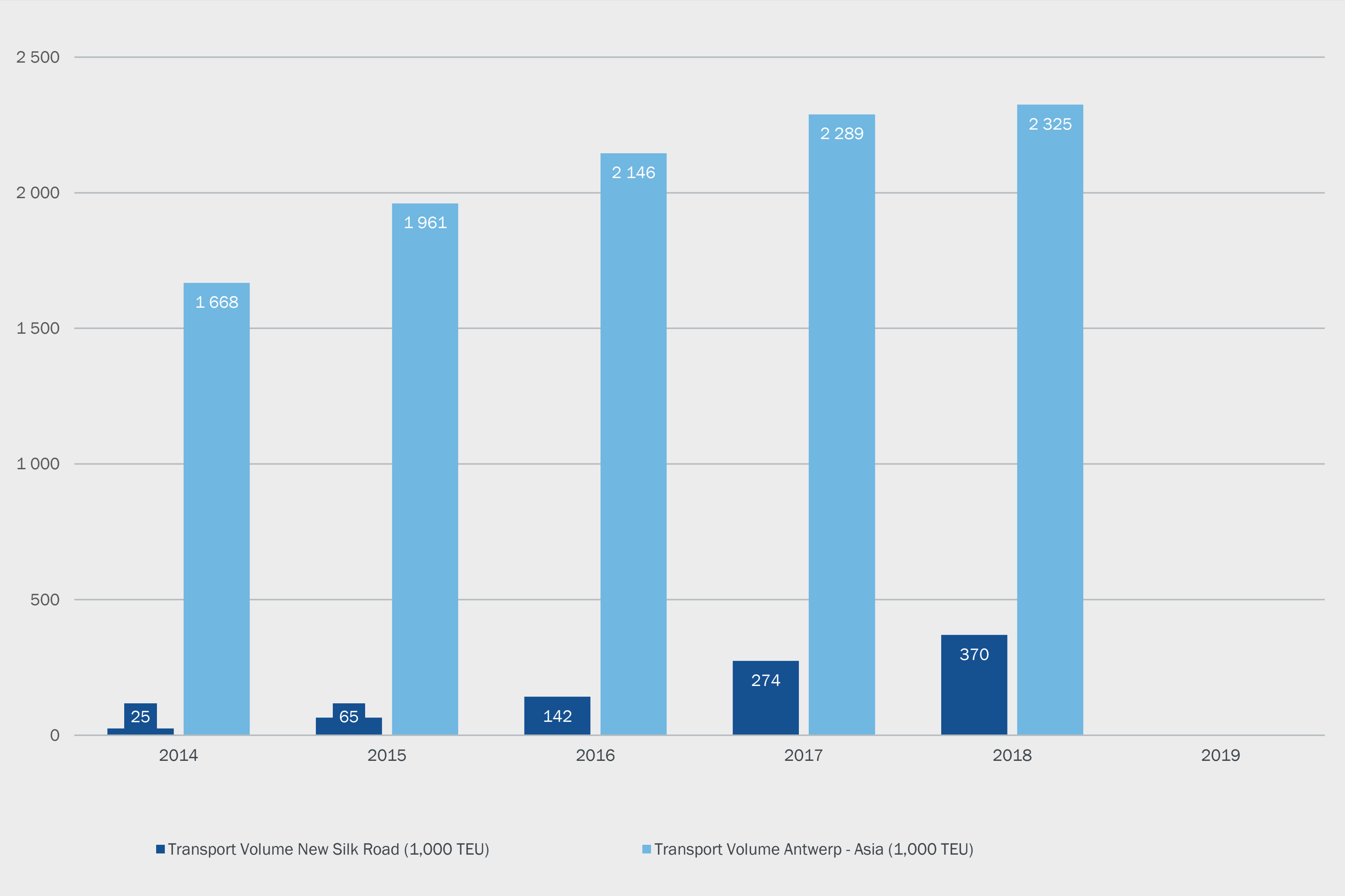
THANK YOU FOR **YOUR TIME.**

METHODOLOGY



STATUS QUO


2 500
2 000
1 500
1 000
500
0
25
1 668
