

# Traffic Data Ecosystem Overview

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# Fintraffic manages and controls traffic and traffic related data in all modes of traffic

## Railway Traffic



- 500,000 trains per year
- 82 million passengers per year
- Rail network 6,000 km
- 470 professionals

## Air Navigation Services



- Air traffic control services at 22 airports
- 280,000 aircraft movements per year (190,000 at Helsinki-Vantaa)
- 440 professionals

## Road Traffic



- Roads carry 90% of passenger transport in Finland
- More than 120 million km driven in vehicles every day
- Road network 78,000 km
- 90 professionals

## Vessel Traffic Services



- Shipping carries 90% of exports and 80% of imports
- 30,000 visits by foreign vessels per year
- 29 ports
- 100 professionals

We also deliver traffic data and digital services for operators and end users in the transport ecosystem



# We offer a wide range of data and services

## Key domains:

- Situational awareness on all traffic modes
- Logistics
- Public transport

### Digitraffic

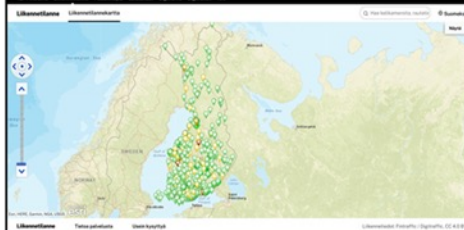


#### Digitraffic

Ajantasaista avointa liikennetietoa sovelluskehitykseen Suomen tie-, rautatie- ja vesiliikenteestä.

- Open traffic data
- Open interfaces

### Traffic Situation



- Real time situation of the traffic system
- Also available as a mobile app

### Train Departures



#### Junien aikataulut reaaliajassa

Junien aikataulupalvelussa pystyt tarkastamaan junien lähti- ja saapumisaajat kaikilta Suomen henkilöliikennesemiltiltä. Tiedot pohjautuvat junien reaaliaikaiseen kulkuasetelhin.

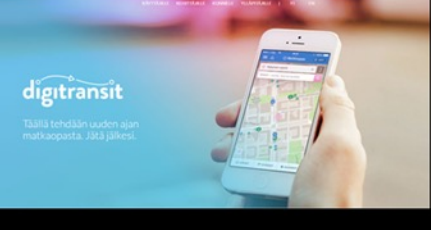
- Train schedules in real time
- Virtual Monitor

### Feedback Channel



- Channel for feedback on traffic networks

### Digitransit



- Public transport route and timetable information

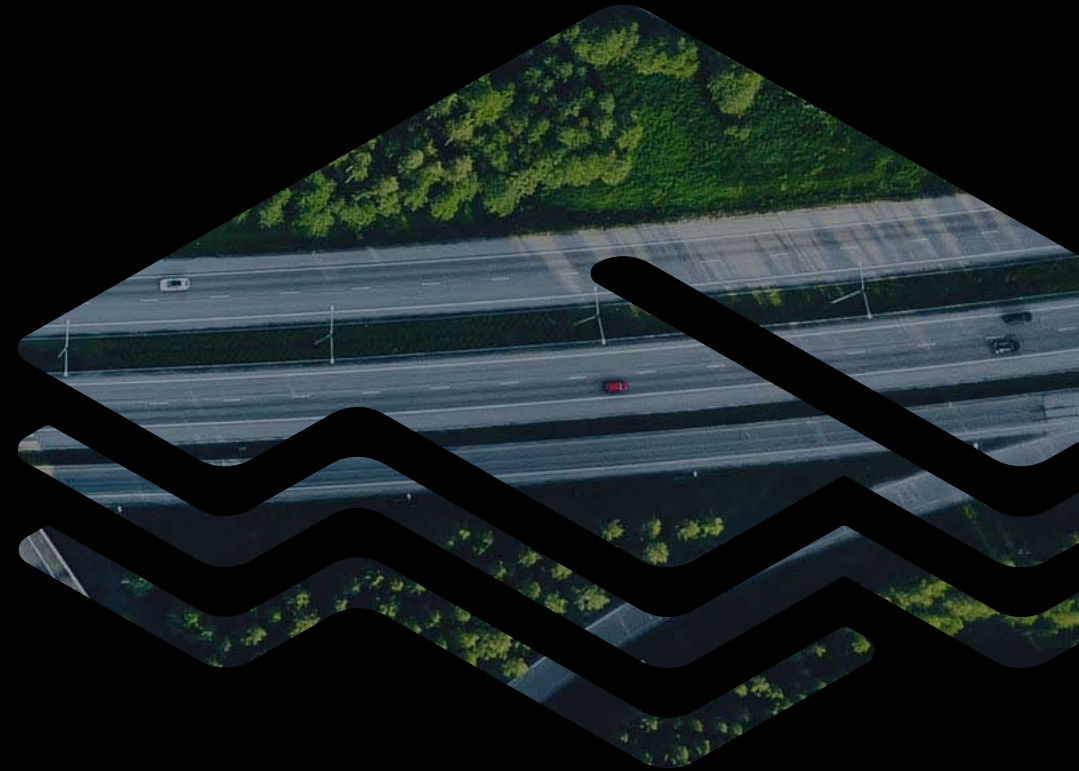
## Data sources:

- Fintraffic traffic management & control
- Finnish Transport Infrastructure Agency, Finnish Transport and Communications Agency
- Public Transport Authorities and Operators
- Logistics organizations
- 3rd party data providers (e.g. EV charging)
- Citizens



**~10B**  
**API Calls / Year**

users include e.g. Google, HERE, Apple, PTAs etc.



**WHY?**



# Digitalization of Traffic is an effective tool

in building sustainability and productivity



70%



Growth forecast for Global traffic market by 2030\*

13%



of companies' and households' money is spent on logistic and traffic costs

20%



of emission are caused by traffic. We need to cut the emissions to half by 2030

**Digitalization offers a unique possibility to:**

- create better and equal traffic and logistic services for customers
- build a more effective traffic system, cut down traffic related costs for companies and households and to cut down emissions
- create growth to the industry, to support Finland's competitiveness
- enhance international accessibility

**WHAT?**





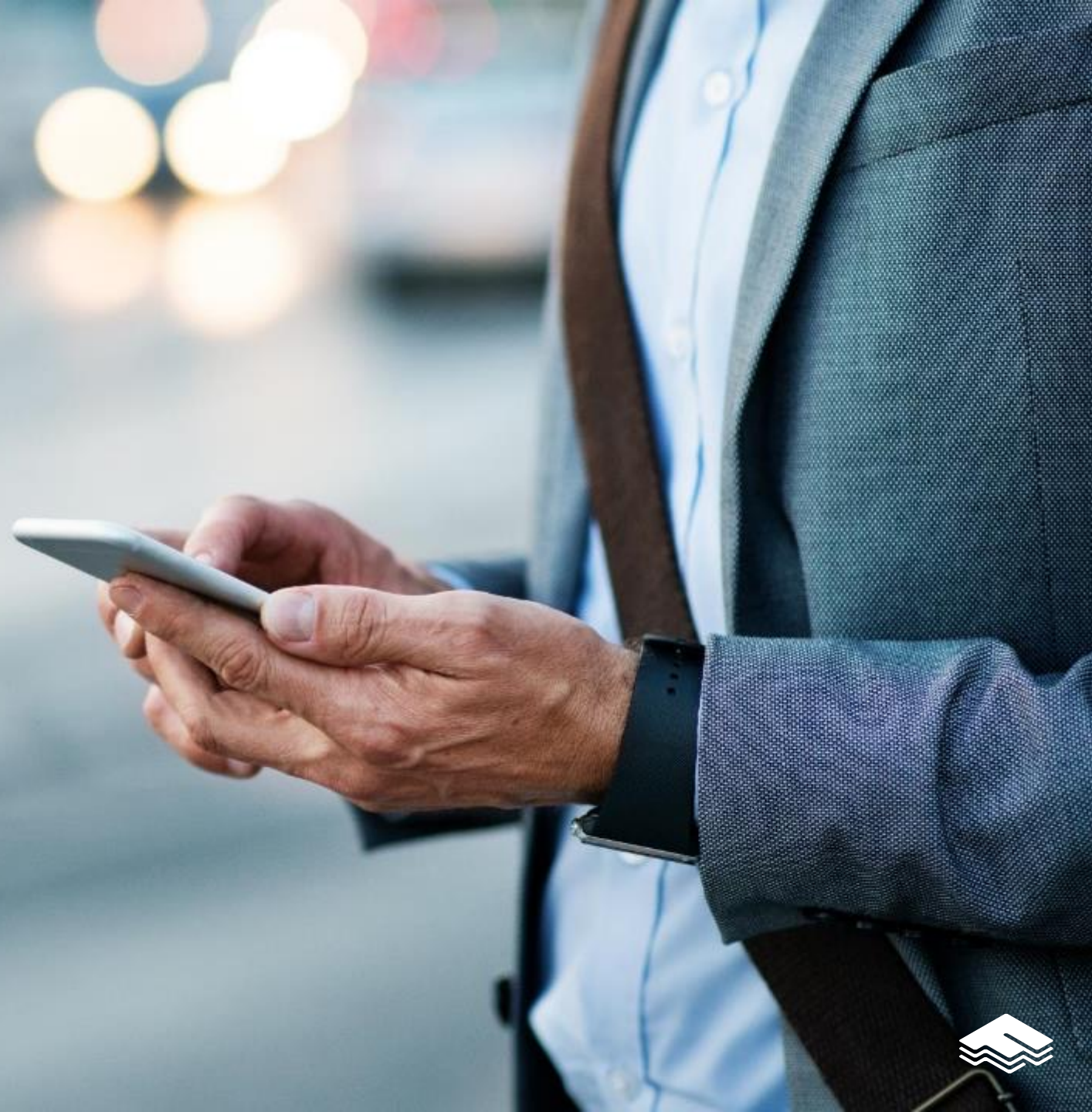


**HOW?**



# Traffic Data Ecosystem

- **We are developing the future of traffic**, where one major goal is to create a Finnish network of traffic operators **making the most effective use of data**, a network unique in the world.
