European Commission

Bayerische Staatskanzlei
Bayerisches Staatsministerium für
Umwelt und Verbraucherschutz

Jahresforum der EU-Alpenstrategie
24. November 2017, BMW-Welt, München

Annual Forum of the EU Alpine Strategy
24 November 2017, BMW-Welt, Munich

Workshop 5

Moving in inter-connected transport systems

1. **Thomas Haberer -** Unbounded Passenger Information? An Overview
2. **Stefan Markl -** With DELFI towards a continuous passenger information for Germany! – and also for Europe?
3. **Peter Herzog -** The Open Data Platform Swiss PublicTransport.
4. **Bettina Neuhäuser -** Linking, transnational multimodal traveller information and journey planners in the Danube Region
5. **Marcella Morandini , Luigi Patuzzi -** Integrated platform for public transport in the Dolomites

EUSALP
EU STRATEGY FOR THE ALPINE REGION
BAYERN 2017
PRESIDENCY

Bayern.
Die Zukunft.

The Bavarian Ministry of the Interior,
for Building and Transport

Unbounded Passenger Information? An Overview

Thomas Haberer

Division Transport Policy and Planning, International Transport, Connected Mobility

November 24, 2017

The State of Bavaria

- Area: 70,550 km²
  (Germany‘s largest Federal State)
- Population (9/2016): 12.9 million
  (8th largest in the EU)
- GDP (2015): 549 billion euro
  (7th largest economy in the EU)
- Unemployment rate (10/2017): 2.9 %
- Major cities:
  Munich, Nuremberg

Intelligent transport systems & services

- Local systems, data and services
  - timetable, realtime, forecast, incident information
  - tariff data
  - Information for people with reduced mobility
  - Further Mobility-options
- Quality of data
- Data exchange
- Interfaces for connected systems
- Contracts, Regulation
- Financing

DEFAS Bayern: integration platform, data hub

Data provided in DEFAS Bayern:

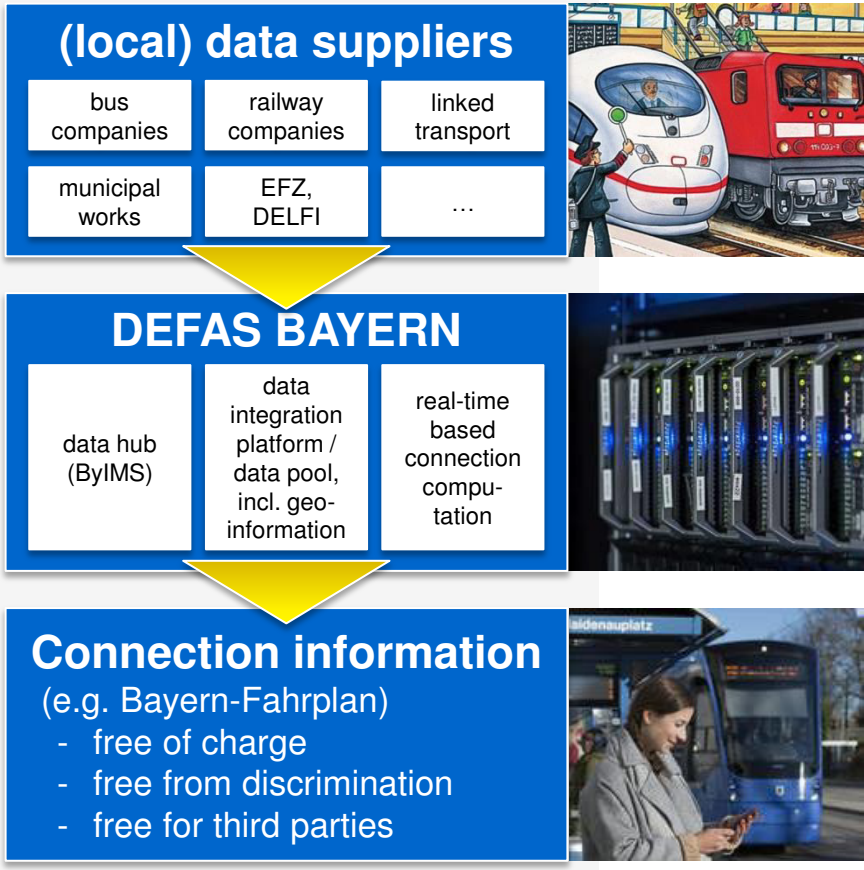
- 6,300 bus and train routes
- 40,000 stations/stops served
- Scheduled times and real-time data

Data suppliers:

- 60 data suppliers
- 50 % also supply real-time data
- Primarily bus and railway companies in Bavaria

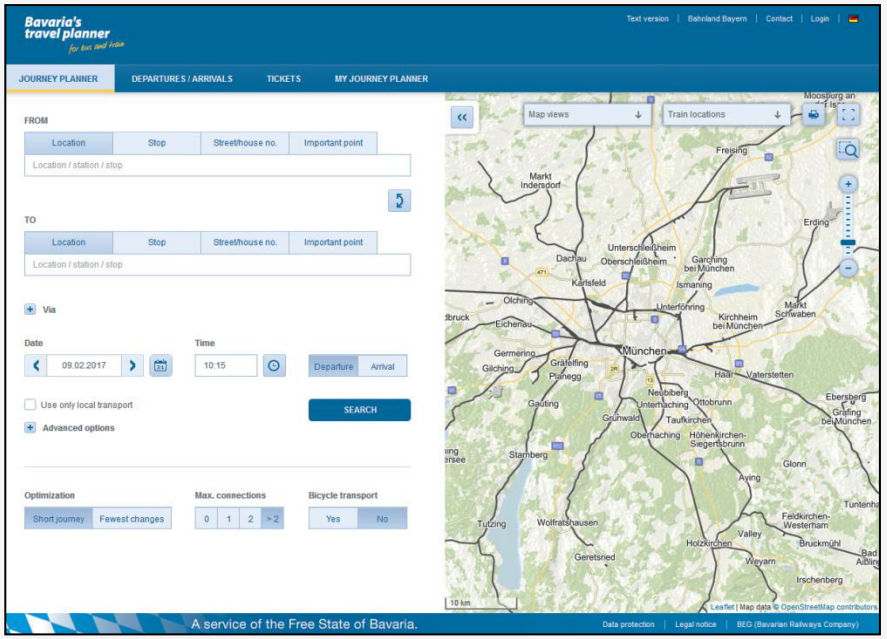
Integrated data (no real-time yet):

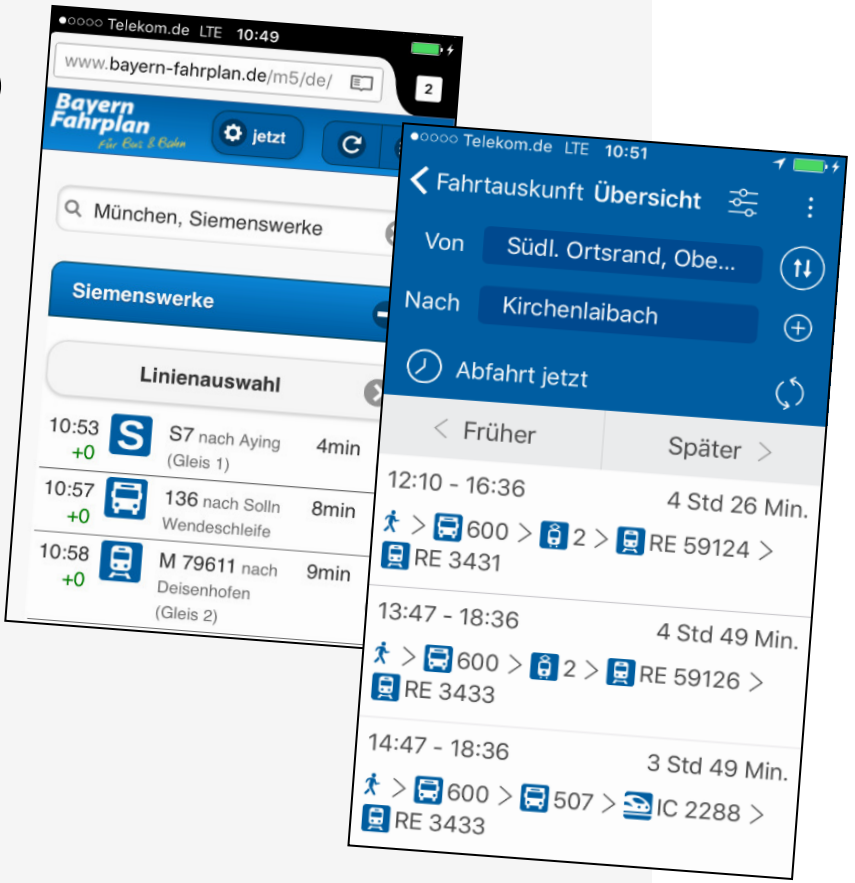
- NVBW Baden-Wuerttemberg
- VAO Austria
- Planned: DELFI (Germany-wide public transport)



