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Helsinki Region Transport

Helsinki Region Commuter Trains Tendering Project

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Presentation agenda

→ Commuter train services
- Current contract and operating situation
- Past performance statistics

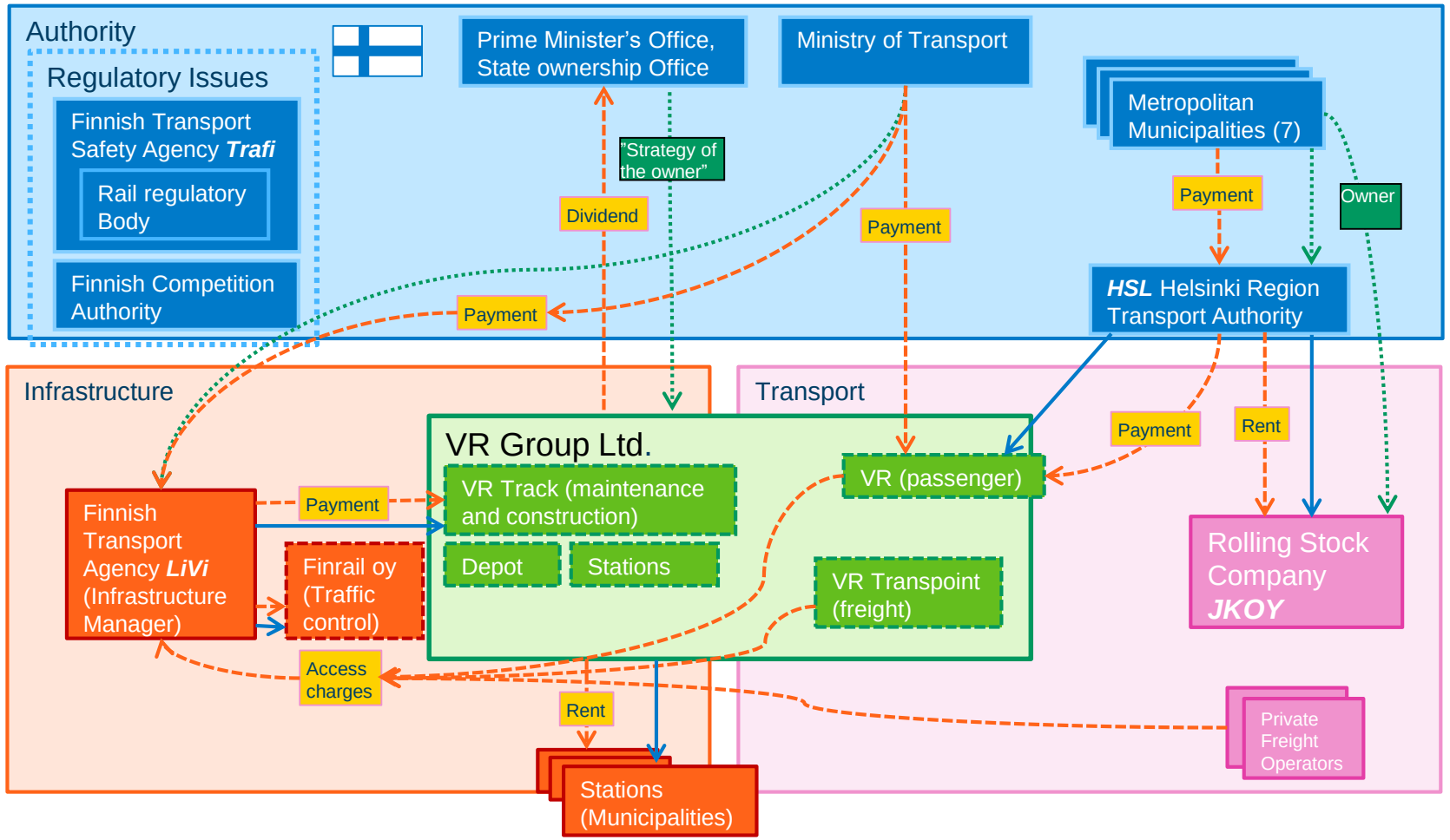
→ Proposed tendering plan

→ Market dialogue

- Whole presentation will be published on the HSL website after the event
- No questions please until the end of each section

Helsinki region commuter trains: Background to the current interim contract

Institutional setting for Finland 2017 (changes in the near future)



Money
Steering
Contract

Comments:
- VR Commuter operations is now a separate business unit under VR Passenger division

Background: contractual arrangements

- → HSL negotiated direct award with incumbent VR (Finnish State Railways), 2006 – 2017
- → Gross cost contract for operations and maintenance, included use of older VR rolling stock (Sm1 + Sm2)
- → New Sm5 FLIRT-fleet owned by rolling stock company JKOY, leased to HSL, assigned for VR
- → Former operating contract worth about € 70 million/year

Background: tendering

- → HSL is now competent PSO authority for train services within its region (area of member municipalities)
- → Tendering was legally possible for next contract starting from 2018
- → Tendering of passenger train services has not been legally required by EU or national legislation
- → HSL and state authorities have been working to enable fair market access, starting in the Helsinki region

Background:

Following requirements were not solved in 2014 in order to enable the start of HSL tendering process

- → Leasing of the depot space and access to services
- → Neutral control of the rolling stock (VR part-owner of the JKOY)
- → Roles, employment terms and transfer principles of the VR commuter services personnel
- → Transparency of operational structure and costs
- → Access to data on past performance and maintenance
- → Decision on the City Loop tunnel project

Background: Solutions with the interim contract for transition

→ Interim contract guarantees for HSL

- Availability of the depot facilities on a long-term lease
- VR ownership in JKOY removed by a buyout arrangement
- More flexible and efficient contractual terms of work for the current VR employees (to be transferred)
- Better transparency to costs and organization
- Access to realised performance data for public tendering
- Total savings of € 32 million (-10 %) during the contract

HSL strategic goals met by the interim contract and transition period (1)

1. Ensuring the reliability and general quality of the operations
2. Optimising the use of on-board personnel and defining the tasks required by authority (service, safety and security)
3. Taking stronger ownership of the commuter train service brand and design, integration with HSL image and marketing

HSL strategic goals met by the interim contract and transition period (2)

4. Improving disruption management and information
5. Establishing correct baseline specifications for the tendering (offer, service level, quality target levels, energy consumption etc) and ensuring availability of past performance data
6. Lowered costs and better transparency into the cost structure

New interim contract for transition to tendering

- → HSL has signed a negotiated direct award contract with incumbent state company VR for 2016 – June 2021
- → Interim contract replaced final two years of earlier contract
- → Transition contract for a five-year period preferred by both sides to enable better preparation and lower risks for the competitive tendering process

Current situation

Service statistics
Timetable
Network structure
Service concept
Tasks of personnel
Rolling stock
Maintenance

Service statistics:
HSL commuter train services

- → About 7,3 million train-km annually
- → Double traction for peak hours, 9,7 million unit-km
- → About 750 departures / weekday, 220 000 trains annually
- → About 59 million passengers annually
- → Mostly high-frequency urban services on dedicated double-track network
- → Also regional services on main line in mixed traffic

