



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

Secrets of the OV tariff

Or perhaps just some lesser-known facts

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Modes of OV-chipkaart



Payment type

- Travel on balance
 - Balance stored in card's memory
 - Deposit collected at check-in *all the way to – €4*
 - Final fare calculated at check-out
- Post-paid (NS Flex, GVB Flex, Arriva Flow)
 - Transactions are recorded in card's memory
 - Fare is calculated later

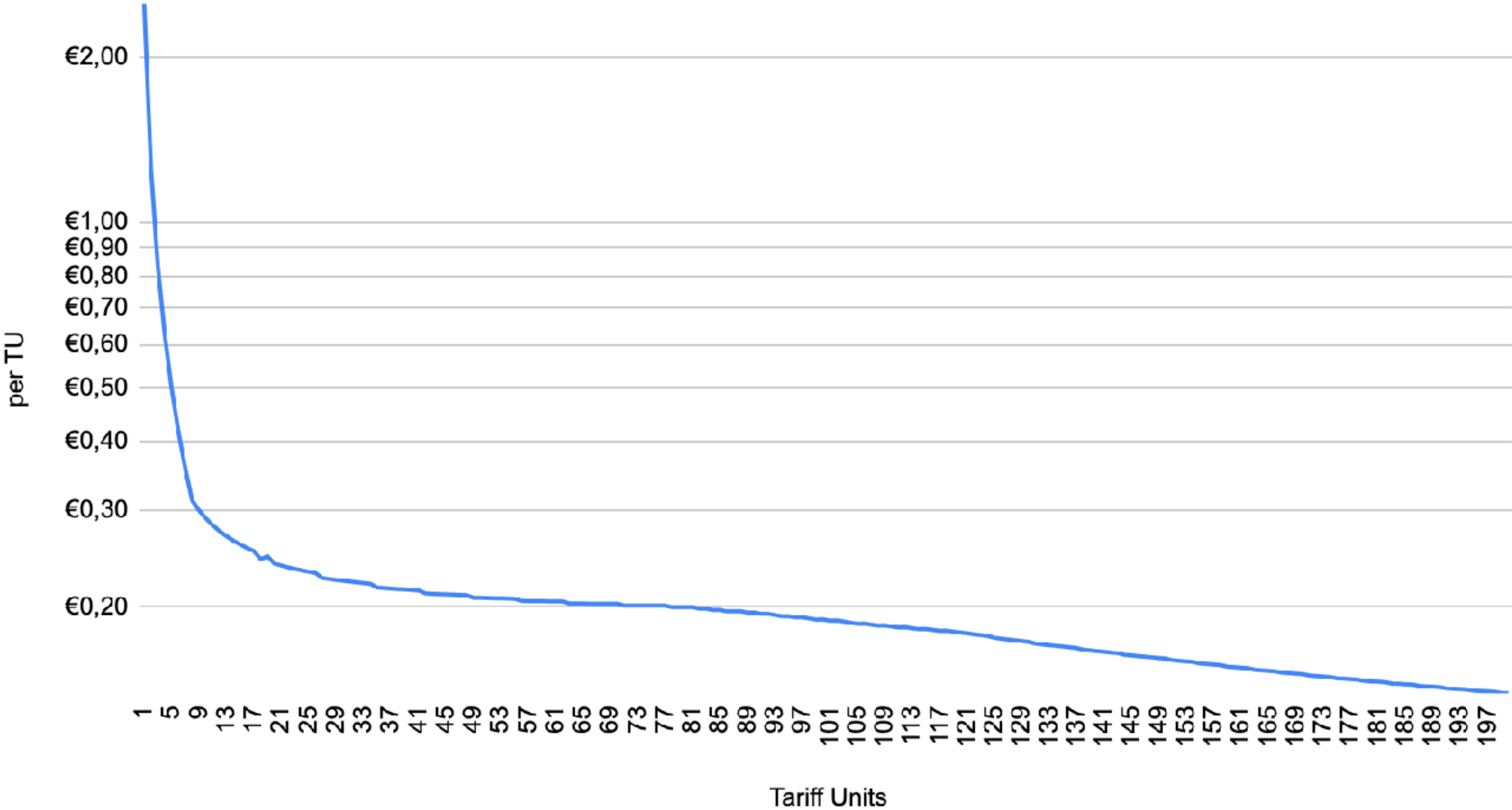
Product type

- Bus, Tram, Metro (BTM)
 - €1.01 boarding/basic fare
 - fare per kilometre differs between regions (€0.179 in Amsterdam)
 - can be more expensive than GVB 1 hour ticket (€3.20)
- Train travel
 - Fare tables based on Tariff Units
 - Tariff Unit map published by ProRail

Travel farther on train to save money



Price per tariff unit



Save € 0.40 on a trip to the Airport



- Amsterdam Centraal - Schiphol Airport = **19 TU**
- Amsterdam Amstel - Schiphol Airport = **17 TU**
- You *actually* travel through Amsterdam Centraal
- Use an e-ticket
- Gates in **all stations** will open for any *valid* ticket



Trains to the limits



- Peak hours are **actually 10 minutes shorter** than announced
 - Mon - Fri **06:35 - 08:55, 16:05 - 18:25**
 - Tariff is determined at (the first) check-in
 - No afternoon peak hours for international trips
- You can cancel check-in by checking-out **within 60 minutes**
 - Stuck in a restaurant for more than 60 minutes? Then take a train to some *other* stop!
- You can continue the journey by checking-in **within 35 minutes** after check-out
- Total journey duration cannot exceed **6 hours**
 - Longer journeys get broken into shorter ones with possible missing check-ins/-outs

First class travels



- When travelling on balance, class has to be chosen before check-in and **cannot be changed**
- With NS-flex, class can be **changed within 15 minutes** after (*each*) check-in
- Surcharge **67%** on top of 2nd class fare
- Almost precisely cancels out **40% discount**

$$1\frac{2}{3} \cdot \frac{100 - 40}{100} = \frac{300}{300} = 1$$

$$\frac{167}{100} \cdot \frac{100 - 40}{100} = \frac{1002}{1000}$$

Extra cent for NS Flex users



On Balance / e-ticket

Amsterdam Centraal

$$\text{Train (NS)} \quad 2.90 \cdot \frac{100 + 67}{100} = 4.843 \sim 4.84$$

2nd class full fare € 2.90

20% discount € 2.32

40% discount € 1.74

1st class full fare € 4.84

20% discount € 3.87

40% discount € 2.90

Railrunner € 2.50

Zaandam

$$4.84 \cdot \frac{100 - 40}{100} = 2.904 \sim 2.90$$

NS Flex

The screenshot shows two NS Flex tickets. The first ticket is for a journey from Amsterdam Centraal to Zaandam, departing at 18:49 and arriving at 19:07. The second ticket is for a return journey from Zaandam to Amsterdam Centraal, departing at 09:22 and arriving at 09:38. Both tickets are for 1st class and have a price of € 2.91. Each ticket entry includes a green checkmark icon and the NS logo.

$$2.90 \cdot \frac{100 + 67}{100} \cdot \frac{100 - 40}{100} = 2.9058 \sim 2.91$$

Fare optimisation tips



- Buy **40% off-peak** subscription for € 5.10/month
 - The cost of subscription will return within one or two trips per month
 - You will get a personal OV-chipkaart for free
- Check-in before peak hours, but not too early
 - It is **not allowed** to check-in sooner than 30 minutes before travel
- Do not stop for more than 35 minutes during peak hours
 - So the cheaper trip will continue
- Try not to mix trains and BTM
 - You will *very likely* not get any transfer discount



Questions



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