

Liik  
enne  
vira  
sto

Finnish Transport Agency



Today's limits on availability  
and accessibility of open data

Tomi Lapinlampi

3.2.2017

# Finnish Transport agency

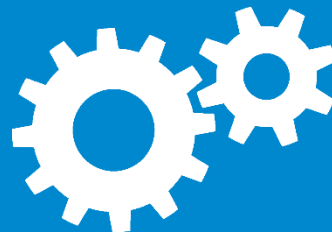


Road – Rail – Maritime – Public transport

3.2.2017 Tomi Lapinlahti



**Open data  
policy**



**Collaboration**

Liik  
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sto



**Data licensing**



**User  
community**

## In Finland since 1999: Act on the Openness of Government Activities



### Open data policy in Finnish Transport Agency

- Open all public data we have (within our resources)
- Open the data in machine readable raw format
- Use unrestricted, standard open licensing
- Share the data for free
- Through self-service API's or download services



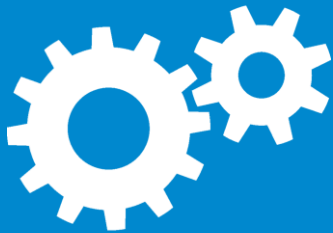
## Data licensing gives legal confidence to users

We use Creative Commons 4.0 BY license for all our open datasets



User community knows how they want to have the data

User community is willing to share their best ideas – for free



Instead of simple  
downloads, we create  
API services with realtime  
open data

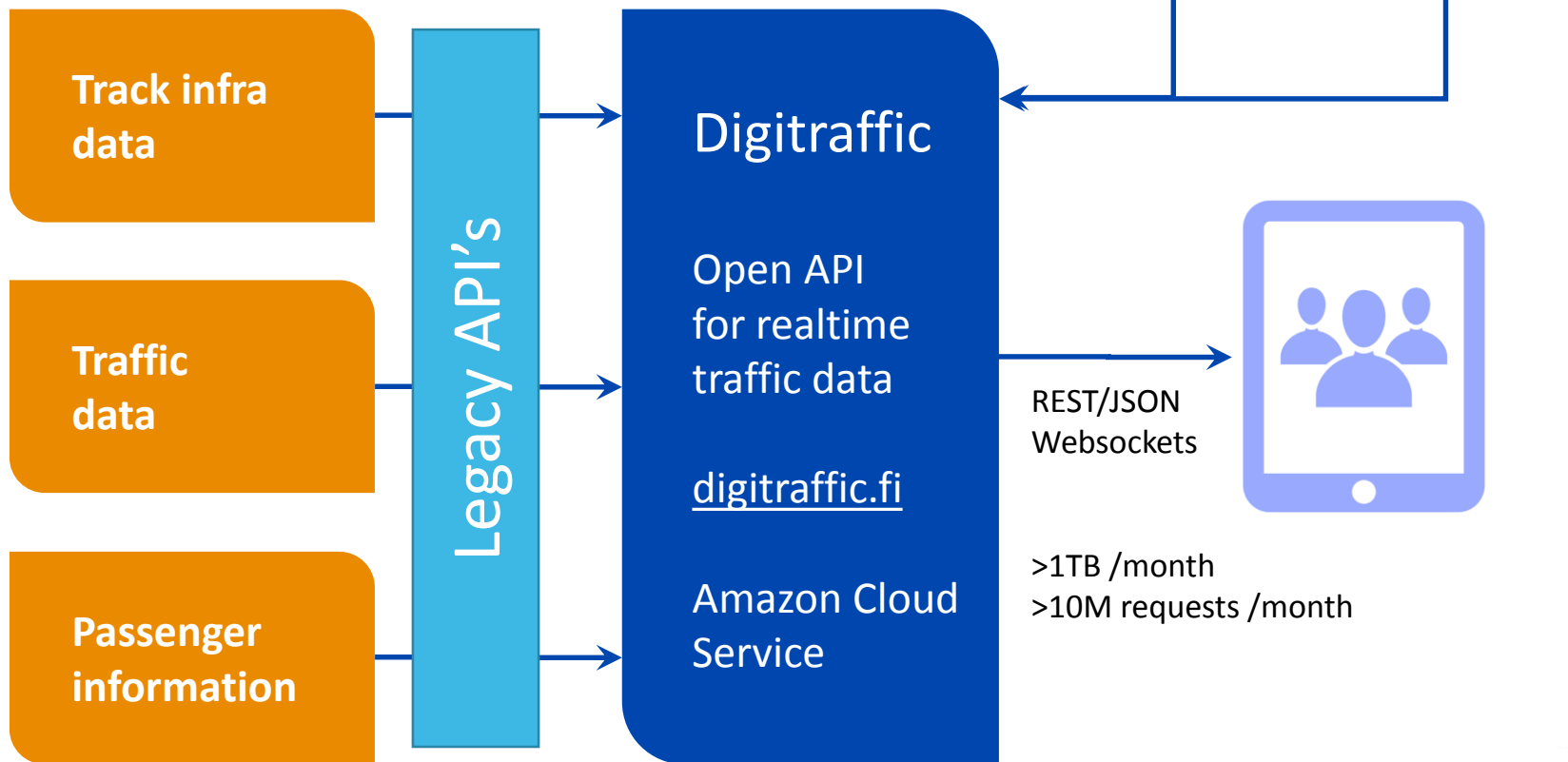
**API = Application Programming Interface**