Bayern-Fahrplan („Bavaria‘s Journey Planner“)

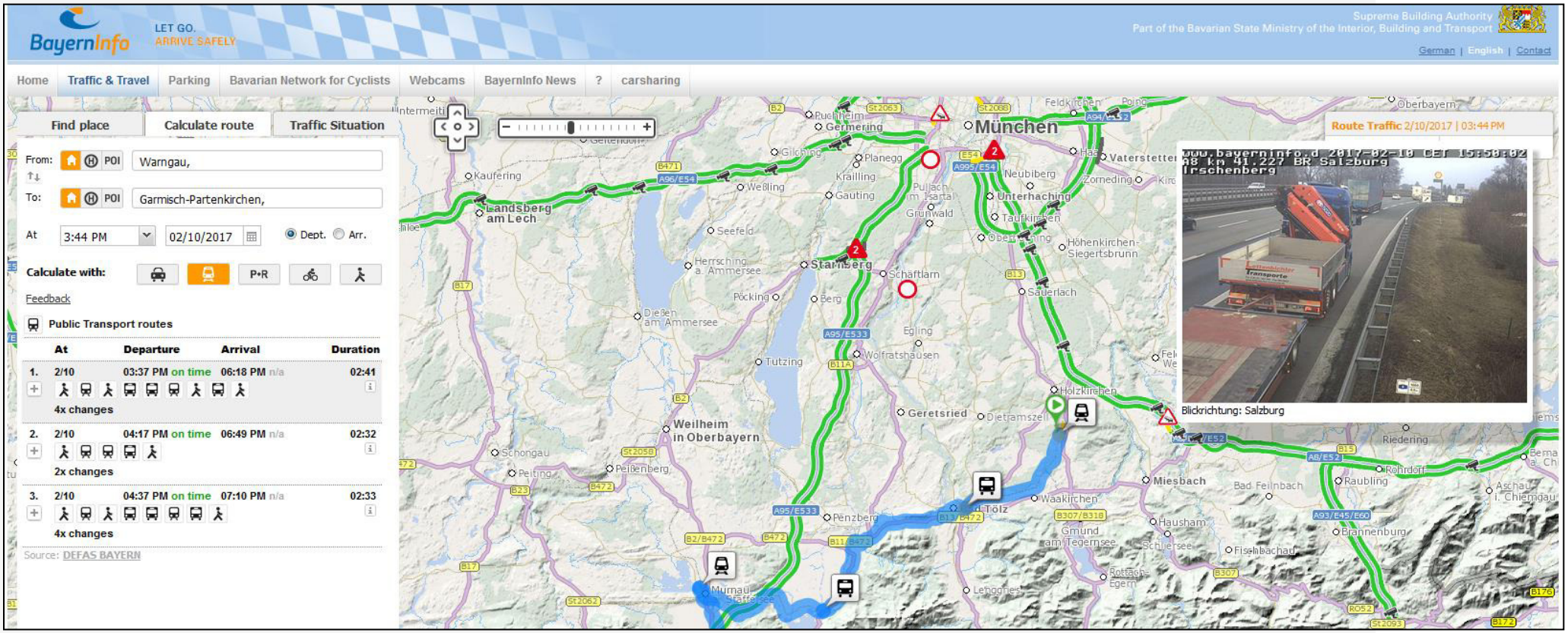
- Bayern-Fahrplan is available
  - browser-based (www.bayern-fahrplan.de)
  - optimized for mobile devices
  - as an app for Android and iOS





„Bayerninfo“ for intermodal information

www.bayerninfo.de



It´s still a lot to do…

- Multimodal information service also with long-distance bus services, Carsharing, Bikesharing, e-mobility, real-time data of park & ride areas…
- Integration of fare information and ticketing
- Exchange of data with all federal states (Delfi)
- Cooperation across regions and states
- Applying the ITS-Directive and the Delegated Regulation for travel information services

Thank you for your interest!

www.innenministerium.bayern.de

With DELFI towards a continuous passenger information for Germany!
–and also for Europe?

www.delfi.de

Facts about DELFI

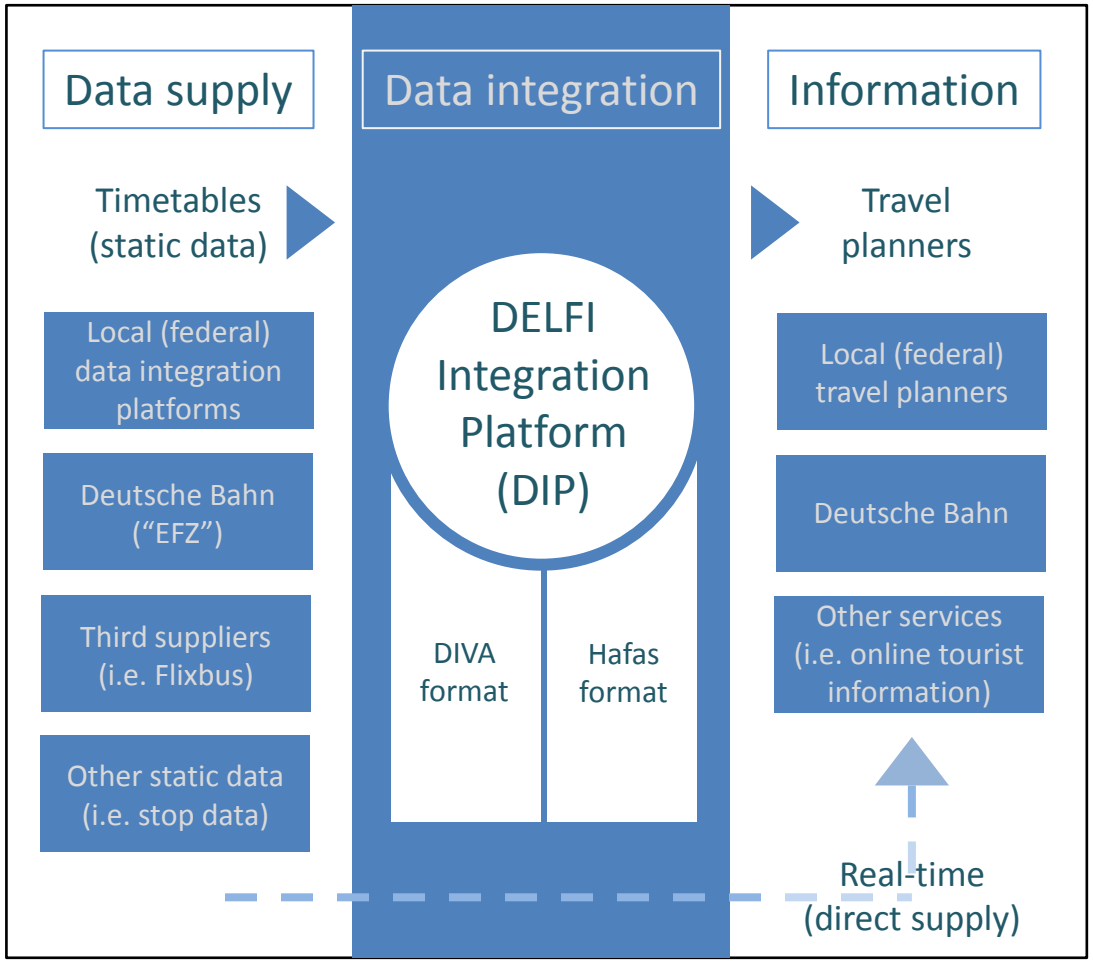
- DELFI is an acronym for continuous electronic passenger information ("**D**urchgängige **EL**ektronische **F**ahrgast**I**nformation")
- DELFI was established in 1999 as a counterpart of Deutsche Bahn's nationwide journey planner and initially hit the market in 2006
- Target: Benefitting from existing local knowledge
- Agreement about the DELFI 2020 Strategy between the federal states and the German Ministry of Transport, following EU's "ITS Directive" (deployment of Intelligent Transport Systems) in 2014
- Today, "Delfi e.V." organizationally guides the implementation of the DELFI 2020 Strategy and technically supervises the development of a new system architecture

Objectives of the DELFI 2020 Strategy

- **Performance:** consistent, current, accurate and complete information with calculating times not exceeding 1-2 sec. and with a very high availability of the system.
- **Functionality:** extension of DELFI to new content such as real-time information, timetable of long-distance buses, complete information on accessibility and tariffs (including DELFI as a source for e-ticketing systems).
- **Open service:** extension of the timetable information to “web services”, i.e. use also on platforms of third parties
- **Standardization:** constant monitoring of developments in the field of passenger information from the viewpoint of public transport authorities and deduction of decisions for the levels of government.

