



New Railway Copenhagen-Ringsted

Ingeniørforeningen – March 14, 2011

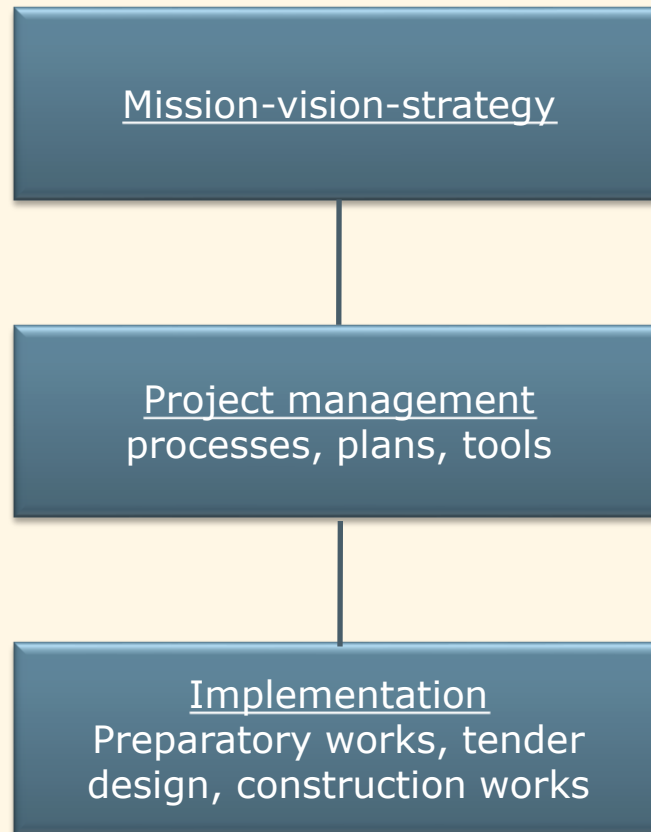


Samfinansieret af EU
Det transeuropæiske transportnet (TEN-T)

banedanmark



Three Levels



Mission

“We construct the new railway between Copenhagen and Ringsted as foundation for several more and faster trains in and through Denmark.”