- We have invited **more than 160 leading mobility organizations (including operators, authorities, academia, service providers, cities, ports etc.)** to create
  - **innovative data-share and data-use solutions** and a **fair digital operating environment** within an open data ecosystem.
  - **competitive and scalable traffic and mobility services** for both Finnish and international markets
  - **Key domains:** Logistics, mobility data, traffic information (situational awareness)
  - **Cost-efficient and scalable platforms and solutions** that will enable safe, low-emission and user-oriented travel and transport chains that combine different modes of transport.
  - [fintraffic.fi/liikenteenekosysteemi](https://fintraffic.fi/liikenteenekosysteemi)  
[fintraffic.fi/en/trafficecosystem](https://fintraffic.fi/en/trafficecosystem)



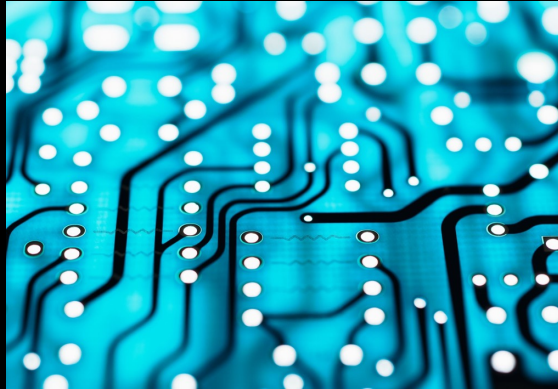
# The building blocks for traffic data ecosystem

## Collaboration



- Shared vision and goals
- Joint development
- Joint investments
- Coordination

## Data & infrastructure



- Technical infrastructure
- Standard Data Models
- Standard APIs
- Shared services