DELFI system architecture

- New hybrid system architecture for static data supply
- No more distributed connection search
- Combined strengths:
  - decentralized, local knowledge and up-to-date data
  - top performance of centralized calculating



Where does DELFI currently stand?

04/2017
Kick-off

06/2017
DIP implemented

12/2017
Local (federal) systems connected
DIP in active mode

03/2018
Local (federal) travel planners adjusted
Trial phase

07/2018
Start/ productive operation

What can DELFI do in productive operation?

- Providing a **routable data record**
  - Nationwide
  - Daily updated
  - Includes DHIDs (unique stop IDs)
  - Quality assured
  - DELFI will be source of National Access Point (NAP)

- Provision of a **DELFI information service**
  - Nationwide
  - Address sharp
  - Input: starting point, destination and individual settings
  - Output: route
  - Conducted by market-proven routing algorithms

Cooperation partners and network of DELFI e.V.

VDV Die Verkehrsunternehmen

- standardized data formats

eTicket Service

- link between passenger information and ticketing services

Mobility *inside*
alles einfach nutzen

- DELFI as source for the e-ticketing initiative

Federal Ministry of Transport and Digital Infrastructure

- DELFI as a substantial partner in national and European projects, i.e. “Roadmap: Digitale Vernetzung im öffentlichen Personenverkehr“

DB

- close collaboration in fields Of i.e. data quality, data governance, technical standards

EU-SPIRIT
European travel information network

- DELFI as provider of German dataset

Conclusion

- DELFI is a **platform for cross-regional cooperation** in public transport, for the federal government, countries and transport networks
- Via DELFI, the **regional systems and local datasets are linked** together
- DELFI thus makes an **important contribution to digitalization** and networking in public transport
- With the DELFI e.V. DELFI is **professional and powerful**
- From mid-2018 on, DELFI will be the **reliable provider of public transport information**: high-performant, accurate, quality assured
- A successful digital linking of public transport also requires a **close collaboration of the market players** – DELFI is ready to contribute!

Your questions, please.

SBB CFF FFS

The Open Data Platform Swiss Public Transport.

Peter Herzog
Head System Management
Passenger Information

EUSALP – First Annual Forum
Munich, 24 November 2017

Community
Ronaldo and open data?

SBB CFF FFS

The Open Data Platform Swiss Public Transport.

Peter Herzog
Head System Management Passenger Information

EUSALP – First Annual Forum
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2027


Tuscany?
11 November 2027.


Ten years ago...
11 November 2027.


What were things like back then?
11 November 2027.

Lisa laughs.


Ten years?!

...digitalisation will create more transparency.

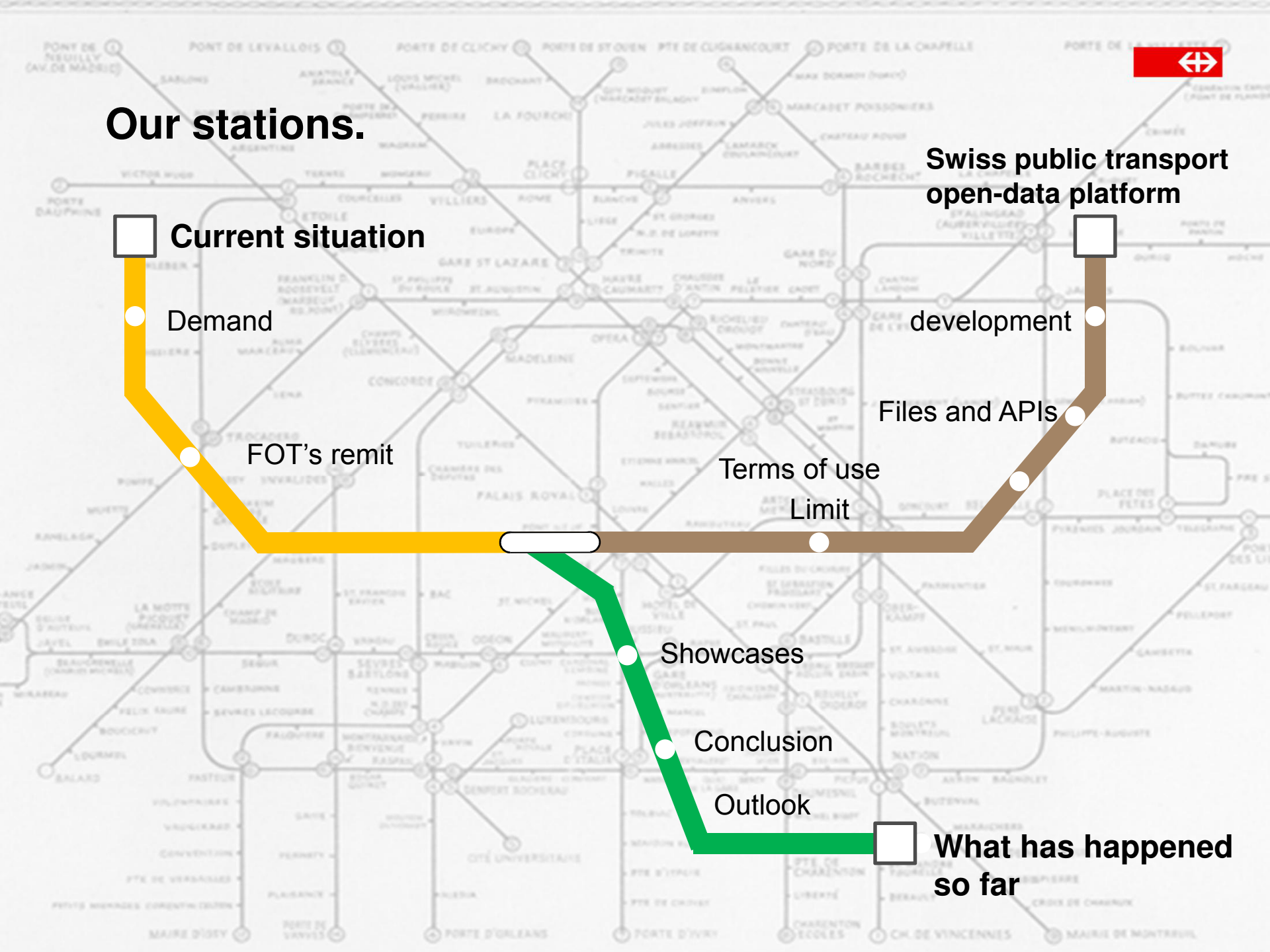
…most people will make purchasing decisions via digital channels.

= THE BEST PERSONAL COMPLETE OFFER

In the future...


Don’t miss the train!

Our stations.



There has been a clear need for transport data for several years.

Semi-legal status stifles innovation

Data is infrastructure, and it belongs to the public service!

It can’t continue like this.


Light at the end of the tunnel!

FOT's remit

- FOT's remit
- Developing and operating
- an open-data platform for all Swiss public transport

Online since 1 December 2016

- Available at: www.opentransportdata.swiss

Aim

- New applications for passengers
- Increasing the attractiveness of Swiss public transport
- Boosting Switzerland's competitive edge as a business hub

Search

Open-Data-Plattform öV Schweiz

Data Cookbook FAQ Showcases

Willkommen auf der Open-Data-Plattform öV Schweiz

opentransportdata.swiss ist die Plattform für Kundeninformationsdaten des öffentlichen Verkehrs der Schweiz. Hier können Sie öV Daten kostenlos beziehen und erhalten Zugriff auf spezifische öV-Services. Bitte beachten Sie, dass die publizierten Daten für Entwickler aufbereitet sind. Eine lesbare Version des Fahrplans finden Sie unter diesem Link.

Data

Die Plattform stellt Fahrplan-, Echtzeit- und Ist-Daten datei- oder dienstbasiert zur Verfügung. Die Daten umfassen sämtliche konzessionierte Transportunternehmen der Schweiz.
Hier gelangen Sie zu den Daten.

News

Die Plattform und ihre Community wird kontinuierlich verbessert und zusammen mit der Community weiterentwickelt.