Kulbanevej / Vigerslevvej



Vestvolden



Vallensbæk Sø



Langagergaard

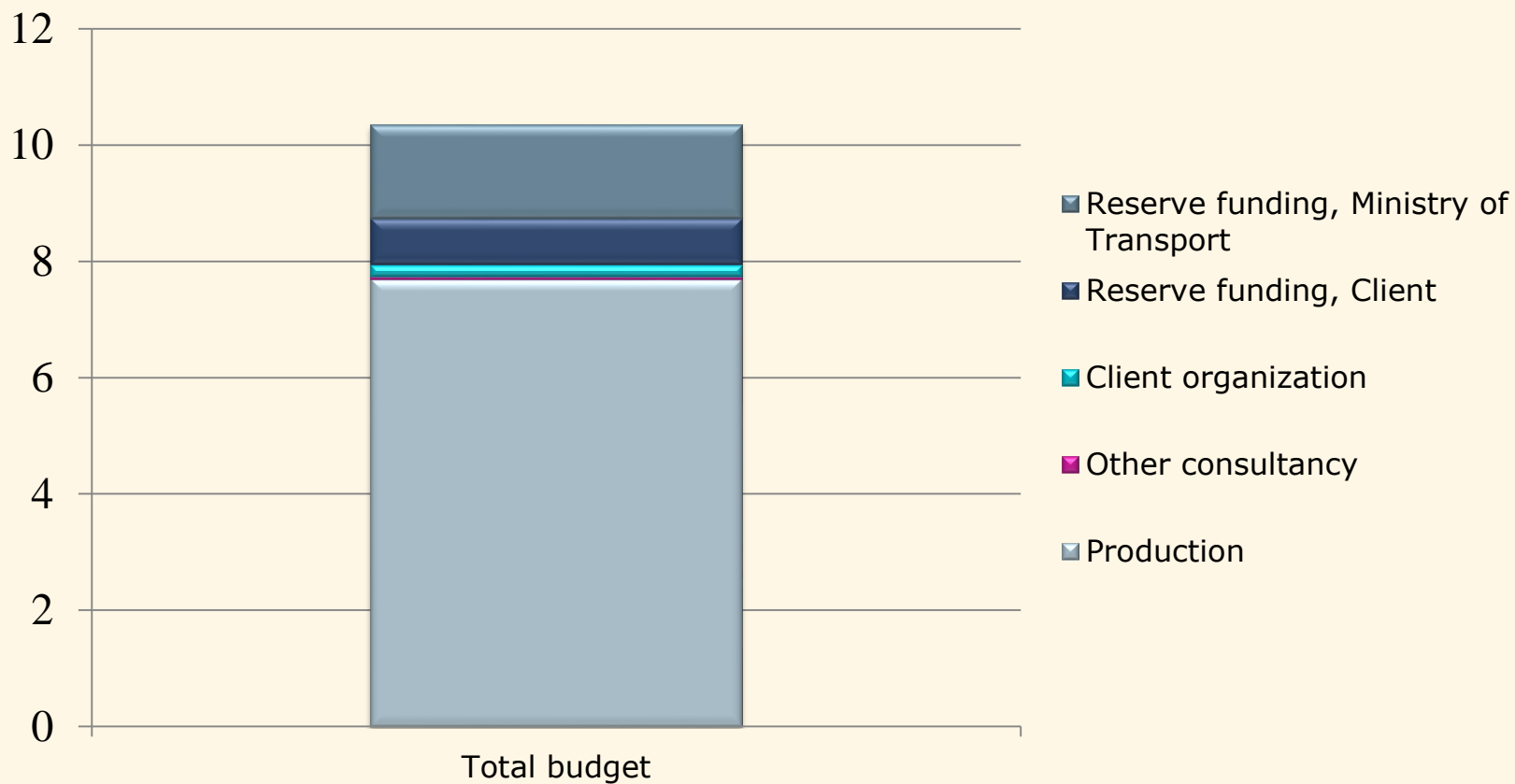


Koege Nord Station



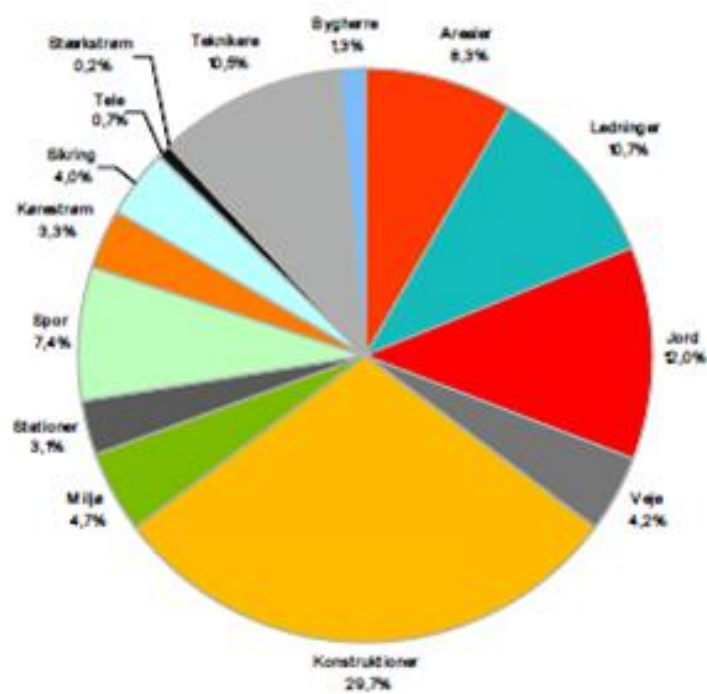
Kongsted Huse

Budget incentives



Costs in %

Percentual cost distribution on items - New Railway, tunnel at Kulbanevej



Key figures

- Dual track electrified railway line designed for up to 250 kph
- Approx. 56 km
- Max axle load 25 tons
- 4 tunnels – approx. 1750 m in total
- 88 bridges
- 3.300.000 m³ dug earth
- Expropriation of 290 ha, approx. 200 buildings (most allotments)
- Approx. 60 overall agreements with utility owners that include more than 600 relocations
- Approx. 60 overall agreements with municipalities that include approx 500 items in total to be agreed on (roads, nature, soil...)