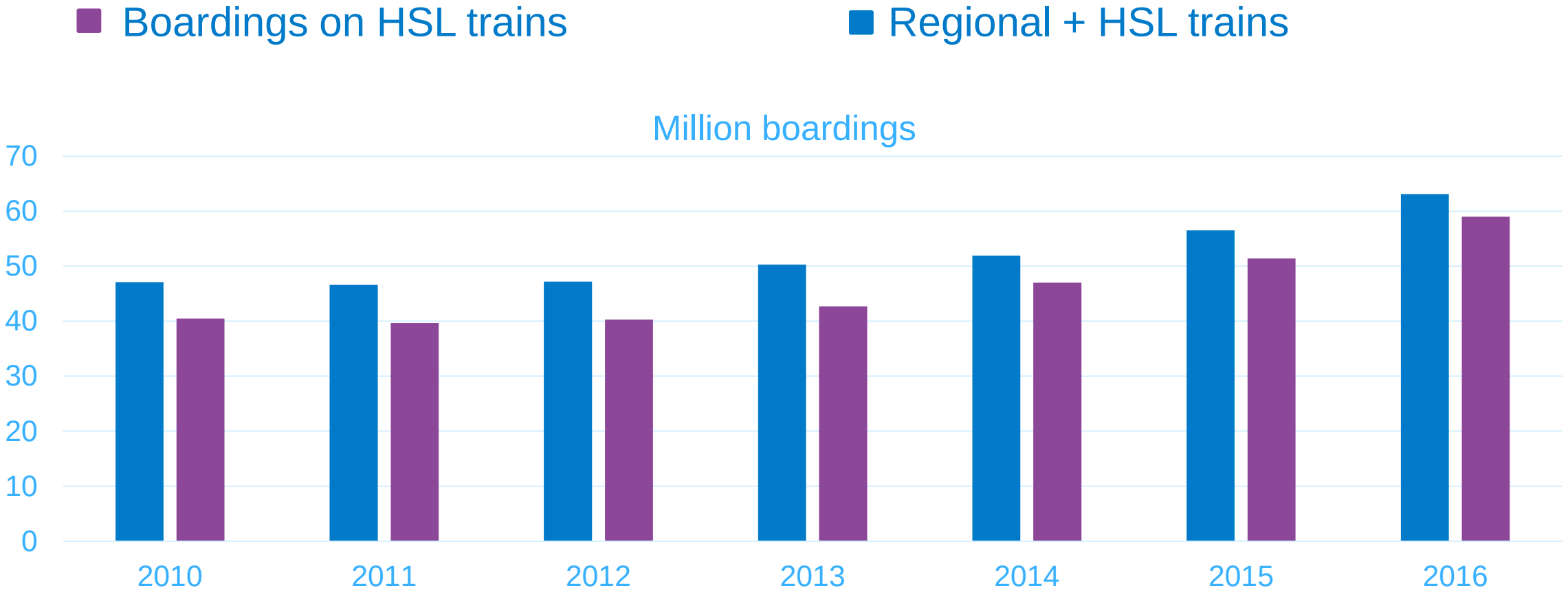
The number of boardings 2010-2016

Million boardings 2010–2016

	2010	2011	2012	2013	2014	2015	2016
Buses	166.6	172.5	176.7	179.3	182.0	182.0	181.3
Metro	57.1	61.5	62.2	63.4	62.1	62.9	64.1
Trams	54.5	53.7	57.2	56.6	55.5	55.2	56.6
Commuter trains	47.1	46.6	47.2	50.3	51.9	56.5*	63.1
Ferry	1.6	1.7	1.6	1.8	1.8	1.9	2.2
Total	**326.9**	**335.9**	**344.9**	**351.4**	**353.3**	**358.6**	**367.2**

*Opening of the ring rail to Airport in 2015

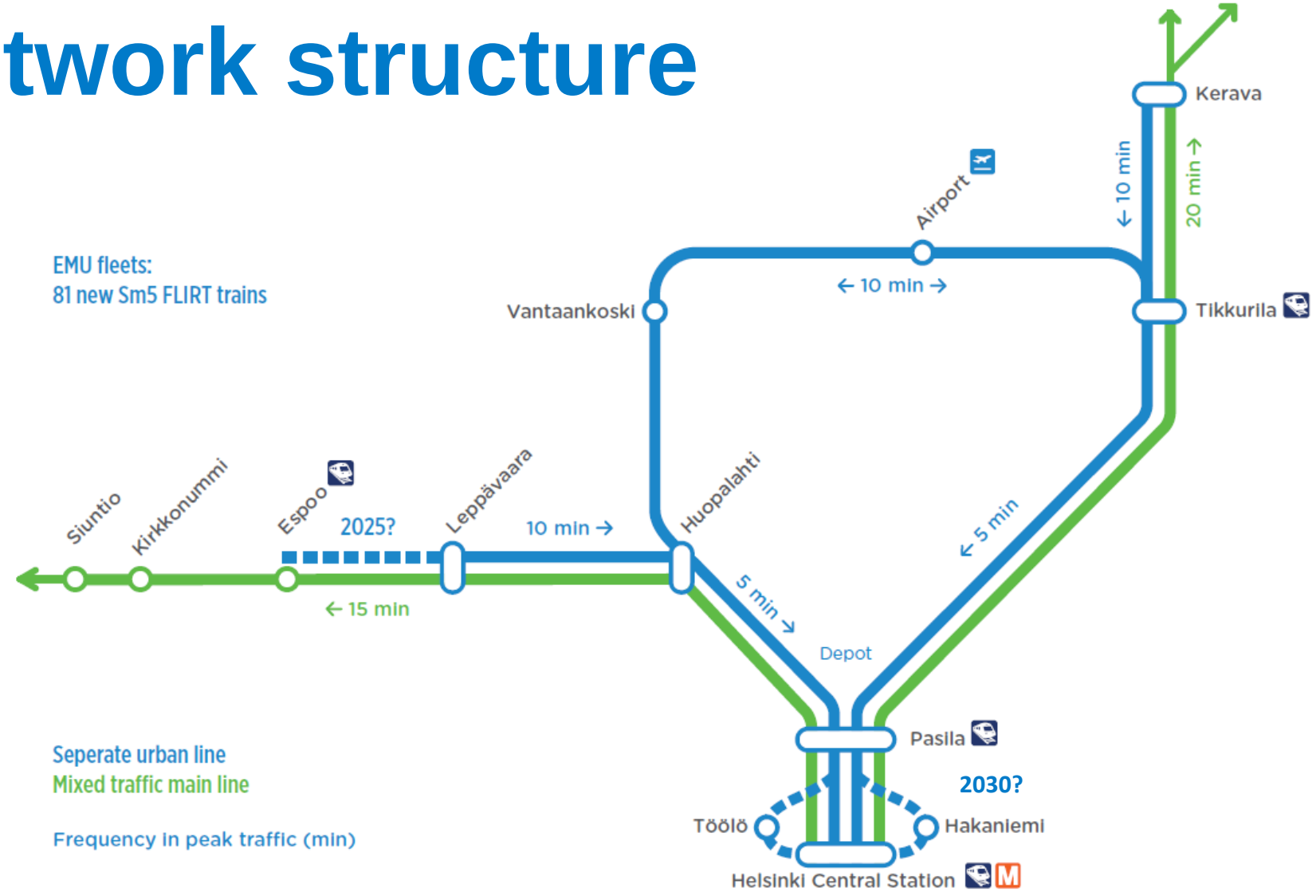
The number of boardings 2010-2016 on commuter trains inside HSL area



Timetable structure

- → Basic structure: from 6 to 19 on weekdays, 10-minute frequency on all urban lines, adding to 5-minute frequency on the access tracks to Helsinki
- → Zipper function means delays can easily lead to larger disruptions; target punctuality tolerance 2,5 minutes
- → Turnaround times 10-20 minutes at Helsinki Central terminus
- → Main lines shared between regional and intercity trains; 4 HSL trains / hour on the western main line

Helsinki commuter rail network structure



Service concept

- → All stations on the urban network have at least 10-minute frequency in peak hours, many have 5-minute frequency
- → Double traction in peak hours adds capacity
- → Key stations have access to both urban and faster regional lines (especially those with large feeder bus networks and intercity connections)
- → Tickets are interoperable between HSL and regional lines inside the HSL area (agreement between VR and HSL)