Informieren Sie sich auf Twitter.

Cookbook

Die Plattform bietet nebst den Daten auch Erläuterung und Zusammenhänge zu den Dateninhalten und Begriffen, damit der Einstieg in die Entwicklung vereinfacht wird.
Erfahren Sie mehr über das Cookbook.

Community

Die Plattform arbeitet eng mit der Community und den Transportunternehmen zusammen.

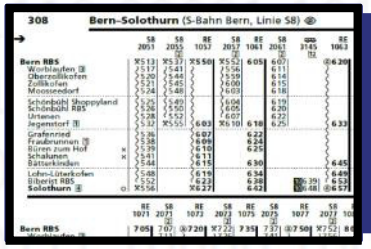
Dies spiegelt sich in den unterschiedlichsten Anwendungen wieder.

http://opentransportdata.swiss

Spielregeln
Nutzungsbedingungen
Netiquette
Limit und Kosten
Datenbankwerke

Über
Impressum
Kontakt
Social Media
fahrplanfelder.ch

File-based data.



Target timetable

Up-to-date data (from the previous day)

Information about stops

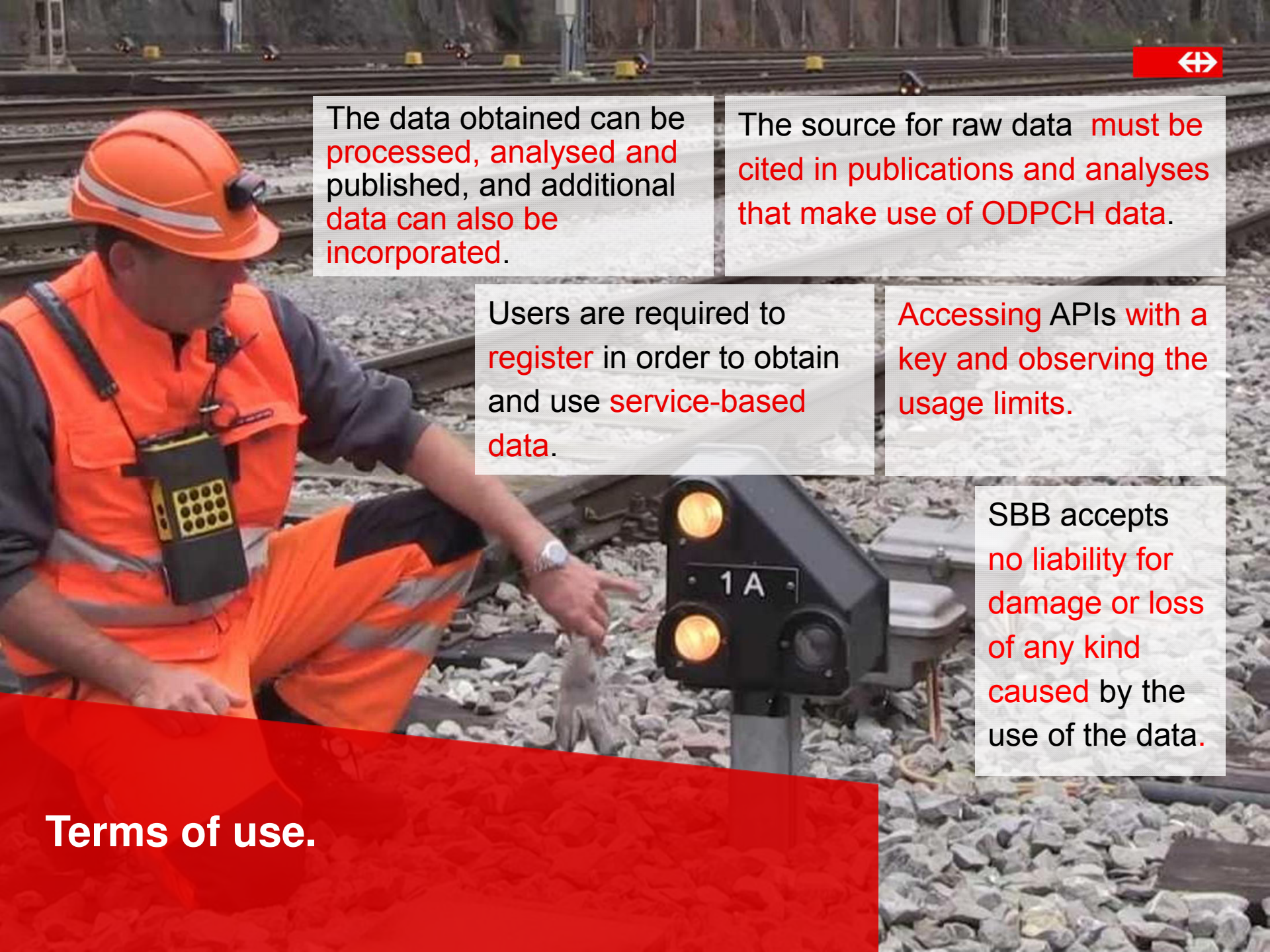
Information about transport companies

Interfaces.

Real-time forecasts for direct journeys from A to B

Database for departure/arrival boards

GTFS-RT



Terms of use.

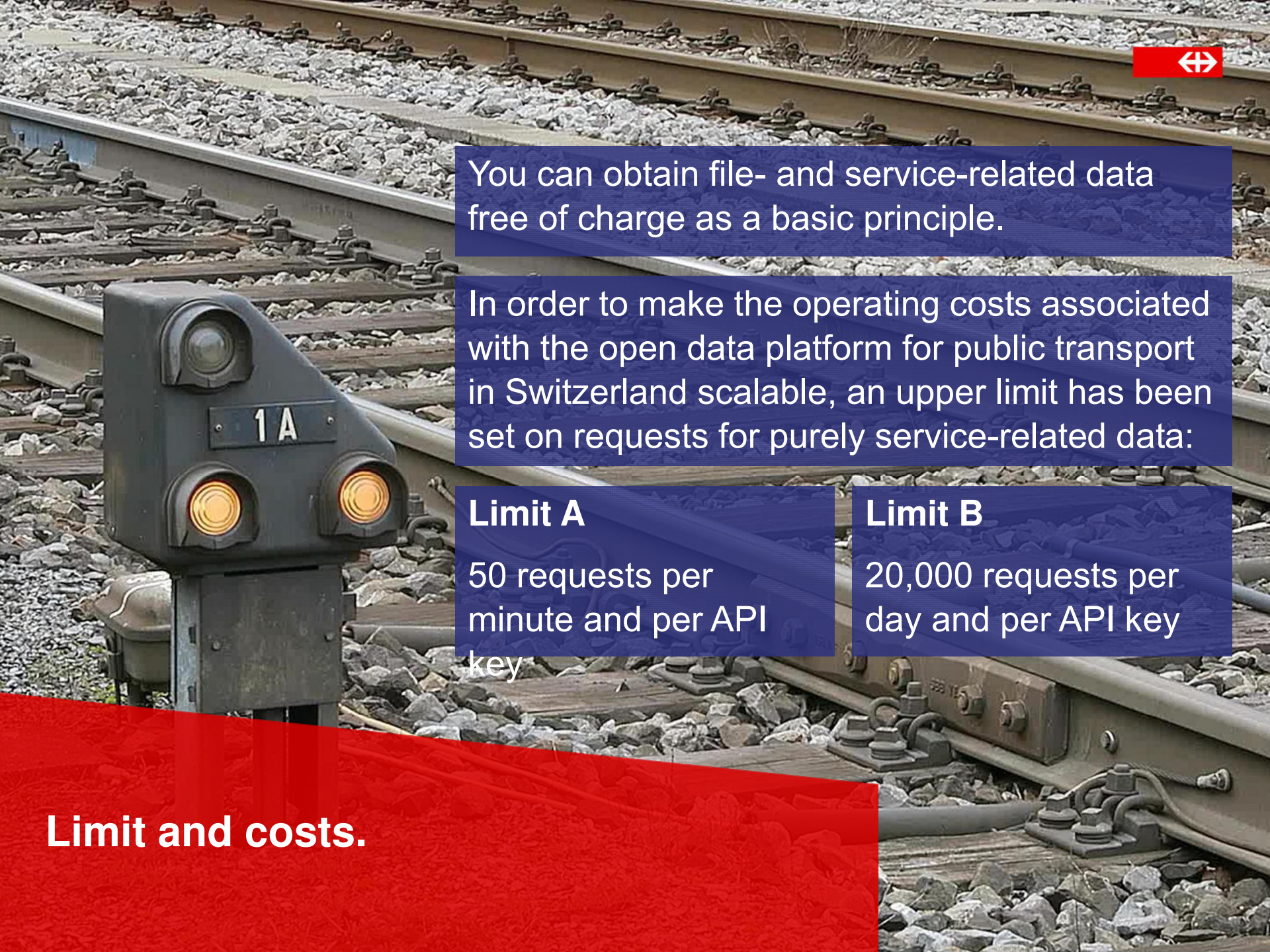
The data obtained can be processed, analysed and published, and additional data can also be incorporated.