 open rail data  
in Finland



# Open rail data flow





# Benefits of open rail data

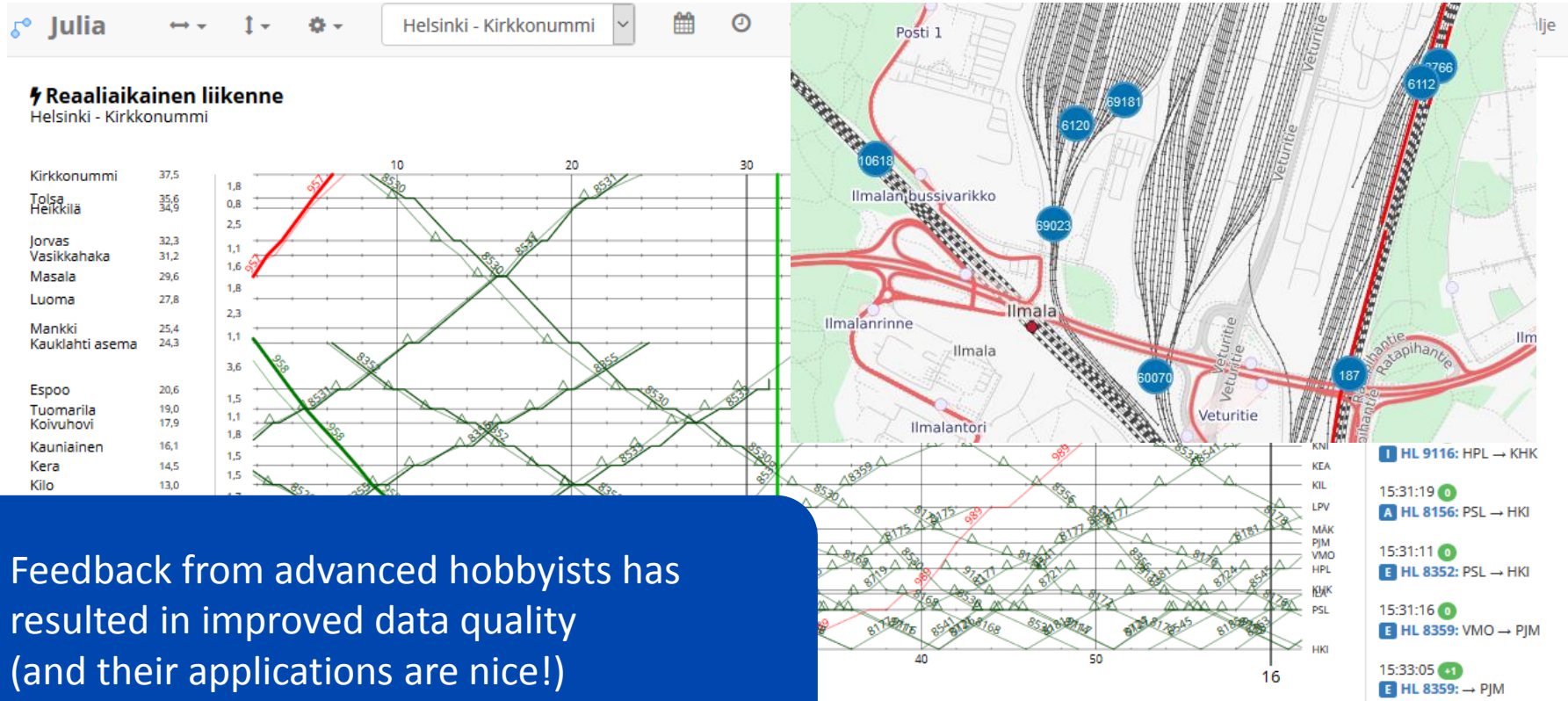
# Enables fast development

Simple mobile apps with passenger information are quick and easy to create. First applications appeared a few hours after API release in 03/2015

The image displays three overlapping mobile app screenshots. The background screenshot shows a main menu for Helsinki with sections for Järvenpää and Hyvinkää, each listing departure and arrival times. The middle screenshot shows a detailed view for the Helsinki - Saapuminen 23:51 train, including the route TPE (Tampere) to HKI (Helsinki) and the time 23:47. The foreground screenshot is a detailed train schedule for Helsinki, listing arrival times and station names.

Aika	Juna	Määränpää	Raide
20:14	P	Lentoasema16	
20:16	K	Kerava	3
20:19	E	Kauklahti	13
20:19	R	Riihimäki	6
20:24	I	Lentoasema 1	
20:24	A	Leppävaara	18
20:29	P	Lentoasema17	
20:31	K	Kerava	2
20:37	U	Kirkkonummi14	
20:39	I	Lentoasema 1	
20:41	Z	Lahti	5
20:44	P	Lentoasema19	
20:46	K	Kerava	2
20:48	H	Riihimäki	9
20:49	E	Kauklahti	12
20:54	A	Leppävaara	16
20:54	I	Lentoasema 1	
20:59	P	Lentoasema17	

# Improves data quality



Feedback from advanced hobbyists has resulted in improved data quality (and their applications are nice!)

# Supports open market

Rail operators can do:

Simulated rail operations

Complex analytics

Network owner gets:

Network neutrality through openness

Operator neutrality

Anyone can do:

New innovations & business

Add value on top of open data

# Supports logistics

Combine road, rail  
and marine datasets

Optimise your  
logistic chain

Estimate when your  
cargo arrives

Enrich your logistics  
apps with open  
data



# open rail data

challenges and solutions



# Challenges & Solutions

## Technology

- Listen to user needs
- Learn from other countries

## Capacity

- Use global cloud services
- Cache API responses

## Legal

- Be multi-operator compatible
- Verify data publicity

## Trust

Provide SLA's to select partners



# beyond opening data

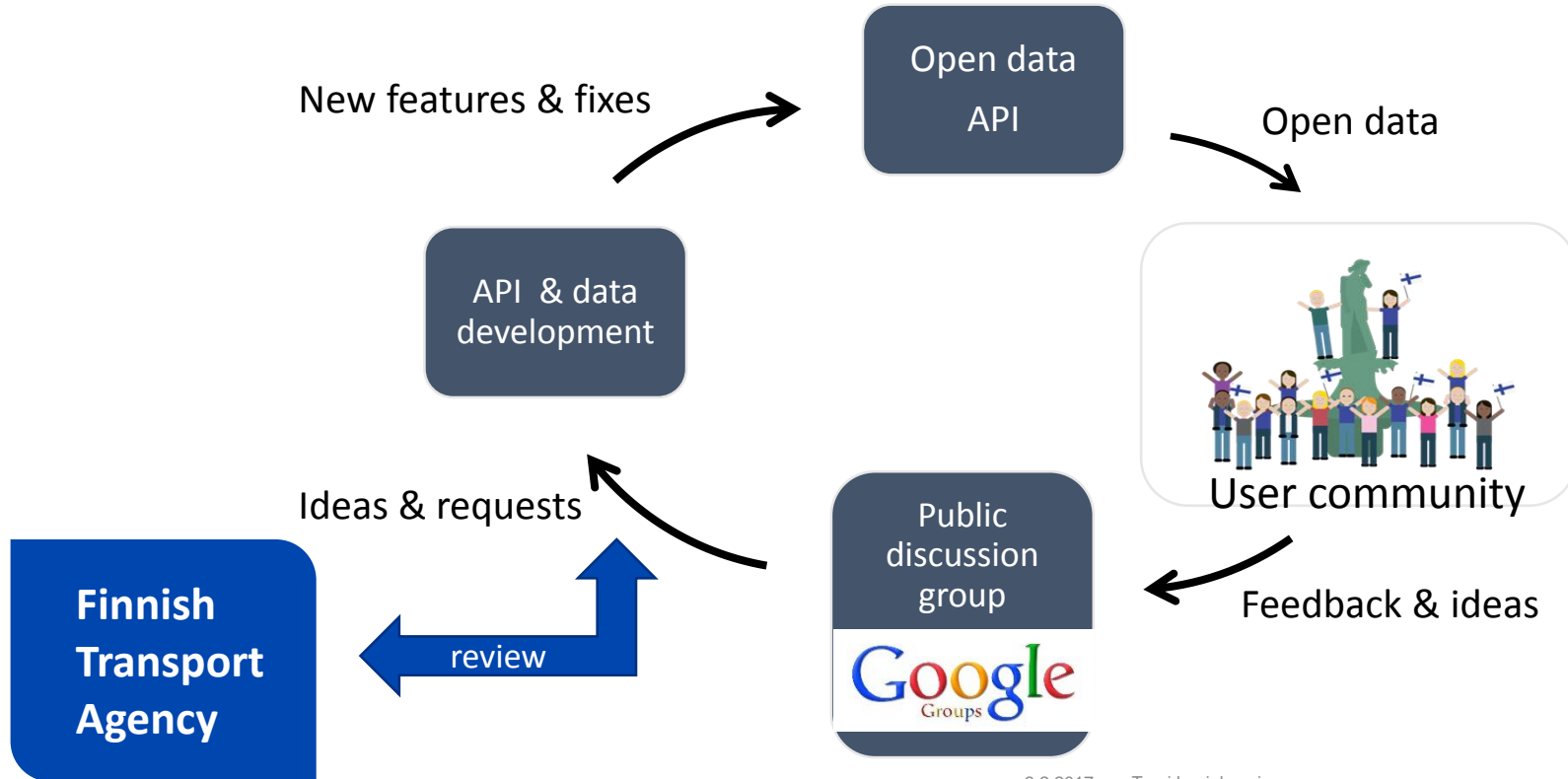
Community driven API development for  
success



# How do we benefit from the community?

1. Besides opening the data, open the process that's behind the open data
2. Make all support channels public and free to join for anyone
3. Give fast, accurate responses to questions & ideas

# Community driven API development



# API access

<https://rata.digitraffic.fi>

<https://rata.digitraffic.fi/infra-api/>

<https://rata.digitraffic.fi/jeti-api/>

<http://liikennevirasto.fi/web/en/open-data>

<https://groups.google.com/forum/#!forum/rata-digitraffic-fi>

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## Open license



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