Tasks of personnel

- → Major change was made in June 2017
- → Driver-only operations: all train safety and operational responsibilities now assigned to the driver
- → Conductors move in pairs from train to train making ticket checks, maintaining order, advising and assisting passengers
- → All trains manned by conductors after 21-22 in the evening to maintain security
- → Objective: more visibility and customer contacts

Rolling stock (new fleet)

- → 81 Sm5-trains (FLIRT from Stadler) delivered 2010-17
- → For HSL train services, leased from municipal rolling stock company JKOY
- → Currently direct-award maintenance contract with VR
- → Length 75 meters
- → Seats 260 / 228 (tot. cap. 380)
- → Top speed 160 km/h, mostly run at 120 km/h max

Maintenance concept

- → Half of the fleet still covered by Stadler warranty
- → Contractual operator maintenance reserve is 6 trains
- → More trains are currently available for maintenance, as only 69 units are required for daily operations
- → Part of fleet brought in between peaks for a 4-hour daytime maintenance window
- → JKOY responsible for heavy maintenance, bogey overhauls are starting for the first delivery series

Maintenance facilities

- → All maintenance operations done at the central Ilmala depot located only 6 km north of central station
- → A workshop hall with 4 tracks and 8 train slots reserved for the HSL Sm5 fleet
- → Washing, wheel lathe and water/sewage pumping facilities on separate tracks, in shared use with VR rolling stock
- → VR uses existing facilities to support both HSL and regional commuter operations

Current and past performance

Punctuality
Reliability
Causes of disruption
Customer Satisfaction
Quality Inspection

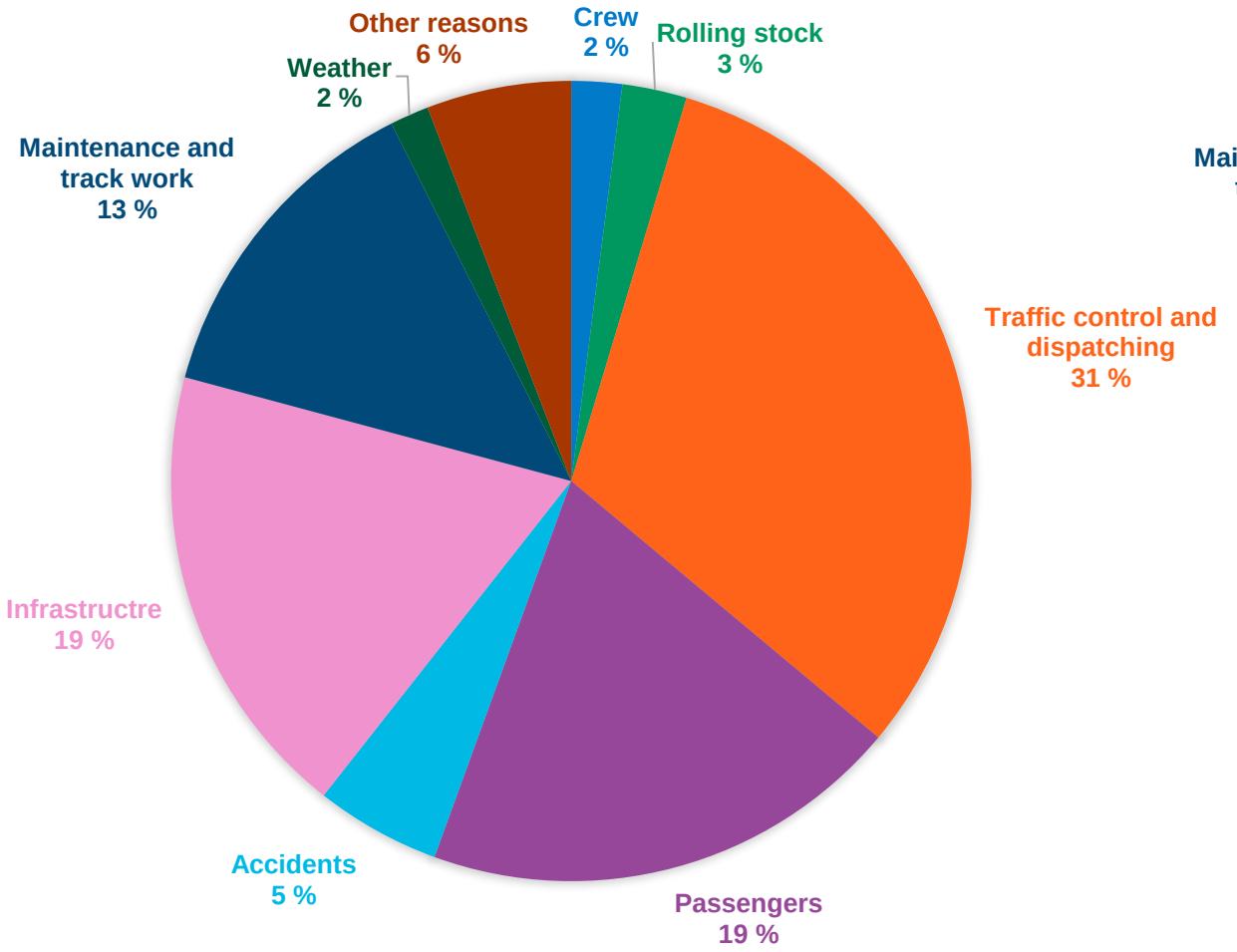
Punctuality

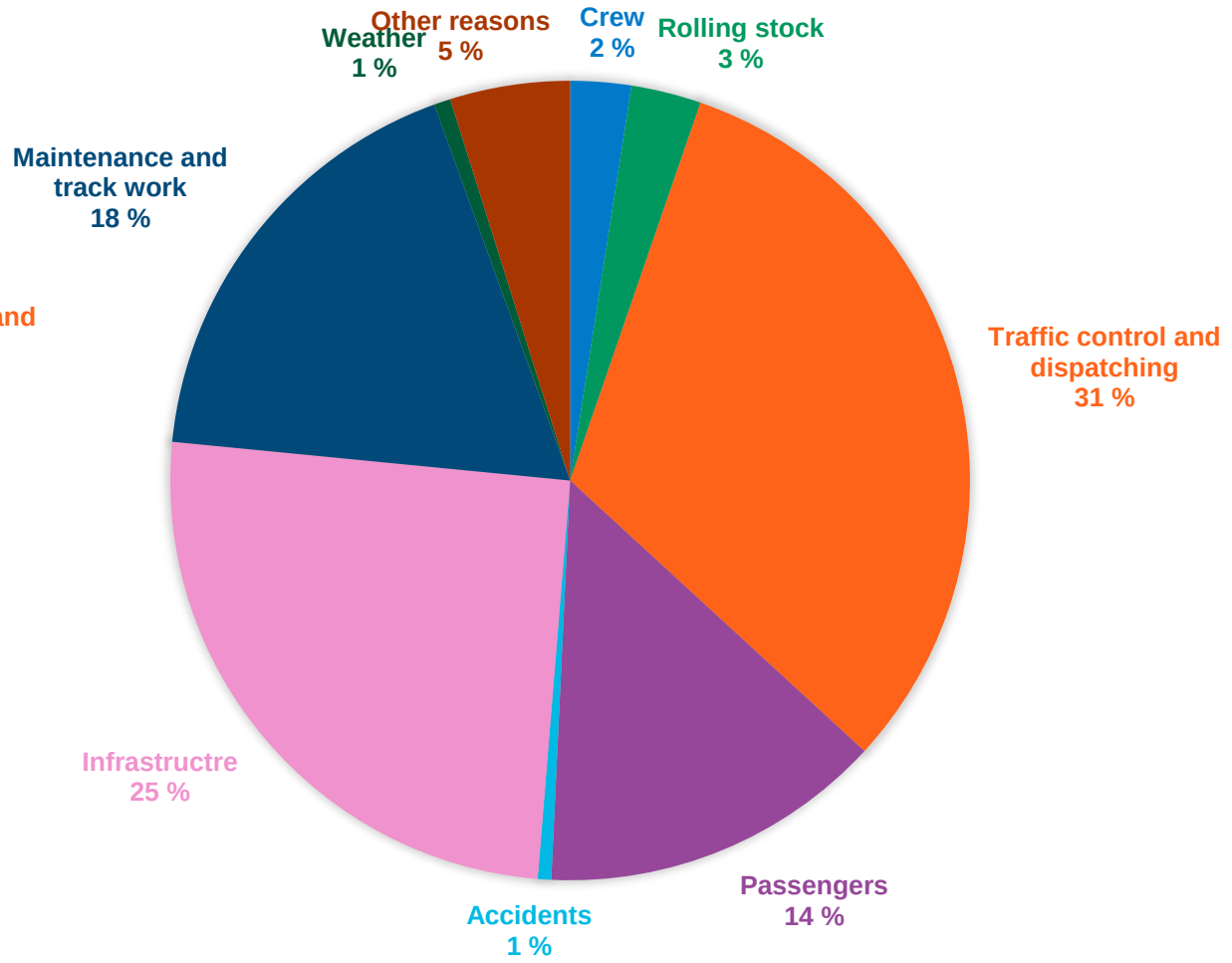
Trains arriving at their terminating station within 2,5 minutes of schedule

