



# Using digitalisation to reduce carbon footprint and cost, plus increasing customer satisfaction

30. september 2023 Ole Lykke Christensen, Managing Director, Tolling, Sund & Bælt

# From DSRC box to video account at Storebælt

Sund & Bælt implemented video accounts in March 2018 for passenger cars and for HGV in 2022 at the Storebælt bridge

## Private

35% video accounts,

45% DSRC

20% card (cash <0,5%)

## HGV

6% video accounts

82% DSRC

12% card

## Benefits:

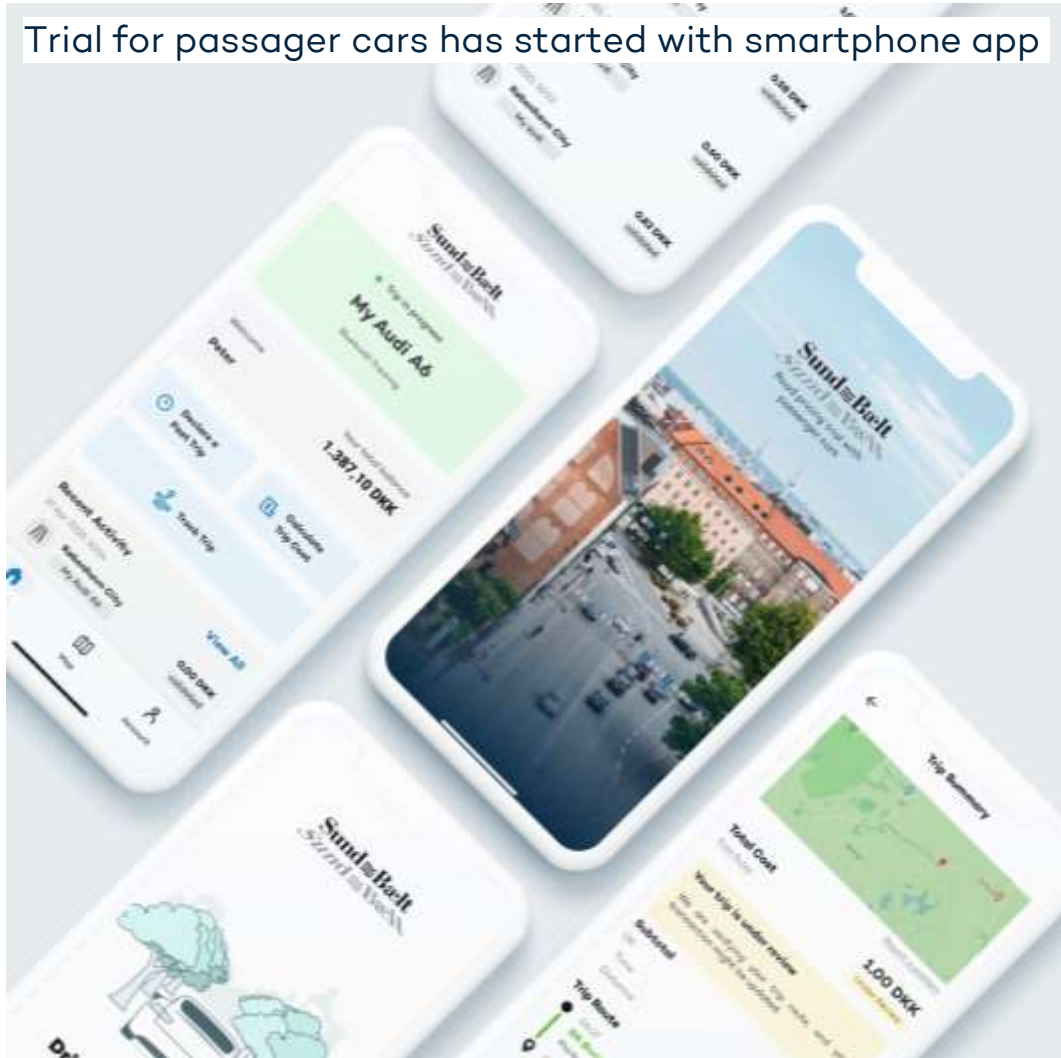
- Faster onboarding of customers
- No handling, no waste of plastic and lithium
- Increase amounts of subscribers with higher capacity in toll lanes





# From GNSS box to smartphone

Trial for passenger cars has started with smartphone app



## Political decision in December 2020

1. Lorry road charging =>12 tonnes in 2025
2. Road charging trial for passenger cars

## Scheme design Lorry Road pricing

- EETS Provider may offer both GNSS box and smartphone app
- The smartphone app will simulate a GNSS box
- At enforcement points the EETS Provider is asked to validate whether the app is active (alternative to not having DSRC)
- Not vendor machines with GNSS boxes will be available – the scheme offers an electronic Toll Ticket

## Benefits

- Easy onboarding of new users and digital options if GNSS box if malfunctioning
- No handling, no waste of plastic and lithium

# From barrier tolling to free flow

Storebælt bridge has had barrier tolling in 25 years as most European toll stations

In 2019, Sund & Bælt implemented the first Multi Lane Free Flow system in Denmark

Planning for the Fehmern link to Germany, we made a business case whether to choose barrier or free flow

Because of high passage price and high yearly revenue, barriers won due to loss of revenue from no-payers

Storebælt bridge has a single lane free flow toll station where we choose whether barriers shall be used or not allowing speed of 50 km/h in Express lanes

## Benefits

- Capacity in the Toll Station that is higher than the motorway – no queue in Express lanes
- Minimum loss of revenue
- High customer satisfaction – NPS score of 77

# Building customer incentive



In 2018, the Danish Parliament decided to reduce tariffs at Storebælt with 25% for subscribers, only.

In 2020, the Danish Parliament decided to redesign our business customer discount scheme from a volume-based discount to be based on fuel type and Euro norm giving 13% discount to Euro norm 6, LNG and EV.

January 2025, Denmark launches the lorry roadpricing scheme with CO2 differentiation

## Benefits

- Increase amount of subscribers from 70 to 80 percentage at Storebælt increasing capacity and customer satisfaction
- Incentive for hauliers to drive more green and optimise transports
- Lorry roadpricing scheme calculated positive impact financially for society and to have a CO2 emission reduction of 0.3 mil tonnes in 2025 and 0.4 mil tonnes in 2030.