## Rulebook

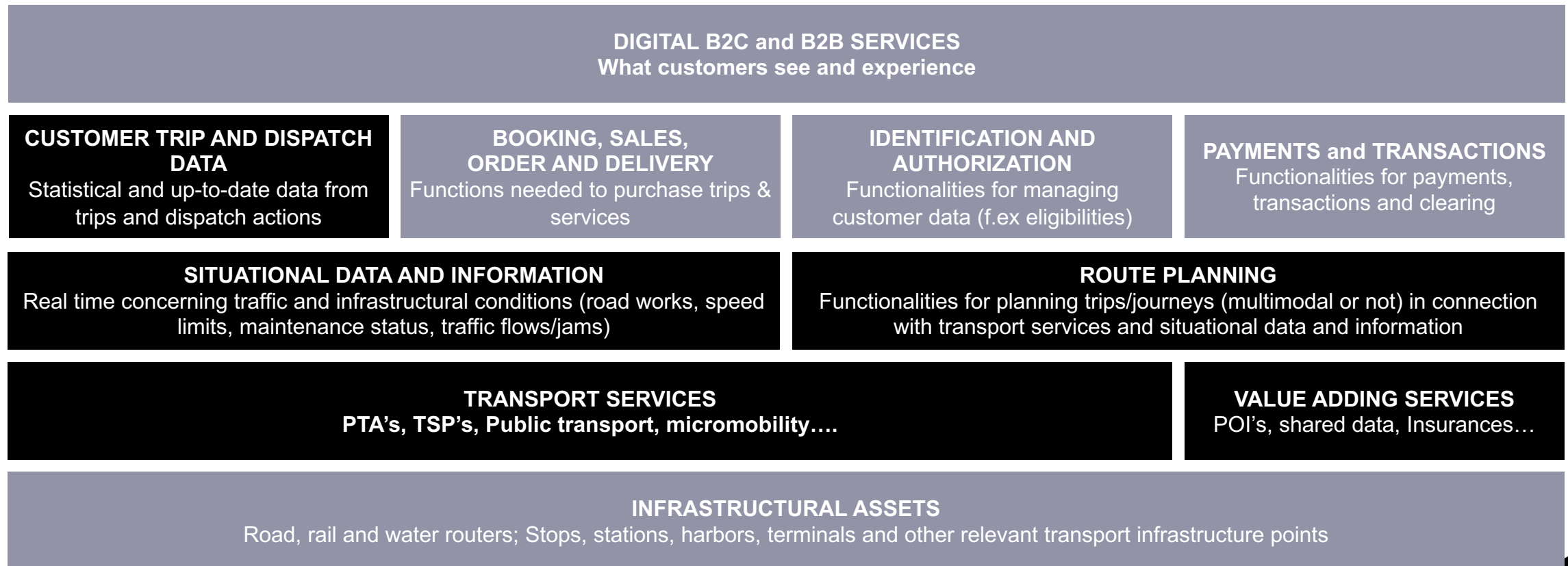


- Fair Data economy rules & agreements
- Agreement templates
- Conventions



# Transport service ecosystem requires a comprehensive set of capabilities and data (“Digital Twin”)

Transport service ecosystem is based on physical and digital elements. Service development and operations require support from public players to enable digital business.







■ = Fintraffic main area of responsibilities



# Example from Logistics:

## Concrete results are expected during 2023-2024.

Area	Results in 2023-2024	Call to action	What can we offer for you?
 <b>Value-added services</b>	<ul style="list-style-type: none"> <li>• <b>Emission data sharing platform</b></li> <li>• <b>Helsinki-Vantaa airport datahub pilot</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Utilize existing data and data services</b> <ul style="list-style-type: none"> <li>• Bring us ideas how to improve the data &amp; services and get additional value</li> </ul> </li> <li>• <b>Bring us new use cases</b> for co-development (<a href="mailto:teemu.heikura@fintraffic.fi">teemu.heikura@fintraffic.fi</a>)</li> <li>• <b>Participate actively</b> in Traffic Data Ecosystem workgroups and other forums               <ul style="list-style-type: none"> <li>• Keep yourself updated</li> <li>• Make an effect</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Networking and industry clustering</b> on the ecosystem</li> <li>• <b>Data and data services</b></li> <li>• Industry <b>expertise</b></li> <li>• In some cases, <b>funding</b></li> </ul>
 <b>A common data-platform</b>	<ul style="list-style-type: none"> <li>• <b>European Maritime Single Window /Nemo</b> <ul style="list-style-type: none"> <li>• Port collaboration platform implementation</li> </ul> </li> <li>• <b>Traffic information services further development</b> <ul style="list-style-type: none"> <li>• Fintraffic-mobile application brings two way incident reporting</li> </ul> </li> </ul>		
 <b>Statutory information services</b>	<ul style="list-style-type: none"> <li>• <b>eFTI definitions on year 2023 and piloting 2024</b> <ul style="list-style-type: none"> <li>• Pilots and additional value service will depend on CEF funding</li> </ul> </li> </ul>		
 <b>Facilitation services</b>	<ul style="list-style-type: none"> <li>• <b>Systematic co-operation</b></li> <li>• <b>Innovation cluster development</b></li> </ul>		

# Need more information?



- Please do not hesitate to contact us:

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# Appendix





# How will we achieve our goals?

1. By **inviting all parties to participate equally in the joint and open development** of a traffic data ecosystem.
2. By working towards **common objectives and common action**, by sharing knowledge, and by engaging in co-development to increase the value of the traffic and logistics market.
3. By **making more data available** – either with or without charge – in a mutually agreed format.
4. By **making use of jointly developed rules** and clear working practices.
5. By **making it easier for different operators to work together** with the aid of things such as common data models, jointly defined technical interfaces, and international standards.
6. By **building cooperation networks** that can market, sell and supply interoperable solutions.
7. By **respecting current legislation** under all circumstances, and particularly with regard to privacy protection, trade secrets, competition law, data protection and data security.
8. By **leveraging Fintraffic’s unifying role between all modes of transport** in the creation of the data ecosystem, particularly in the creation of market references and key market-based services that are difficult to launch, and primarily as an enabler rather than a creator of services for end users.
9. By **actively communicating agreed measures, progress, and achievements**; and by facilitating interaction between operators at all stages of the process.