Reliability

Percentage of trains cancelled

Causes of disruption 2016-2017



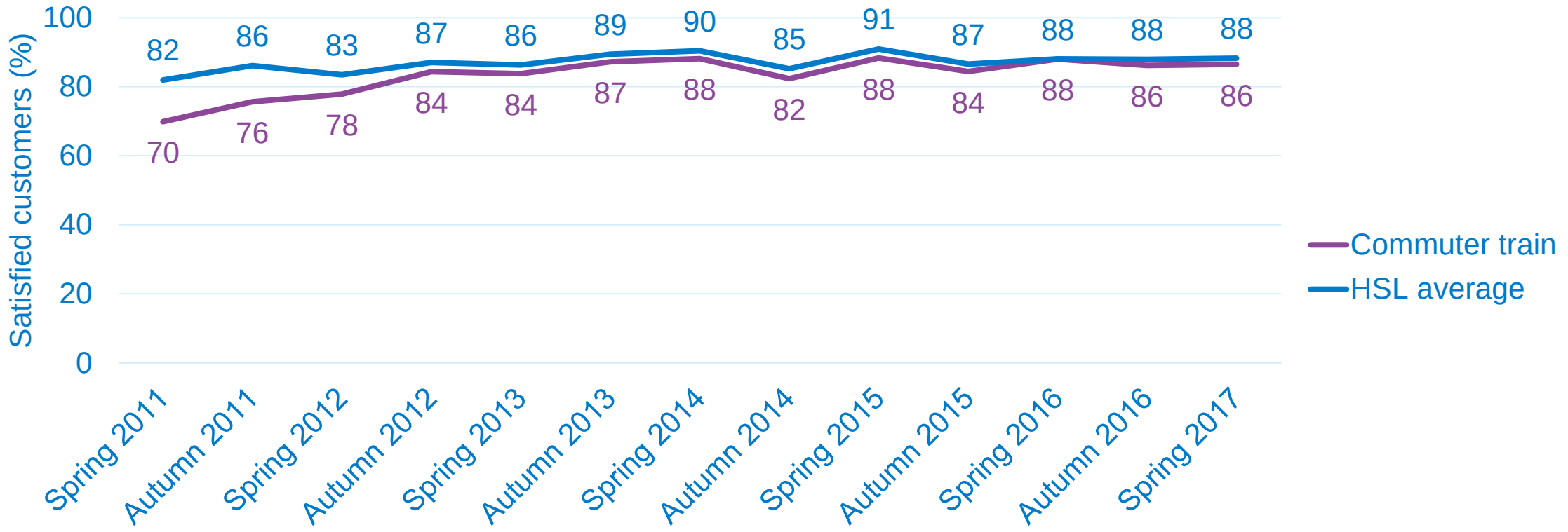


Customer satisfaction survey

Commuter trains are performing below HSL average for all modes

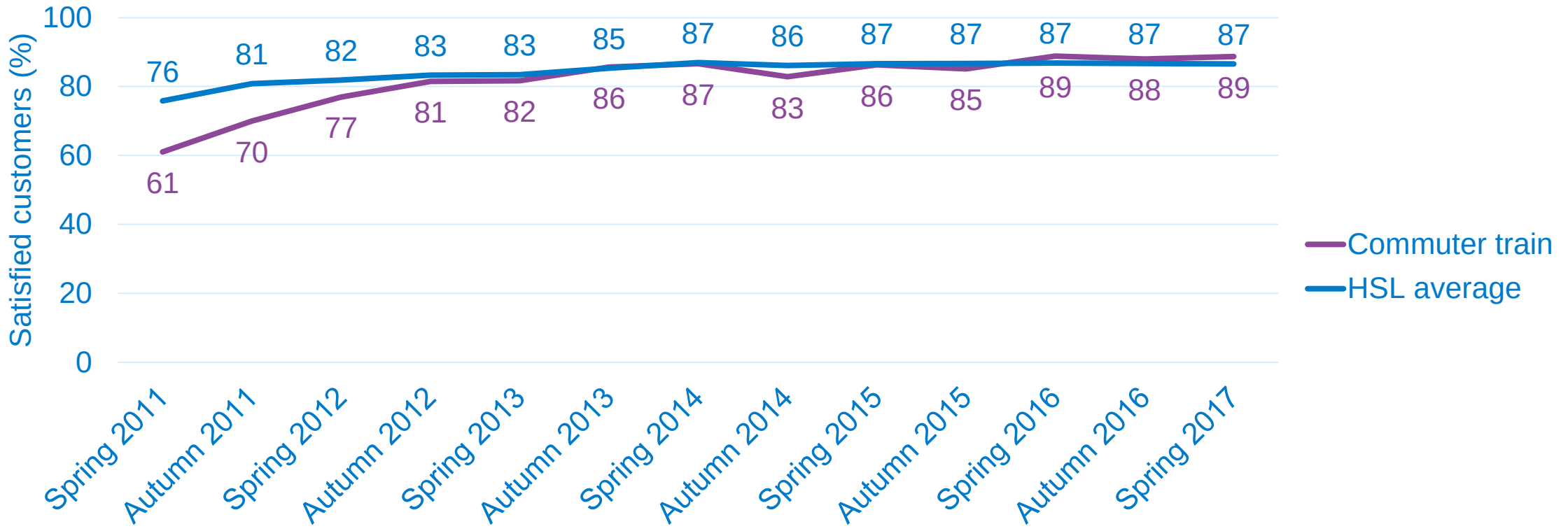
Overall grade for public transport services in the HSL area