The source for raw data must be cited in publications and analyses that make use of ODPCH data.

Users are required to register in order to obtain and use service-based data.

Accessing APIs with a key and observing the usage limits.

SBB accepts no liability for damage or loss of any kind caused by the use of the data.



Limit and costs.

You can obtain file- and service-related data free of charge as a basic principle.

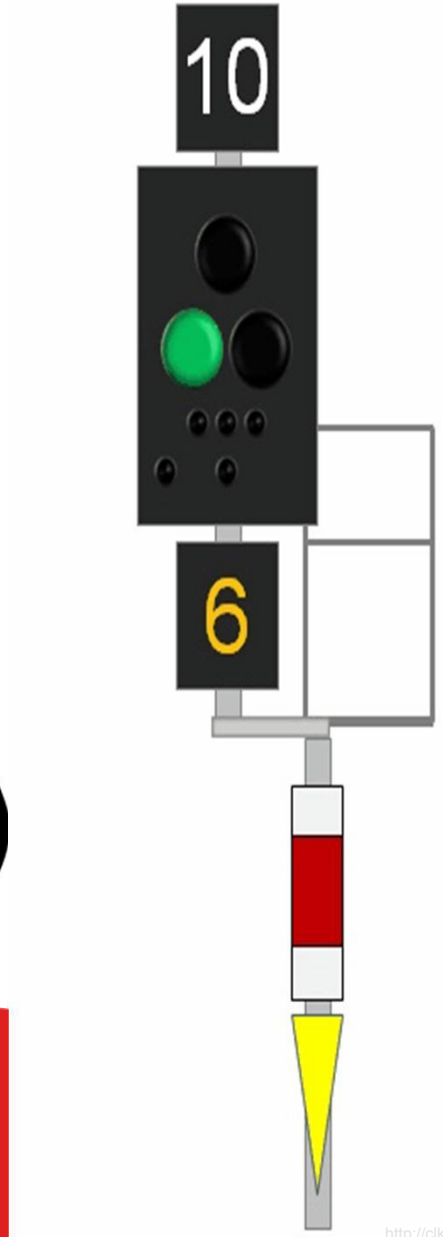
In order to make the operating costs associated with the open data platform for public transport in Switzerland scalable, an upper limit has been set on requests for purely service-related data:

Limit A

50 requests per minute and per API key

Limit B

20,000 requests per day and per API key



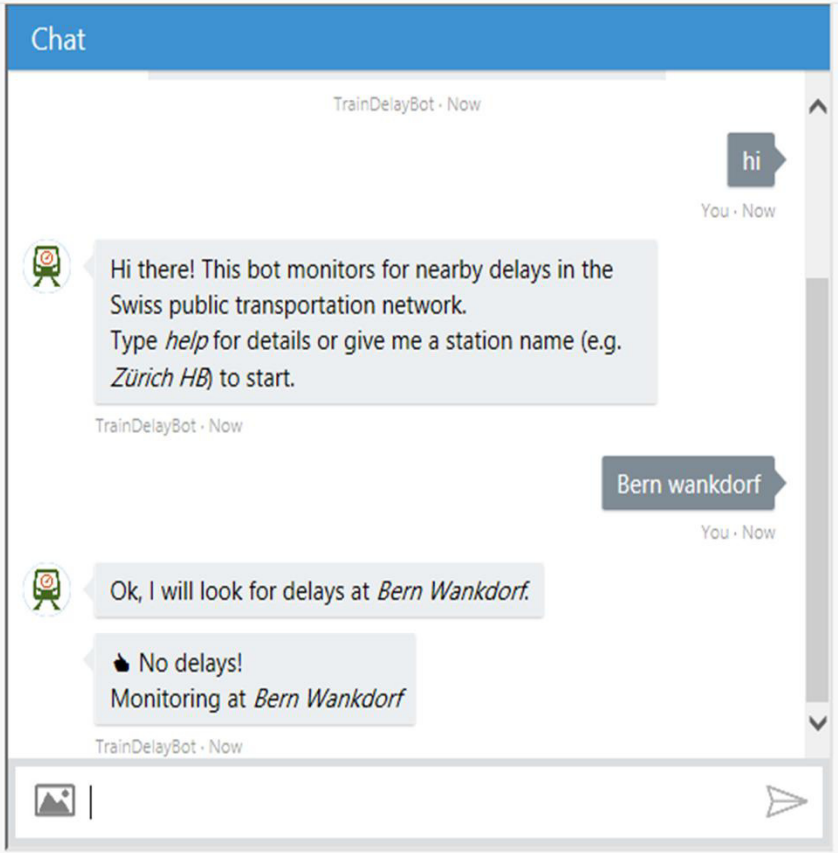
All signals are set to GO!

Right here. Right now. TrainDelay Webchat

You can also try the TrainDelayBot in your browser - right here, right now. Notifications included.

Otherwise, converse with the bot on one of our supported chat platforms:

Message Us | Add to Slack | Add to Skype | Telegram



TrainDelayBot.
EBP Switzerland

TrainDelayBot is an R+D project by EBP. A first version was published in March 2016. Read more about it on our blog.

Questions? Send us an e-mail and we will get back to you. You can meet some of us on Twitter: @rastrau, @ping13.

EBP is an independent enterprise and offers a broad range of consulting, planning, construction, information technology and communications services. Based in various

App Store › Travel › Vasile Cotovanu

Downloaded

Offers In-App Purchases

Rating: 4+

TOP IN-APP PURCHASES

1. Support Further Development — CHF 10.00
2. Support Further Development — CHF 5.00
3. Support Further Development — CHF 3.00

LINKS

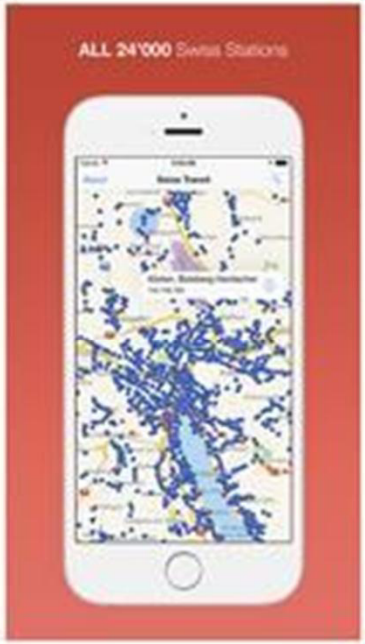
Developer Website

Swiss Transit: ALL trains, trams, buses, boats and cablecars in your pocket !

Vasile Cotovanu ›

Details | Ratings and Reviews | Related

iPhone Screenshots



Description

Swiss Transit App is the perfect travel companion for your trip in Switzerland. It contains more than 24'000 stations and more than 1 million vehicles: trains, trams, buses, boats and even cablecars. All of these in your pocket !

Main features:

- OFFLINE departures: you can search for stations or departures without having an internet connection.

What's New in Version 1.4.0 Posted 25 May 2016

Thank you for using this application! Please don't forget to support this app by leaving ratings, sharing it or just sending me any feedback you might have.

What's new in this version 1.4.0:

- Timetables update: The application uses the latest timetables data from March 2016

Swiss Transit App.