Anlægslovens § 2: Naturbeskyttelses- og museumsloven

Banedanmark kan beslutte at:

- dispensere fra areal - og fortidsmindefredninger
- træffe afgørelser efter lovene
 - ændring af tilstanden af en hede eller en mose (nbl §3)
 - ændring af tilstanden af sten og jorddiger (ml § 29a)
 - *Undtagelse:* EU-ret Natura 2000-områder og bilag IV- arter
- træde ind i verserende klagesager efter lovene

Klager rettes til transportministeren (BDK) og ikke Natur - og miljøklagenævnet

Anlægslovens § 3 - støjkrav

Væsentlig fordyrelse:

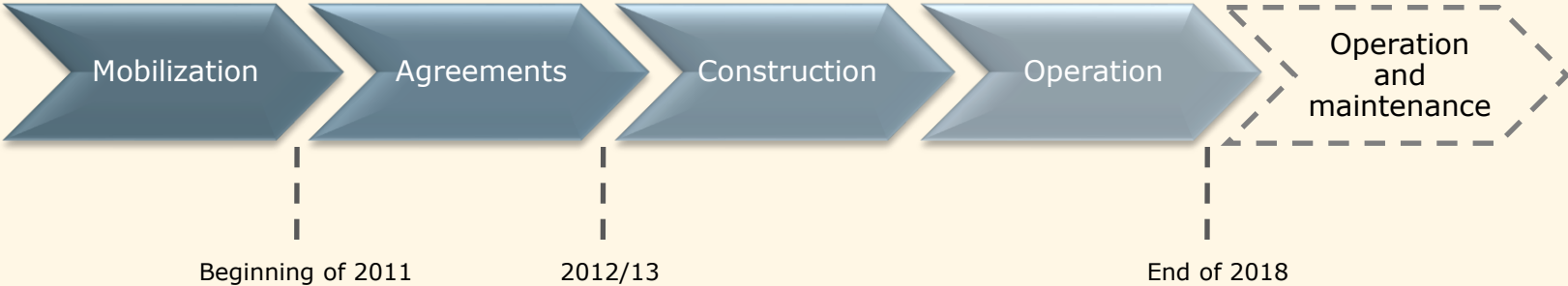
- konkret vurdering
- mindst 100 mio. kr. for det samlede projekt
- fordyrelse alene pga. krav, påbud og forbud om støj

Væsentlig forsinkelse:

- konkret vurdering
- lægges vægt på et delprojekt i sig selv medfører en forsinkelse af det samlede projekt
- forsinkelse alene pga. krav, påbud og forbud om støj

Afgørelser påklages til transportministeren – ikke BDK.

Project levels



Aktuelle opgaver og tidsplan

2010 – 11	Opmålinger
2010 – 11	Prøveboringer
Januar 2011	ART-kontrakt (rådgiver)
Marts 2011	Jord&Natur-kontrakt (rådgiver)
2011	Arkæologiske prøveundersøgelser
Forsommer 2011	”Urban Civil Works”-kontrakt (rådgiver)
2011 - 14	Ledningsomlægninger
2011 - 12	Besigtigelsesforretning
2012	Ekspropriationsforretning
2012	Arkæologiske udgravninger
2013 - 16	Konstruktioner, jord, veje
2016 - 17	Baneteknik
2018	Prøvekørsler
2018 (ultimo)	Banen tages i brug

Vision

“We construct the new railway between Copenhagen and Ringsted European “best-in-class” by purchasing in a competing market, economy of scale, and enabling technological innovation”