By mode of transport



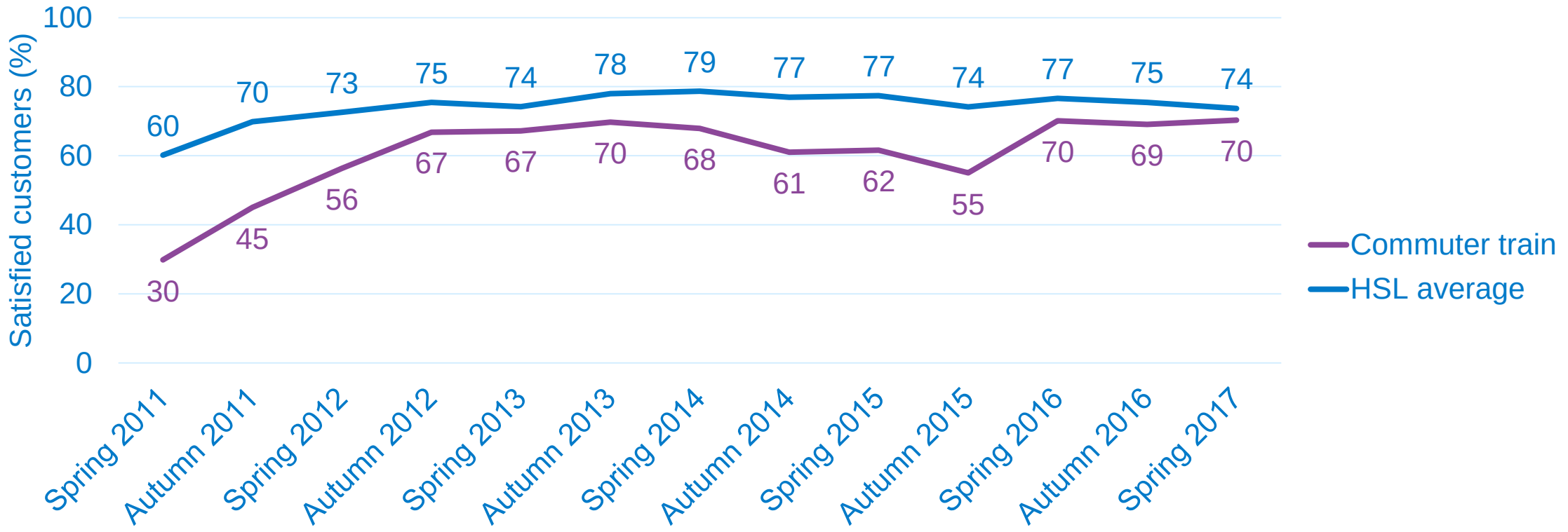
Overall grade for the operator

By mode of transport



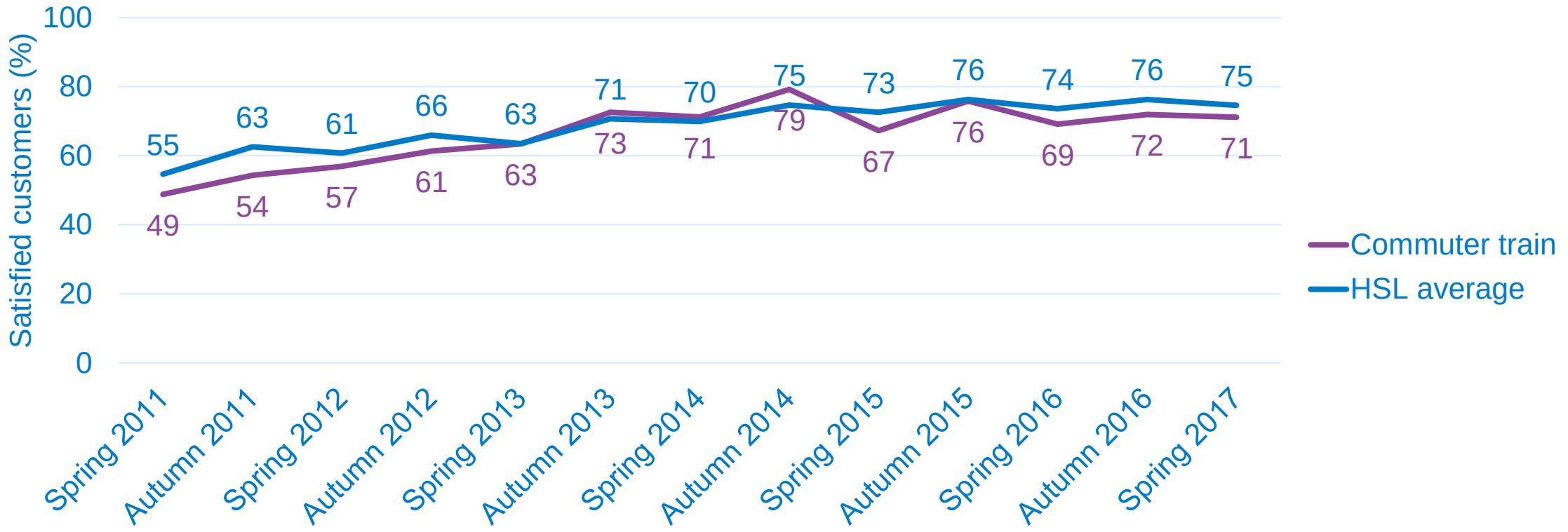
Keeping to the schedule

By mode of transport



Cleanliness of the vehicle

By mode of transport

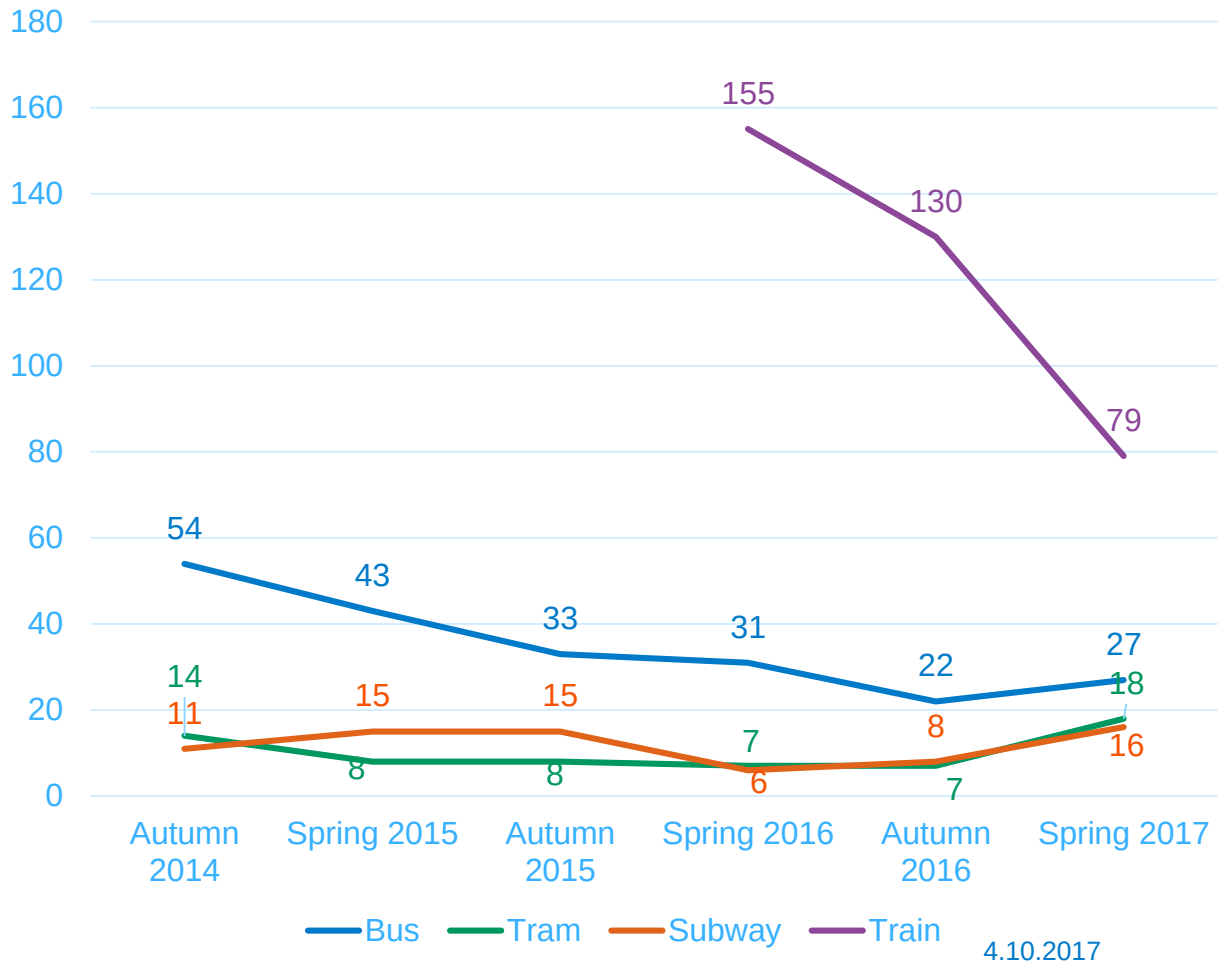


Quality inspection of public transport vehicles

Initial improvement on the trains, more required

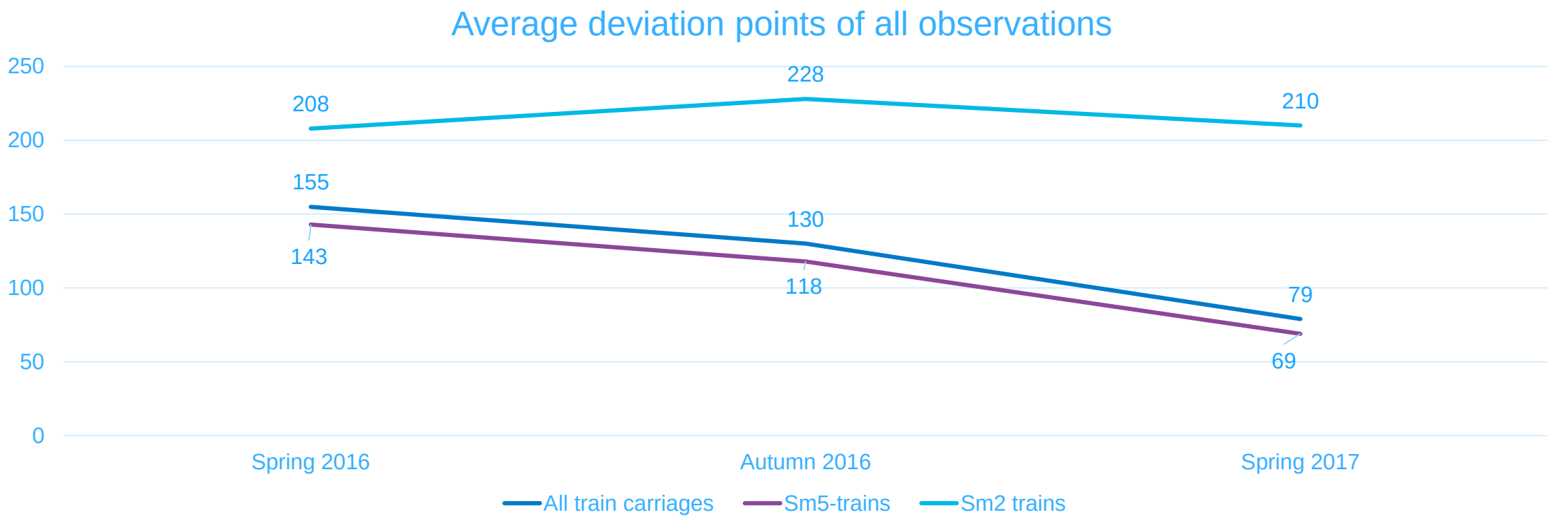
Quality of public transport fleet

- Pre-defined criteria for different quality elements of public transport fleet
  - ➢ Quality deviations accumulate ”deviation points” (the lower the better)
- Inspection of train carriages started in spring 2016
- Results between travel modes should be compared with caution as the area of inspection unit and number of quality elements varies
  - ➢ Trains have the largest inspection units and more quality elements than other transport modes



The development of deviation points in train carriages

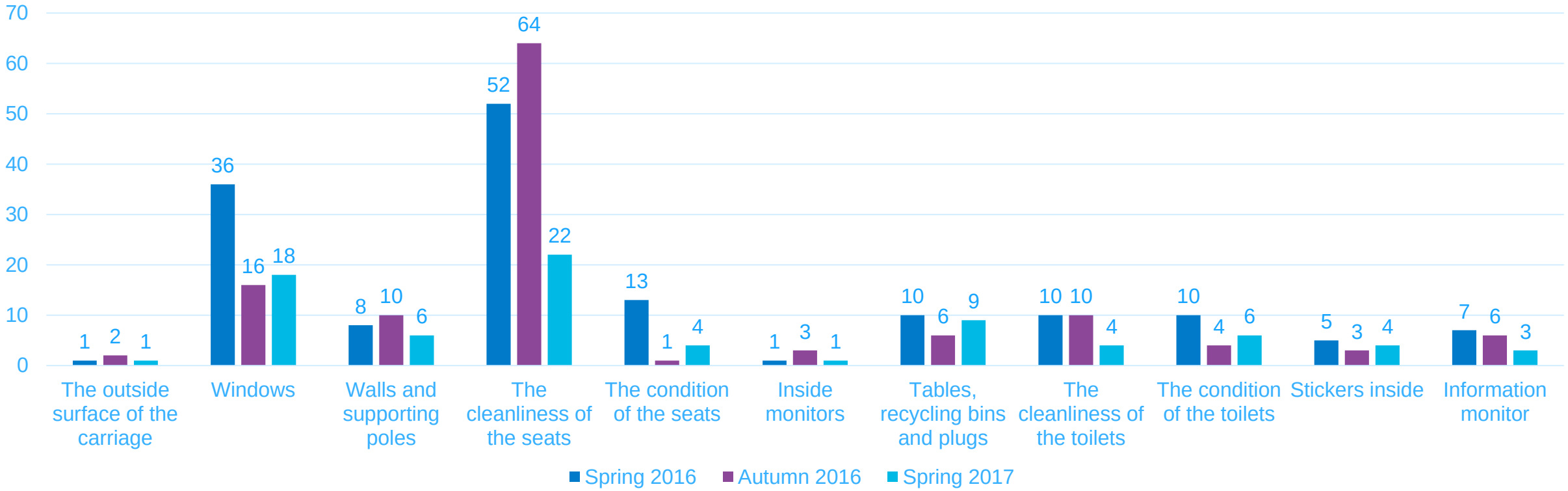
- From autumn 2017 onwards all inspected train carriages are Sm5 models



Quality elements

24 quality elements are inspected on trains

- 71 % of inspected train carriages had quality deviation(s) in spring 2017 (autumn 2016: 82 %)

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Plan for tendering and contract model

Proposal, feedback from you is welcome in the market dialogue

HSL tendering plan:
Main objectives of tendering (1)

→ Reliability and quality of services are high
- Ensuring the required competence, resources, processes and tools
- Correct incentives and priorities supporting HSL quality targets

→ Reasonably priced contract