65
1 961
142
2 146
274
2 289
370
2 325
2014
2015
2016
2017
2018
2019
Transport Volume New Silk Road (1,000 TEU)
Transport Volume Antwerp - Asia (1,000 TEU)

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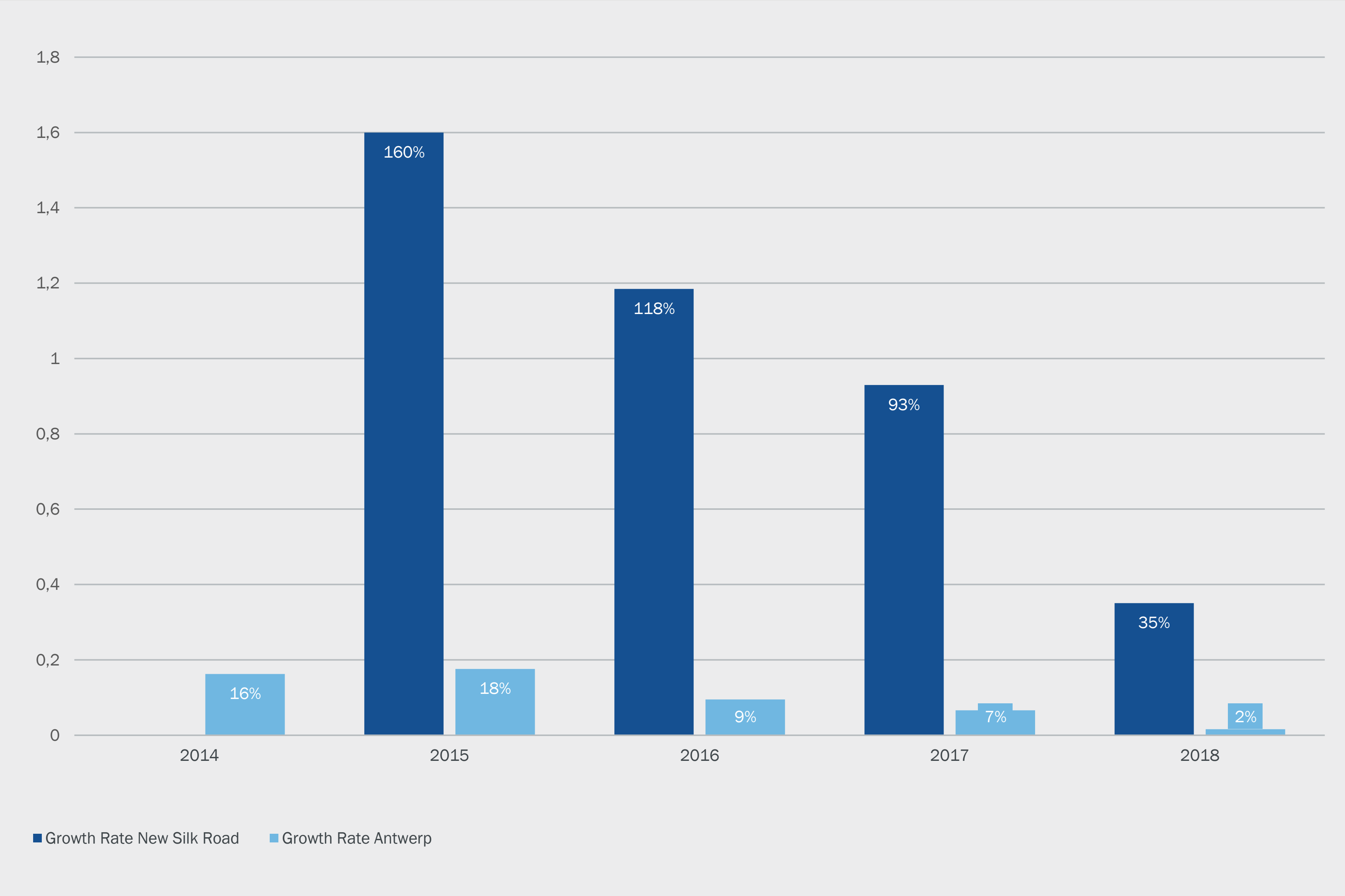