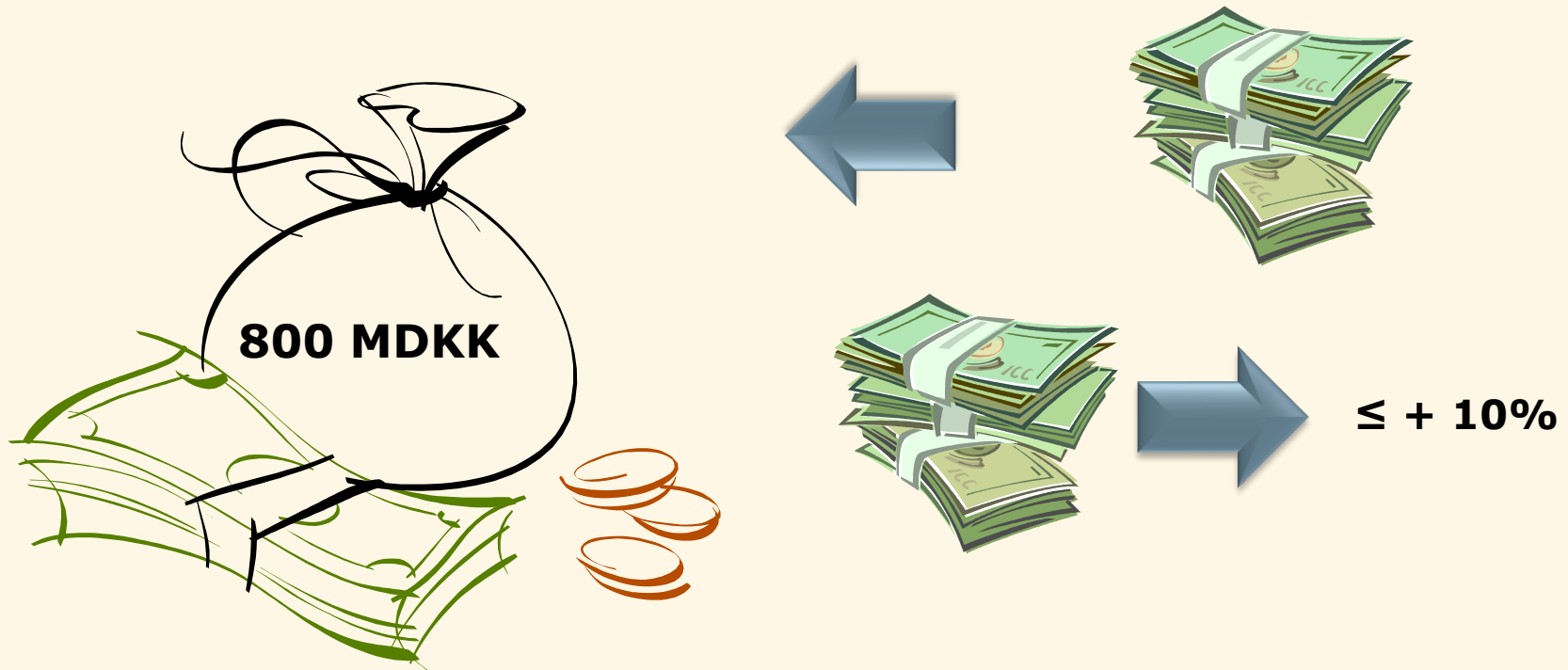
Construction/railtech contracts

- *How to define?*

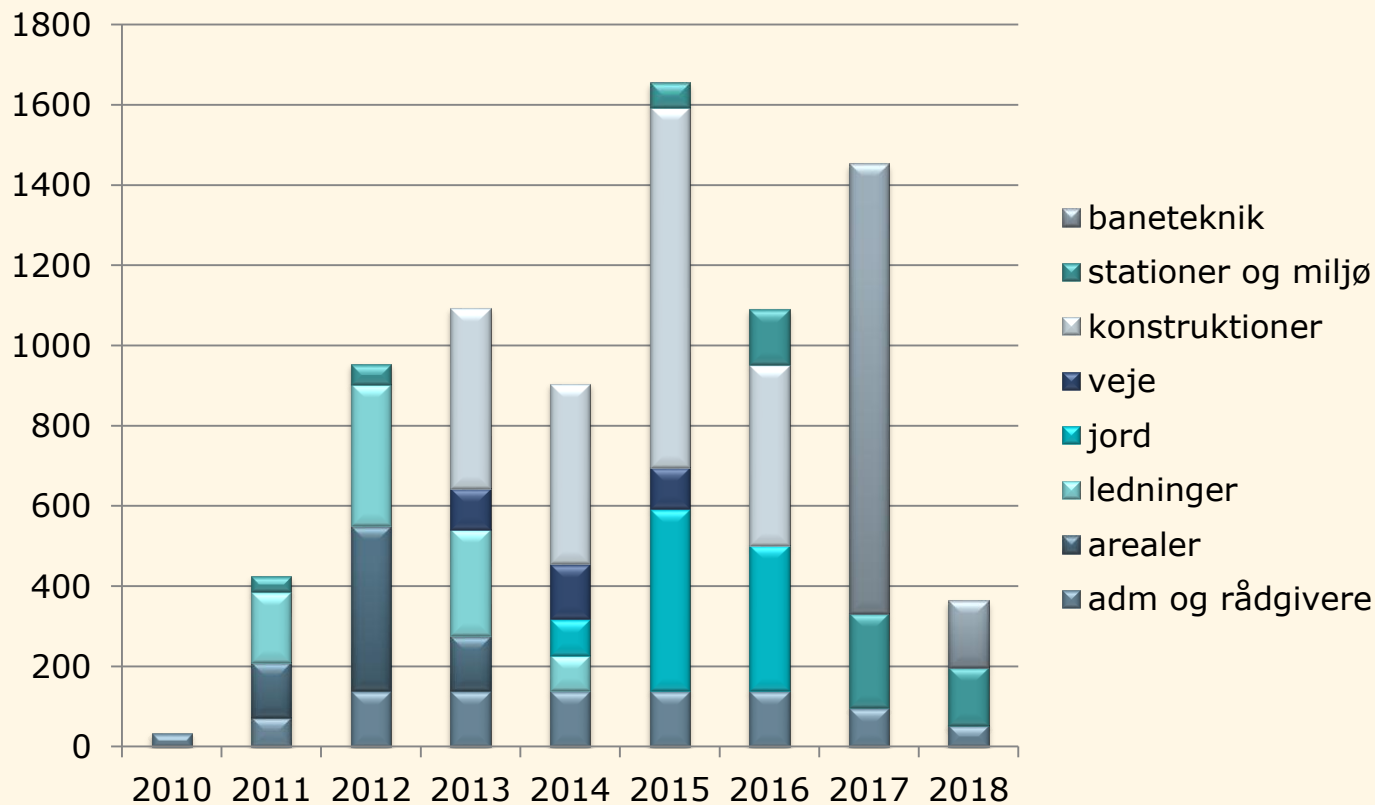
- Geography/disciplines?
- Contract sizes?