Vasile Coțovanu

Your current board
saved on 3 Jan 2017 at 09:40

Your next departures from: Bern Wankdorf ✖ +add a stop in

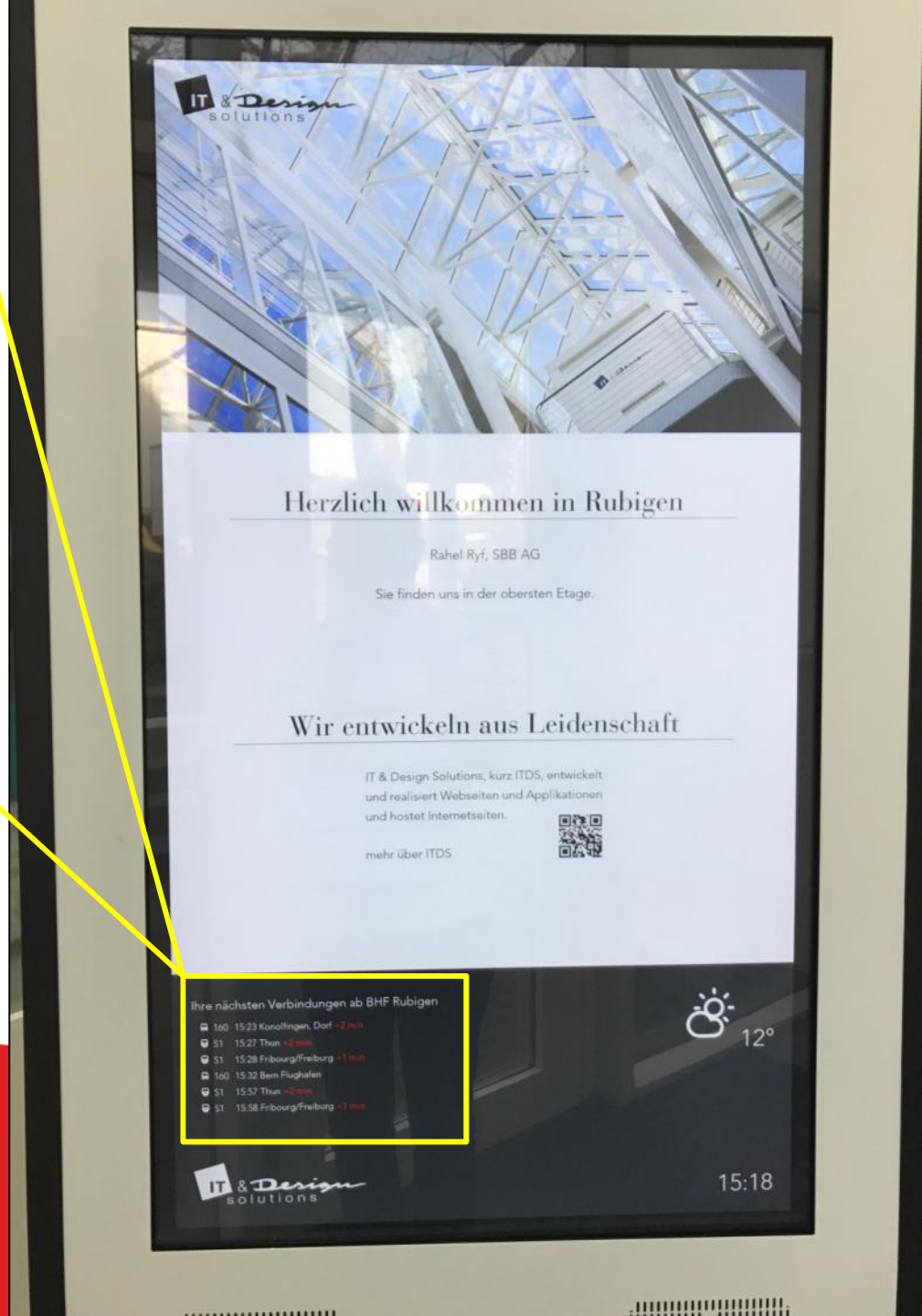
filter destinations | share this board | fullscreen

28	Bern, Brunnadernstrasse	20:19 *no real-time data*	
S31	Münchenbuchsee	20:20 *20:19*	
S1	Thun	20:20 *20:19*	
28	Bern Wankdorf, Bahnhof	20:22 *no real-time data*	2’
S4	Langnau i.E.	20:24 *20:23*	4’
20	Bern, Bahnhof	20:24 *no real-time data*	4’
S3	Belp	20:25 *20:24*	5’
9	[illegible]ation	20:25 *no real-time data*	5’
40	Allmendingen b. B, Käserei	20:25 *no real-time data*	5’

Relax and don't wait at the stop for your next bus, tram, train, boat or cable car. Enter any stop in Switzerland to get started.

Time for Coffee.

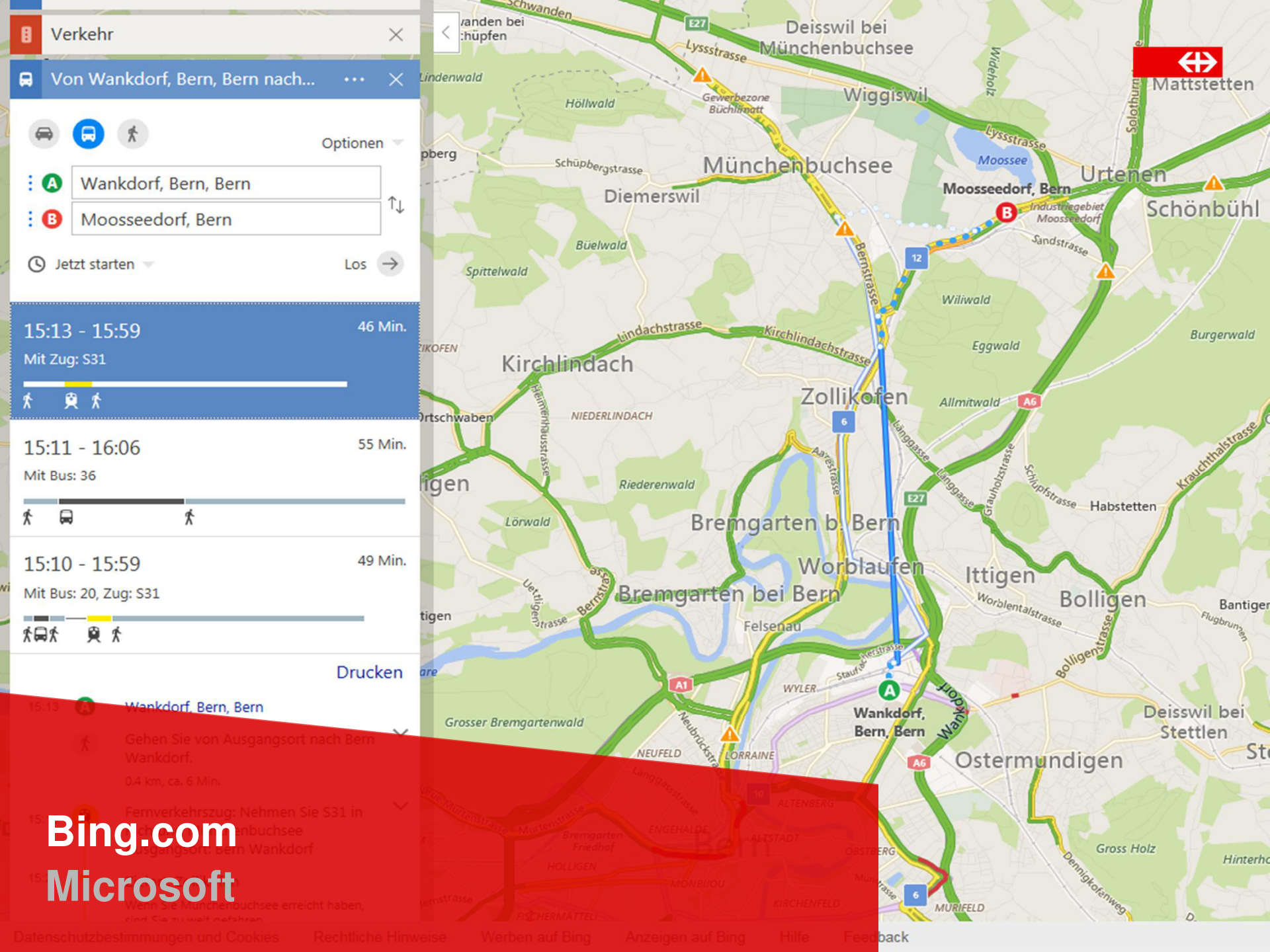
Time for Coffee team



Welcome!