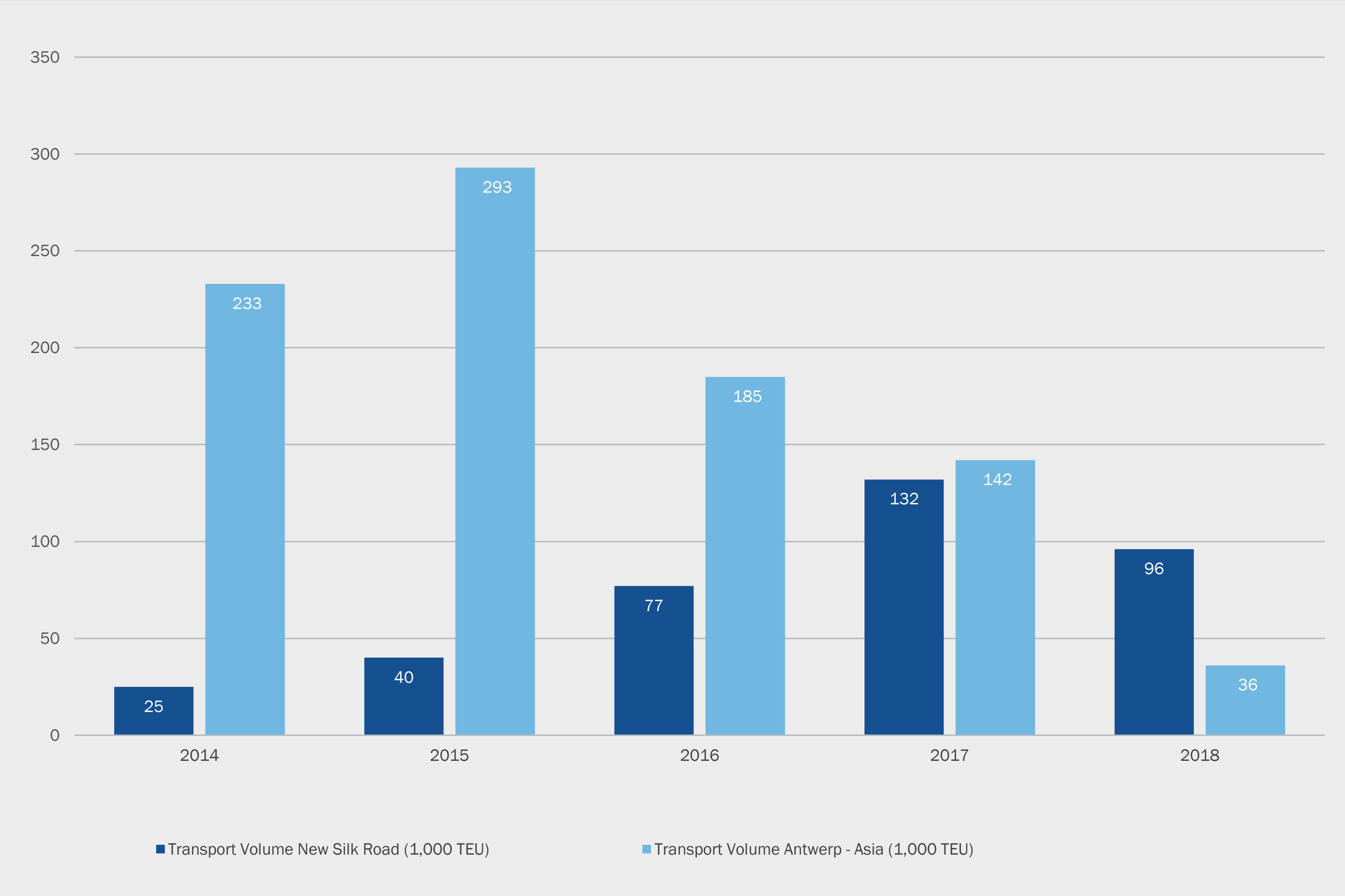
GROWTH RATES



GROWTH IN VOLUME



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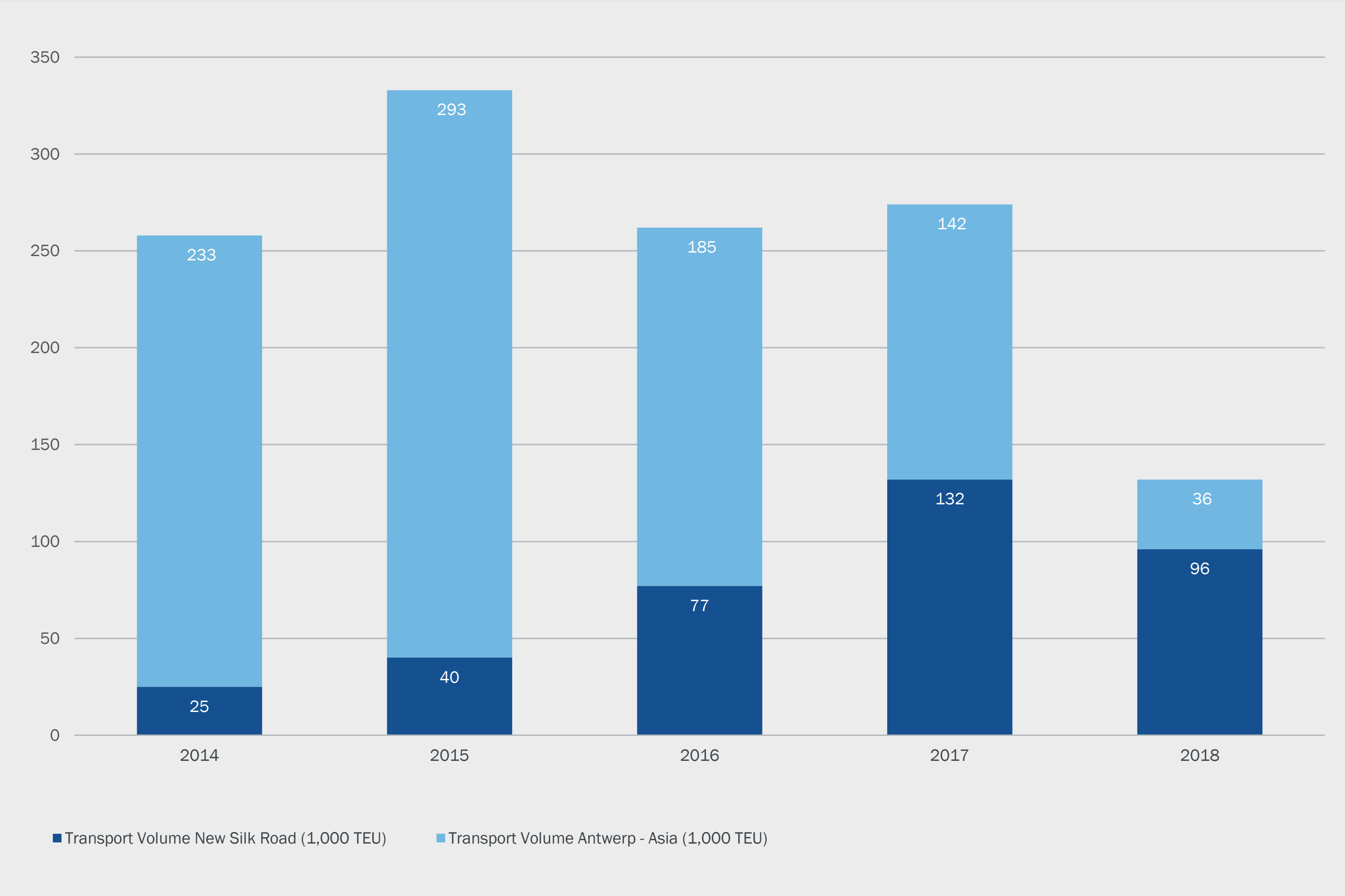