- Detailed design/design-and-build?
- Interfaces/Risk sharing

Own reserve

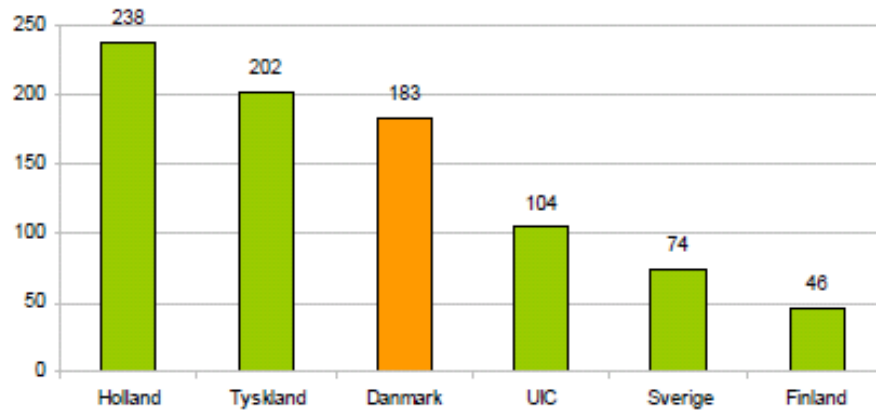
Traceability – traceability - traceability!!!