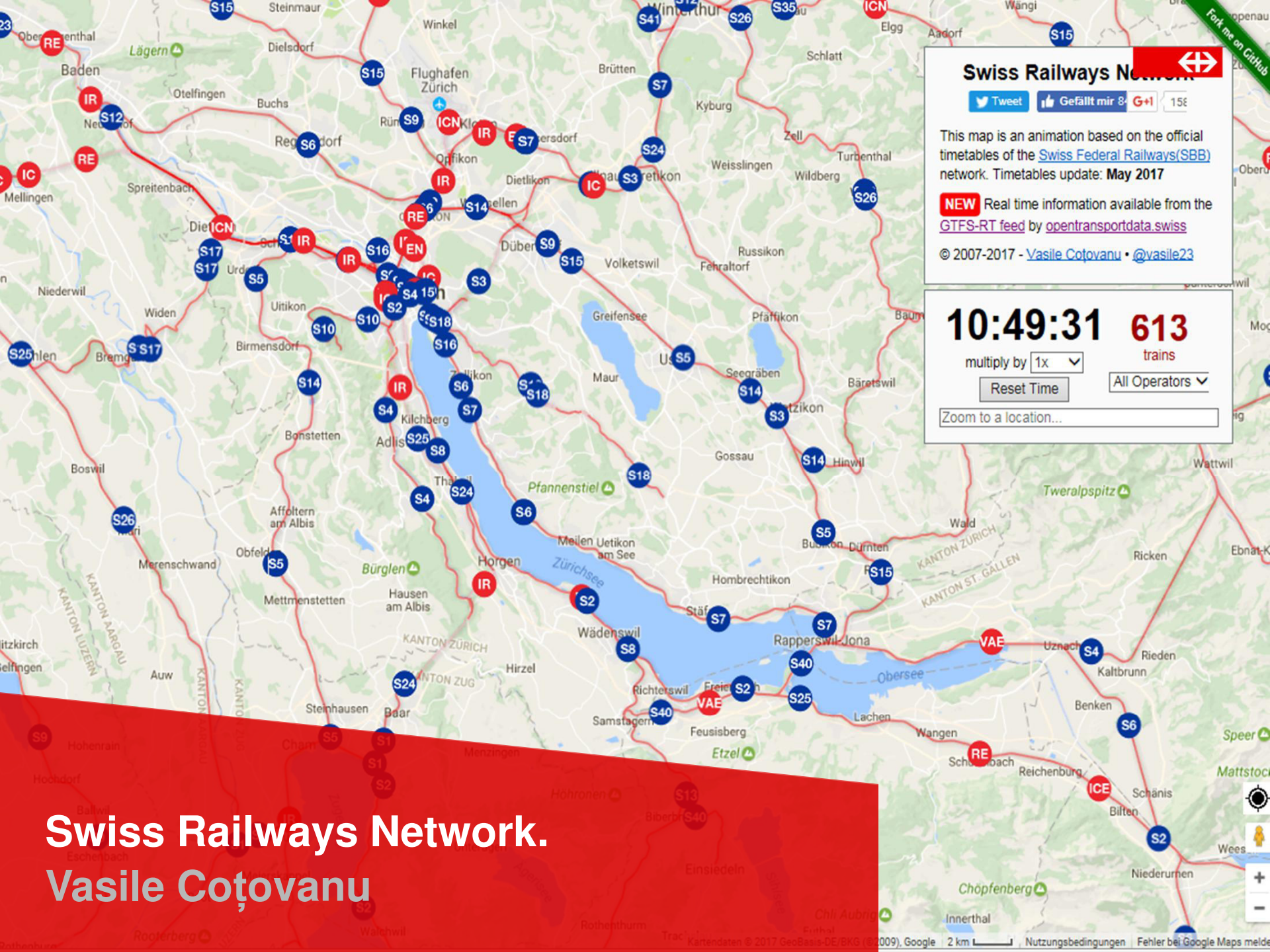
IT & Design Solutions GmbH


Rome to Rio.



Bing.com

Microsoft


Swiss Railways Network
Tweet
Gefällt mir
G+1
This map is an animation based on the official timetables of the Swiss Federal Railways(SBB) network. Timetables update: May 2017
NEW Real time information available from the GTFS-RT feed by opentransportdata.swiss
© 2007-2017 - Vasile Coțovanu • @vasile23
10:49:31
613
trains
multiply by 1x
Reset Time
All Operators
Zoom to a location...
Fork me on GitHub
Swiss Railways Network.
Vasile Coțovanu

FAIRTIQ.

schucan management

More showcases:
opentransportdata.swiss

Thank you very much for the Swiss GTFS files you provided as open data and the **wonderfully unbureaucratic access to your establishment's**API timetable. We were able to integrate your data sources without any major problems, especially thanks to the helpful "cookbook" examples.

I would like to take this opportunity to extend my heartfelt thanks for the generous publication of the data. The system runs extremely smoothly and is very **well documented. I enjoyed using it as a base to build on!**

Your platform has been developed very well and **I thoroughly enjoyed working with it.** Once the projects have come along a bit further, I would also like to provide a contribution for the showcase section.

For one customer, we were able to use the data straight from your platform for the first time and they have been **very satisfied** up to now. What we appreciate the most is you also providing timetable data by local providers such as the Zurich Transport Network.

I finally have all the data **I ever wanted exactly how I wanted.**

Very positive feedback.

SBB CFF FFS

Switzerland is a country of public transport and opentransportdata.swiss is going a long way to ensuring we become a leader and innovator in the digital age too!

- Major milestone for open data in Switzerland and beyond!
- Switzerland sets a new benchmark
- State-of-the-art open data portal for public transport.
- Public transport interfaces controlled and safely available for the first time
- Scalable to many millions of queries per day

http://www.gettyimages.ch (20.6.2017)

SBB CF

European Commission

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

NAP – National Access Point for Switzerland

MMTIS - Multi Modal Traveler Information System

Our next steps.

Community
Ronaldo and open data?

http://www.goodnet.org (20.6.2017).

“People go to the stadium because they want to know how things will pan out.” Sepp Herberger

Players. Dates.

http://www.goodnet.org (20.6.2017).

Strategy.

http://www.ostendis.ch (20.06.2017).

Result.

http://shutterstock.com (20.06.2017).

Advantage!

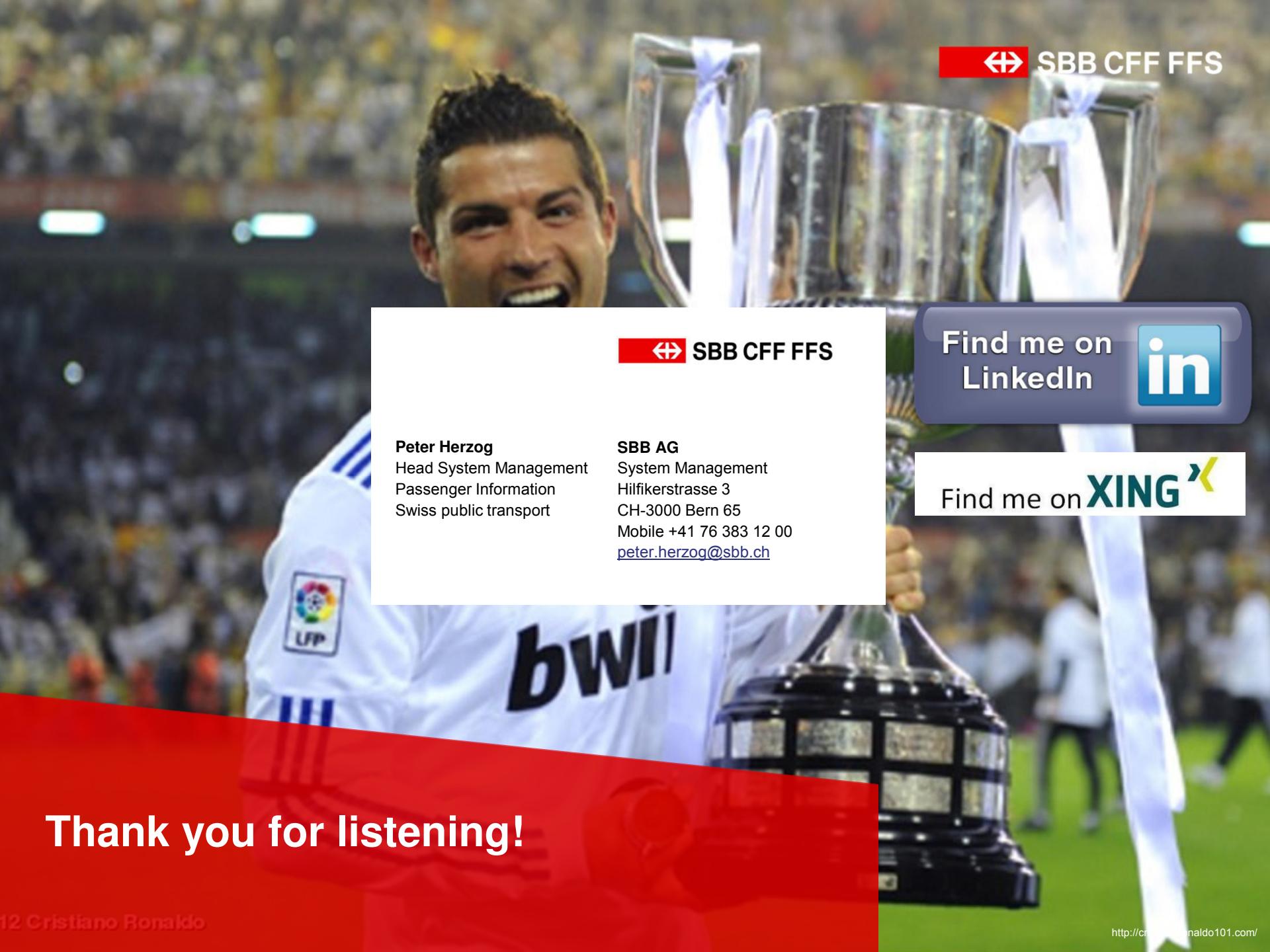
http://www.4-4-2.com/ (20.06.2017).