- Savings in operation costs expected, 5 – 10 % from current level

→ Change management during contract supports innovation, continuous improvement and win-win solutions
- Working together with third parties is crucial for success

HSL tendering plan:
Main objectives of tendering (2)

- → Independence of planning and production of commuter train traffic (priority for service offer and punctuality)
- → Usage of rolling stock, infrastructure and personnel is efficient, flexible and prioritizes customer service, especially during network disruptions
- → Transition to new contract is well managed and service disruptions are limited to minimum

HSL tendering plan: Constraints for the operator

→ Part of integrated transport service and fare system

- HSL as PTA decides service level and fares
- HSL provides ticketing and information services
- Not much freedom for operational planning, train offer and timetable structure fixed by the network

→ Transfer of going concern and facilities

- Obligatory transfer of employees from the incumbent
- Takeover of existing rolling stock and facilities

HSL tendering plan: Potential opportunities for the operator

- → Efficiency gains from improvements through the life of the contract
- → Bonus payments for KPI performance over baseline levels
- → Incentive for co-operation with network manager and other third parties to improve performance (e.g. disruption management)
- → Possibility to include feeder bus services in the contract
- → Limited incentive to grow ridership

HSL tendering plan: questions for potential bidders (1)

→ No competing operators present in Finland
- How to promote market access and attractiveness?
- How to demonstrate transparency and fairness?