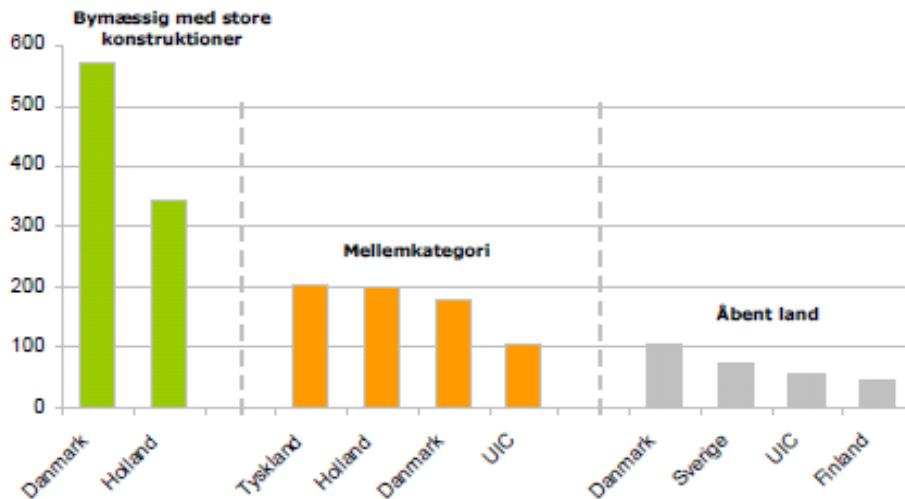
Cost distribution 2010-18



Public Transport Authority's Benchmark Analyses III

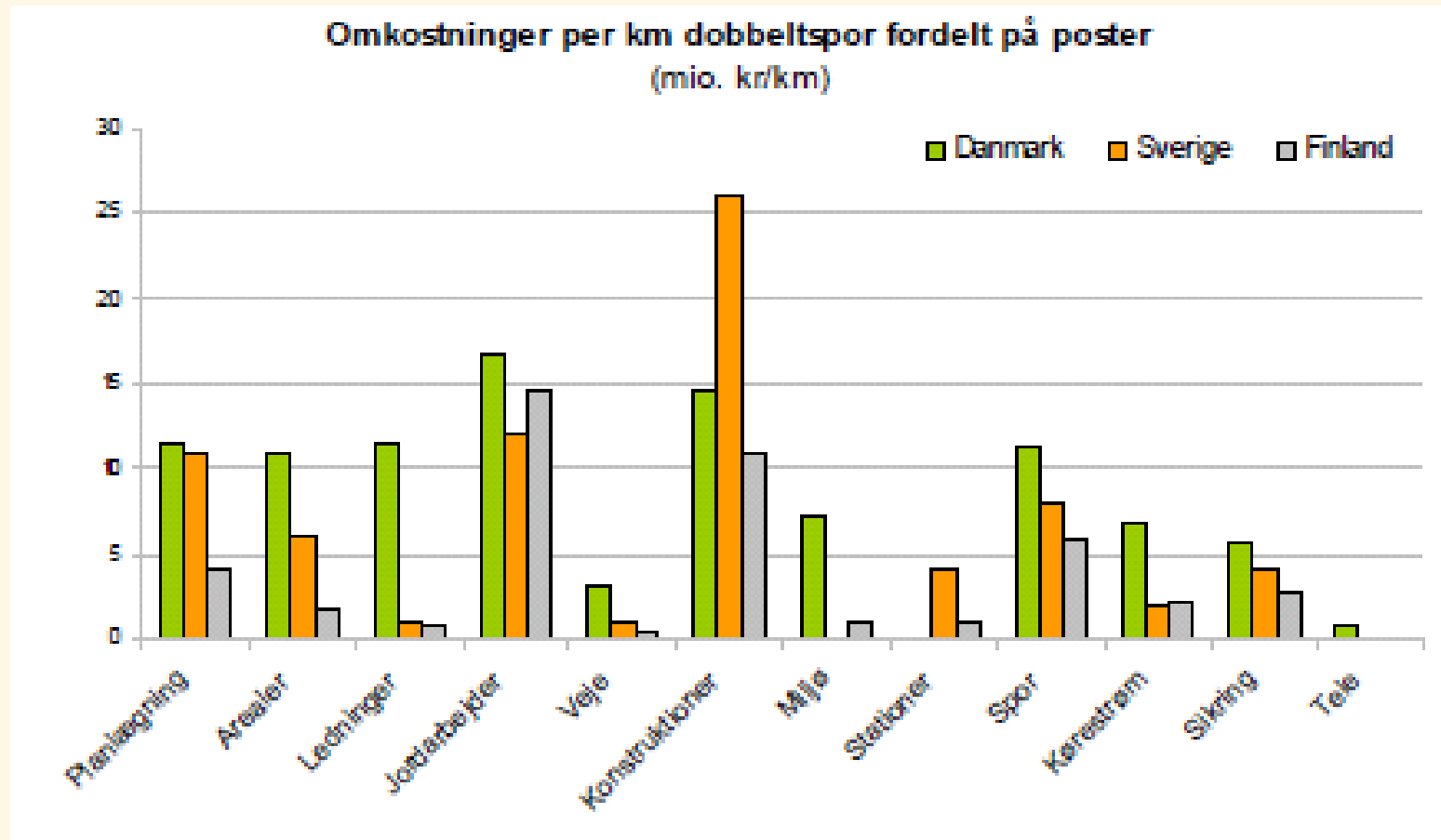