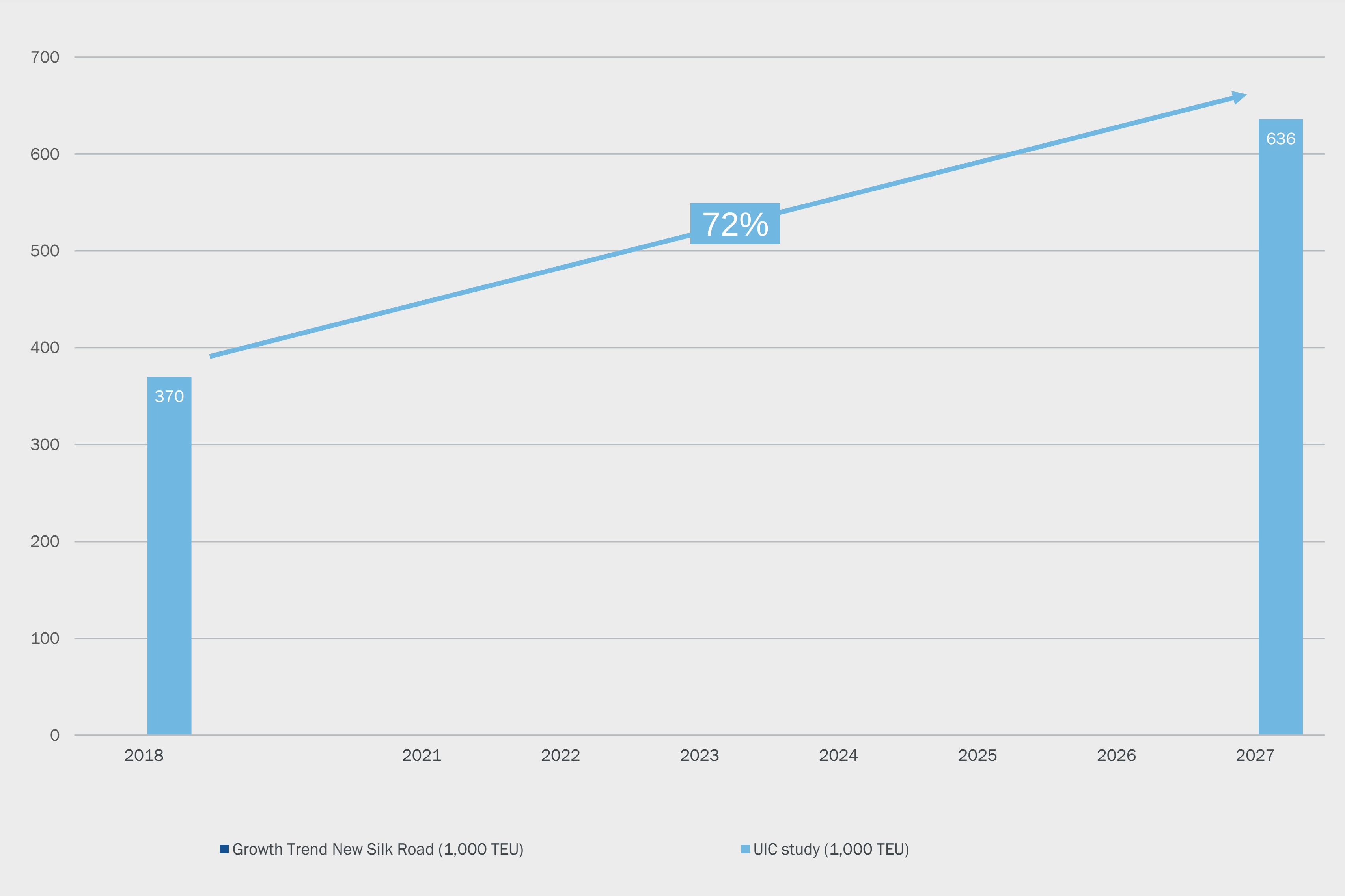


OUTLOOK NEW SILK ROAD



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