→ Necessary qualifications for new operators?

→ Potential quality criteria for pre-selection and award?

→ Timeline for establishing operations in Finland?

→ Language-related issues and local partners?

→ Timeline of transition period for new contract?

HSL tendering plan: questions for potential bidders (2)

→ Reliability of service is the key quality objective

- How to separate operator performance from overall outcome dependent on other causes?

→ Quality evaluation in bidding / contract

- Which are the relevant KPI's, how they should be measured?
- How should the contract incentives be structured?
- Weight in bid evaluation / weight in compensation?

HSL tendering plan: questions for potential bidders (3)

→ HSL desires co-operative relationship to allow for continuous improvement of the services

- How to write the contract terms to serve that goal?
- Output-based requirements vs. evaluation of resources and delivery plans?
- How to achieve transparency of improved performance and related cost for adjustments during the contract (balanced win-win solutions)?
- Proposed arrangements for co-operation in planning and operations, also involving network manager and other third parties?

HSL tendering plan: Pre-qualification requirements

→ References in operation of similar passenger rail services
→ Valid safety certificate and operating license within ERA
→ Financial and operational capability (in relation to contract size)
→ Mandatory requirements from national procurement law

HSL tendering plan: pre-tender bidder selection

→ Shortlist of (4 - 5) pre-qualified bidders or all pre-qualified bidders to be involved in the second stage (pre-tender interaction to develop the tendering documents)?

→ Which criteria should be used to select bidders for the second stage, and how they should be evaluated?

HSL tendering plan: Evaluation of bids

- → Gross cost compensation based on unit costs (train-kms etc)
- → Weight of total cost in bid evaluation to be decided
- → HSL sets the baseline target levels for quality KPIs
- → Proposal: Bidders can set target level for KPIs above the baseline supported by a credible delivery plan, basis for bid evaluation and incentives during contract
- → How to handle evaluation of other quality dimensions (that are difficult to measure or prove in advance)?

HSL tendering plan: Proposals considered for new contract

→ Performance-based gross cost contract

- Payment for delivered services, unit-cost structure?

→ Incentives considered

- Delivered measurable quality (punctuality, reliability, vehicle quality inspections)
- Perceived quality (passenger satisfaction surveys)
- Growth of ridership (or share of revenue growth)
- Co-operation with network manager and other third parties (discretionary)
- Rolling stock availability (reduced maintenance reserve, delivered usage ratio)

HSL tendering plan: Proposal for contract framework

→ Contract length 10 years + 3 years option (at HSL discretion)

- Major network change (City Loop tunnel) may be constructed (disruptions) and deployed during the contract, affecting the operational scheme and costs, requiring review and adjustment of the contract terms
- Decision criteria and timeline for triggering the extension options?

→ No rolling stock or facility investment required from operator

- Transfer of control of the existing assets with the contract, at no cost or at nominal / real leasing cost? Requirements for maintenance, asset value protection and handover condition at the end of contract

HSL tendering plan: Proposals being considered for train maintenance concept

→ Operator responsible for daily and regular maintenance during contract (may be subcontracted)

→ Long term asset management, heavy maintenance, upgrades and refurbishment organised by the Rosco (JKOY)

- How to define the responsibilities and co-operation?
- Would more integrated maintenance concept managed by the operator improve efficiency and reduce time out of service?

→ JKOY must approve changes to maintenance programme

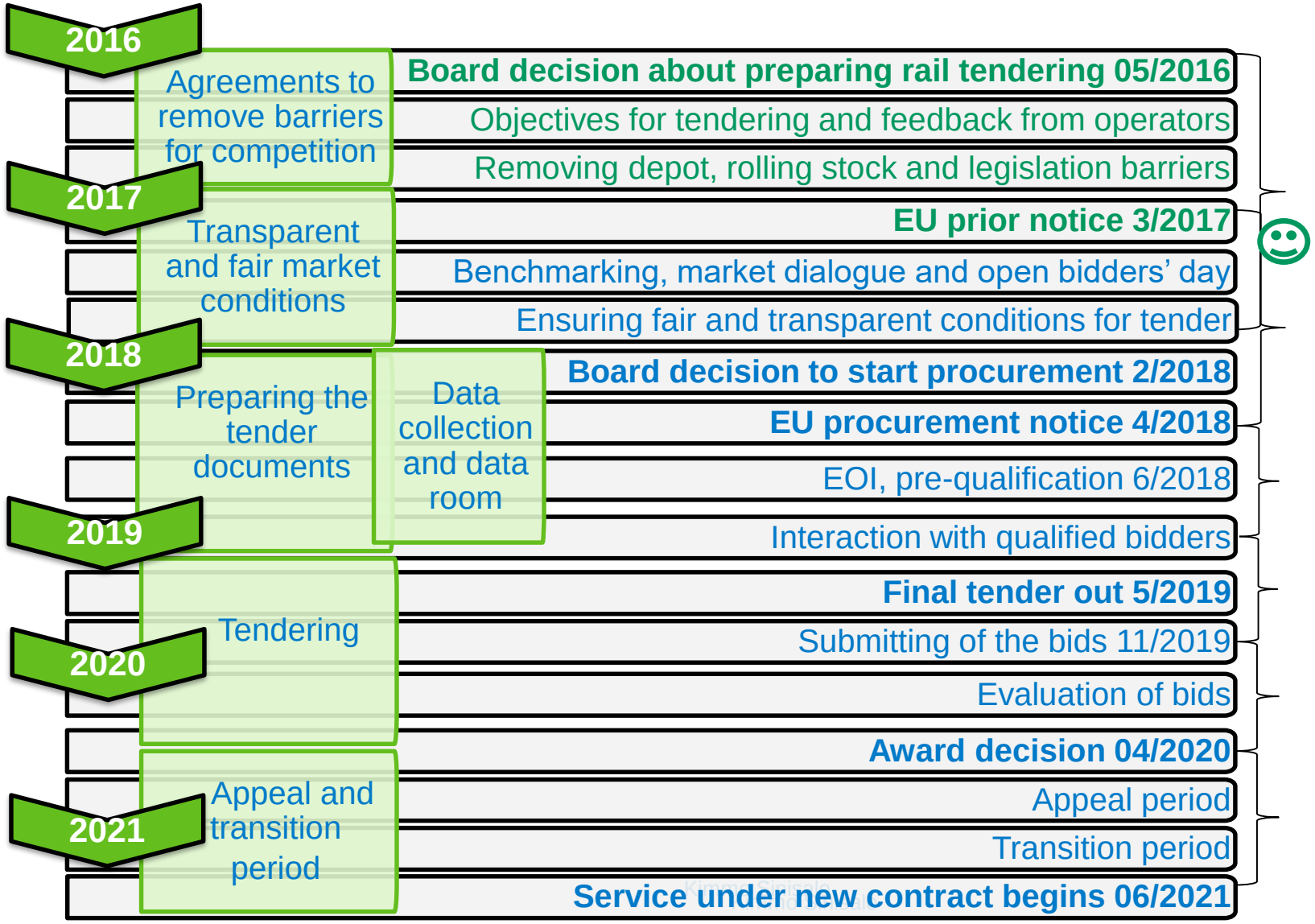
HSL tendering plan: Proposal for maintenance facilities

→ Facilities at Ilmala central depot leased from VR by JKOY, assigned to the winning operator

- The main workshop hall will be included, the plan for other requirements (storage, offices, employees' facilities etc.) still under consideration
- How to make sure the arrangement fits the operators' needs?