Construction costs per km dual-track railway (MDKK per km)

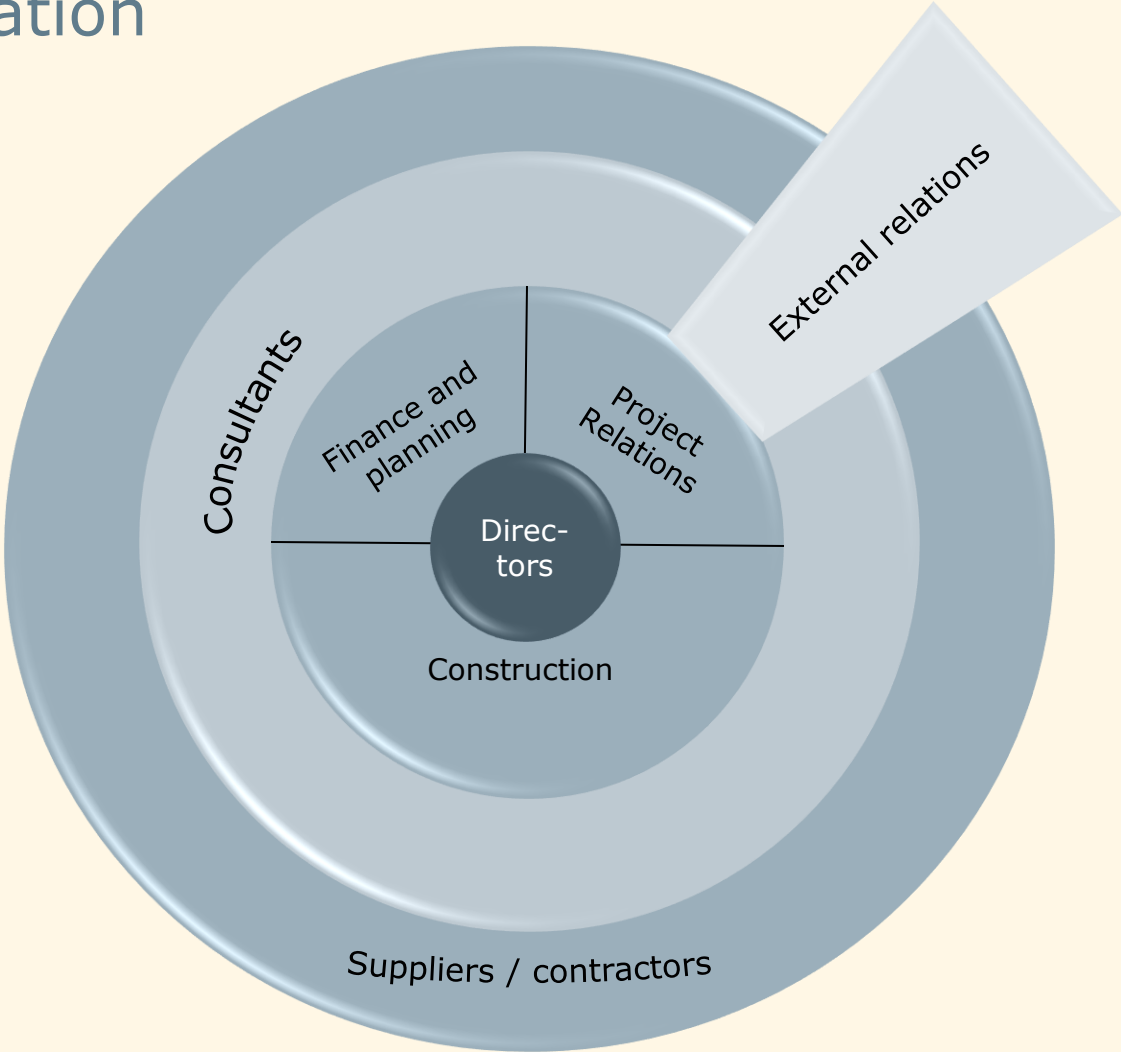


Construction costs per km dual-track (MDKK per km)

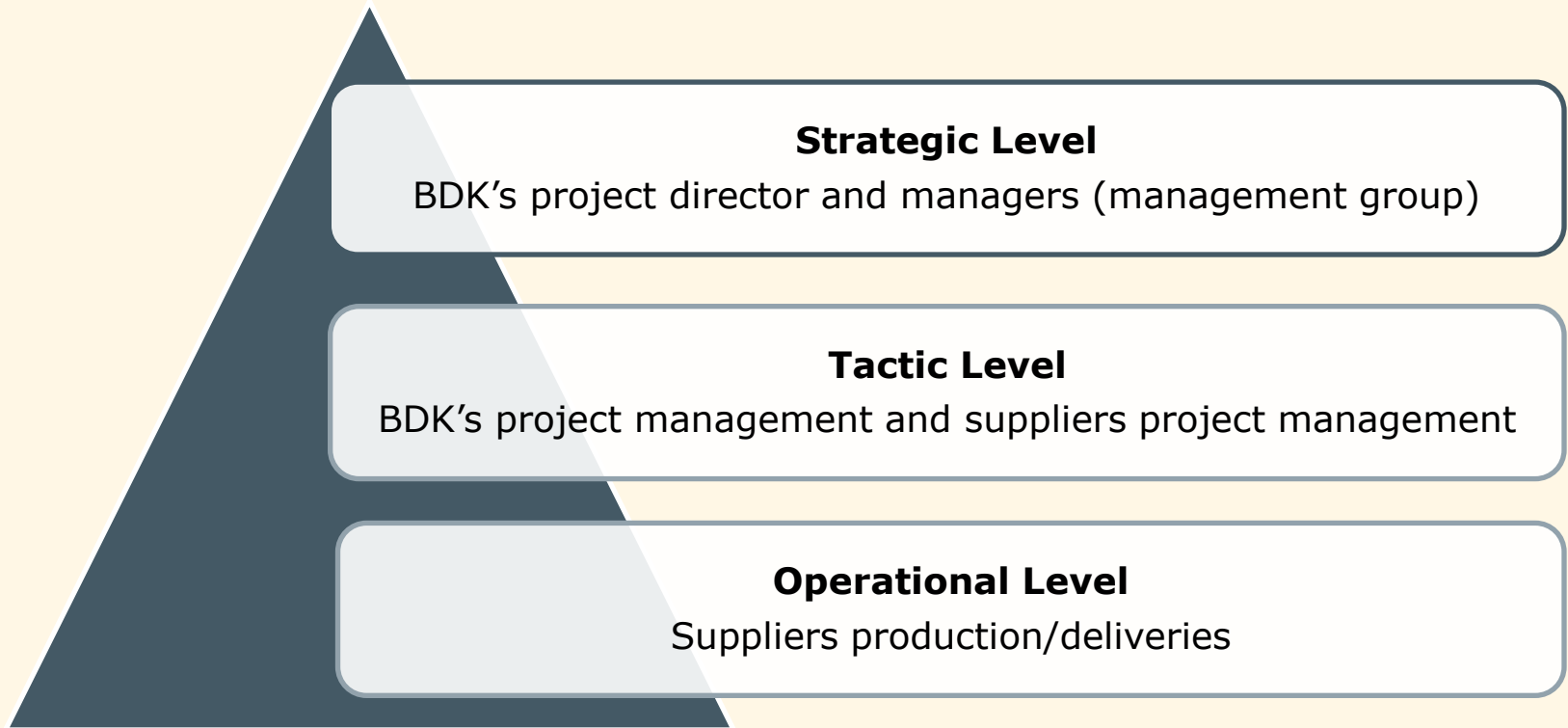
Costs per km dual track distributed on items



Organization



Project Levels



Reference Groups