→ Access to shared services is guaranteed

- Washing and wheel lathing services provided by VR as obligation
- Water/sewage pumps provided by network manager


2016
Agreements to remove barriers for competition
Board decision about preparing rail tendering 05/2016
Objectives for tendering and feedback from operators
Removing depot, rolling stock and legislation barriers
2017
Transparent and fair market conditions
EU prior notice 3/2017
Benchmarking, market dialogue and open bidders' day
Ensuring fair and transparent conditions for tender
2018
Preparing the tender documents
Data collection and data room
Board decision to start procurement 2/2018
EU procurement notice 4/2018
EOI, pre-qualification 6/2018
2019
Interaction with qualified bidders
Final tender out 5/2019
Tendering
2020
Submitting of the bids 11/2019
Evaluation of bids
Award decision 04/2020
Appeal and transition period
2021
Appeal period
Transition period
Service under new contract begins 06/2021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Market dialogue

Information received will be used as basis for the decision on tendering process and contract model to be confirmed by HSL board

Distribution of information

→ Information about the tendering project will be published and updated on the HSL website

www.hsl.fi/helsinkitendering

→ Past performance data about operations and maintenance will be available for qualified bidders in a Data Room service

→ As much documentation and data as possible will be made available in English

Structured 1-on-1 meetings

- → Market dialogue for pre-procurement stage is open from late October to Christmas
- → All potential bidders and service providers are welcome to arrange meetings with HSL in Helsinki
- → Purpose: to receive feedback on our plans and collect questions, answers to be published for all at our website
- → Guided tour of the rail network and a visit to Ilmala depot can be arranged in connection with the meetings

Plan for HSL project support

- → The tendering project team will be fully formed in 6 months
- → Consultants and other project support resources will be engaged mainly before end of the year
- → Goal is to limit availability of Finnish expert resources for bidders as little as possible (only resources directly working with HSL procurement will be excluded from assisting others)

Other tendering opportunities

For consideration and feedback in pre-procurement planning stage

Other rail tendering possibilities

- → In Helsinki, light rail project Jokeri will likely be ready in 2022, decision on operating contract has not yet been taken, studies on possible tendering are ongoing
- → Helsinki city tram network and metro are contracted by direct in-house award until 2024, no plans exist yet for the next contracts

Jokeri light rail project

- → First modern light rail project in Helsinki region
- → Operationally separate from the existing city tram network
- → Peripheral 25 km route, comparable to Tvärbana or new LRT in Copenhagen, right-of-way not completely dedicated
- → New fleet of 29 LRVs ordered (Transtech Artic 35m trams)
- → A new depot (possibly 2) will be built for this project and leased to the operator

Contractual situation

- → Existing city tram network operated by Helsinki City Transport dept HKL, in-house contract until 2024
- → Jokeri operations not included, HSL can make a separate decision for competitive tendering or direct award to HKL
- → New LRVs ordered by HKL, based on a lease contract which allows HSL to assign the fleet to a tendered operator
- → HSL will evaluate contracting alternatives with benchmarking studies and baseline proposal from HKL

Bus tendering opportunities

- → Service contracts for about 200 buses are tendered annually by HSL
- → Size of the contracts is usually between 5-60 buses
- → For the first time, a larger contract for 120 -130 buses based in a new depot will be tendered in 2018
- → HSL is seeking new international operators to enter the local market for tendered bus (and rail) services

Ojanko bus contract tendering

- → Contract size is 120 - 130 buses
- → Contract length 7 y. + 3 y. optional
- → Gross-cost contract with incentives
- → Fixed amount of changes during the contract in kilometres and amount of buses

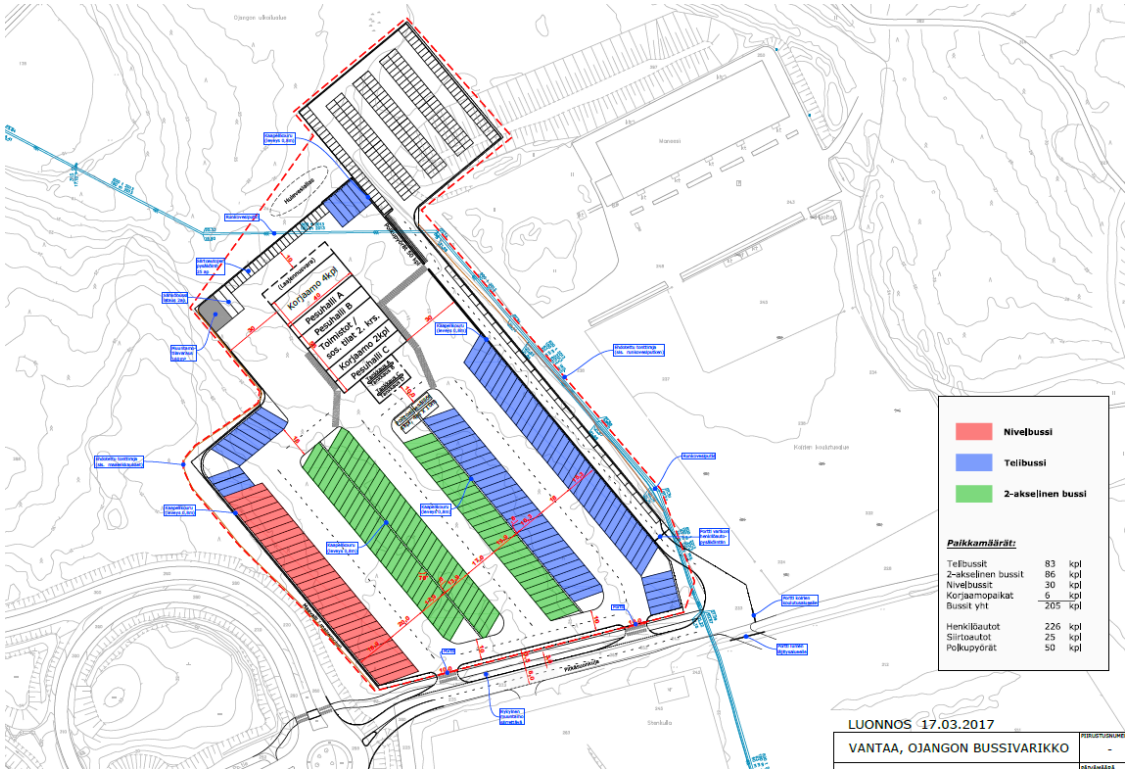
- → Invitation to tender to be published 4/2018
- → Bidding phase until 8/2018
- → Award in 9/2018
- → Handover of the depot 7/2019
- → Contracted operations begin 8/2019

Depot situation and operation area

- → Situated in Ojanko in Vantaa
  - Near Ring III (road 50) and Porvoo motorway (road 7)
- → Eastern Vantaa (Hakunila–Tikkurila–Koivukylä–Korso area)
  - ~ 90 buses
- → Eastern Helsinki (Itäkeskus–Kontula–Mellunmäki–Östersundom area)
  - ~ 25–30 buses
- → Southern Sipoo (Söderkulla area)
  - ~10 buses
- → Total ~125–130 buses

A new bus depot in Ojanko

- → Space for 200 busses
  - Possibility to operate standard and articulated busses
- → Depot layout has been designed for zoning purposes
- → The depot site is located next to Porvoonväylä and Ring Road III
- → Journey time to Itäkeskus 12 min, to Tikkurila 10 min, to Korso 15 min and to Söderkulla 12 min
- → The developer is the City of Vantaa
- → The lease of the depot will be tied to a tendered HSL bus service contract or contracts
- → Goal: the depot will be operational by late summer 2019



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