Head start!

Results!

http://www.naglecc.ie/ (20.06.2017).


Only winners!
12 Cristiano Ronaldo



SBB CFF FFS

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Swiss public transport

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System Management
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CH-3000 Bern 65
Mobile +41 76 383 12 00
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Thank you for listening!

EUSALP ANNUAL FORUM 23-24/11/2017 MUNICH

WORKSHOP 5 – MOVING IN INTER-CONNECTED TRANSPORT SYSTEMS

Linking, transnational multimodal traveller information and journey planners in the Danube Region

BETTINA NEUHÄUSER

TEAMLEADER , TECHNOLOGIES AND SERVICES FOR MOBILITY

AUSTRIATECH

BETTINA.NEUHÄUSER@AUSTRIATECH.AT

austriatech

EUSALP Action Group 4

EUROPAREGION EUREGIO Tirol Südtirol Trentino Tirolo Alto Adige Trentino

European Commission

Interreg Alpine Space AlpGov

The project is co-financed by the European Regional Development Fund.

- Agency of the Austrian Ministry for Transport, Innovation and Technology (BMVIT) (100% Subsidiary)
- Strategies for a sustainable mobility system in Austria (Action Plan for Intelligent Transport Systems, Strategy for C-ITS deployment, e-mobility, …)
- Mobility services, Digital transport infrastructure, Decarbonisation, Automotive driving, Connectivity and cooperative ITS

The project is co-financed by the European Regional Development Fund.

LinkingDanube Project

EUSALP EU STRATEGY FOR THE ALPINE REGION
www.alpine-region.eu

Interreg
EUROPEAN UNION
Danube Transnational Programme
Linking Danube

Linking, transnational, multimodal traveller information and journey planners for environmentally-friendly mobility in the Danube Region

Start date	1st January 2017
End date	30th June 2019
Programme	INTERREG Danube Transnational Programme
Priority	Better connected and energy responsible Danube region
Specific objective	Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas
Website	http://www.interreg-danube.eu/linking-danube

austriatech

EUSALP Action Group 4

EUROPAREGION EUREGIO Tirol Südtirol Trentino Tirolo Alto Adige Trentino

European Commission

Interreg Alpine Space AlpGov

The project is co-financed by the European Regional Development Fund.

LinkingDanube Partnership

AustriaTech Federal Agency for Technological Measures Ltd.	AUSTRIA
KORDIS JMK	CZECH REPUBLIC
ELSOL - Electronic Solution SRL	ROMANIA
Politehnica University of Timisoara	ROMANIA
Regional Development Agency of the Ljubljana Urban Region	SLOVENIA
ZSSK - Railway Company Slovakia, j.s.c.	SLOVAKIA
Ministry of Infrastructure of the Republic of Slovenia	SLOVENIA
GYSEV - GyőrSopronEbenfurt Railway Corp.	HUNGARY
Institute for Computer Science, Hungarian Academy of Sciences	HUNGARY
NMP, National Mobile Payment Plc.	HUNGARY
Priority Area 1B Coordinator of the EUSDR	SLOVENIA
Knowledge HUB Moldova	MOLDOVA
Ministry of the Sea, Transport and Infrastructure	CROATIA

The project is co-financed by the European Regional Development Fund.

Linking Services (Distributed Journey Planning)

The project is co-financed by the European Regional Development Fund.

The Challenge

- Lack of seamless journey planning for public transport going beyond the system boundaries of a local and regional service
- Huge cross-border travel demand within the EU (commuters, tourists)
- Lack of door-to-door information on public transport impacts the mobility behavior (especially of the daily commuters mainly using their car)
- **Need for better cross-border information on public and multimodal transport solutions!**

The project is co-financed by the European Regional Development Fund.

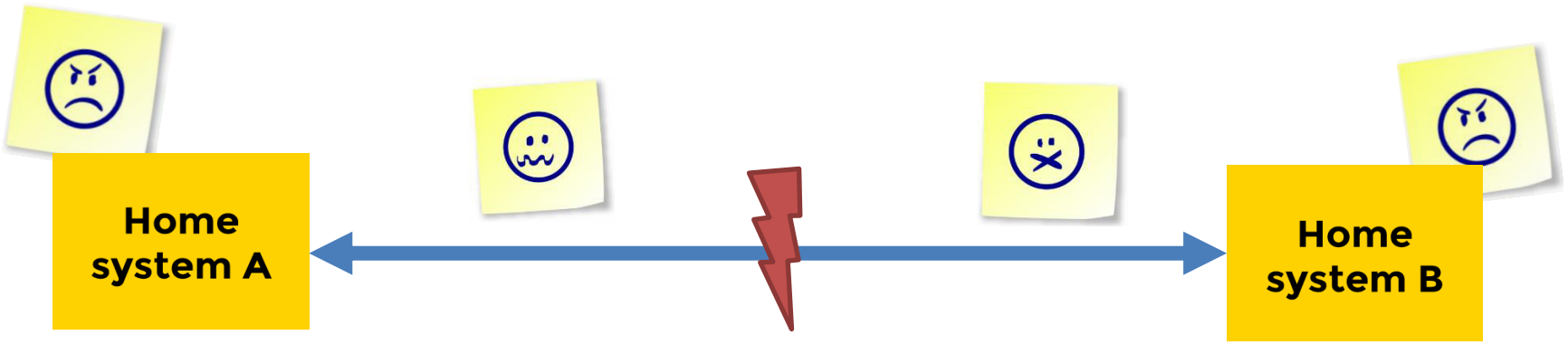
Goals

- **Decentralised** linking of services for transnational routing
  (→ chained/linked)
- Build on **existing services**
  (durability of systems and public investments)
- Use existing **European standards**
  → CEN/TC 278 OpenAPI standard
- **Proof-of-concept**
  the technical feasibility will be demonstrated for the respective regions in relevant use cases (Pilots)

The project is co-financed by the European Regional Development Fund.

The need for a common interface

Public transport — Open API for distributed journey planning – CEN/TC 278 Technical Specification (CEN/TC 278, Date: 2017-01, TC 278 WI 00278420)



The project is co-financed by the European Regional Development Fund.

The need for a common interface

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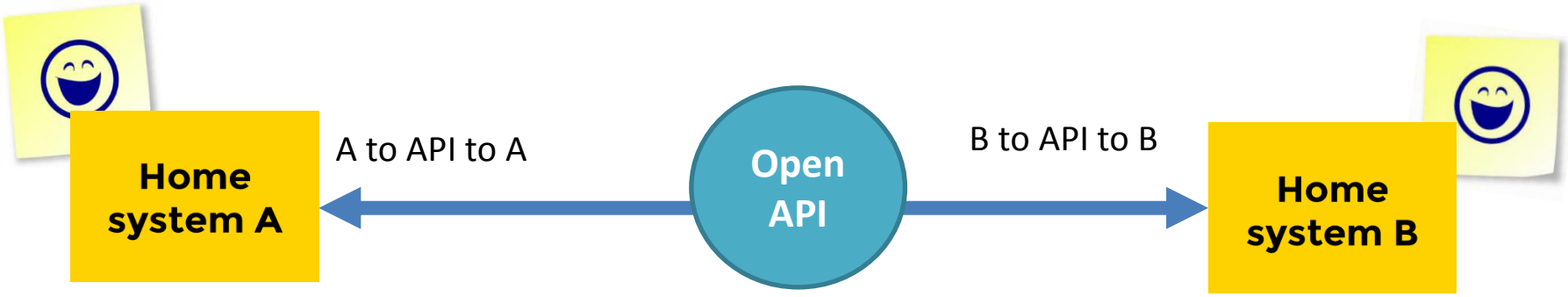
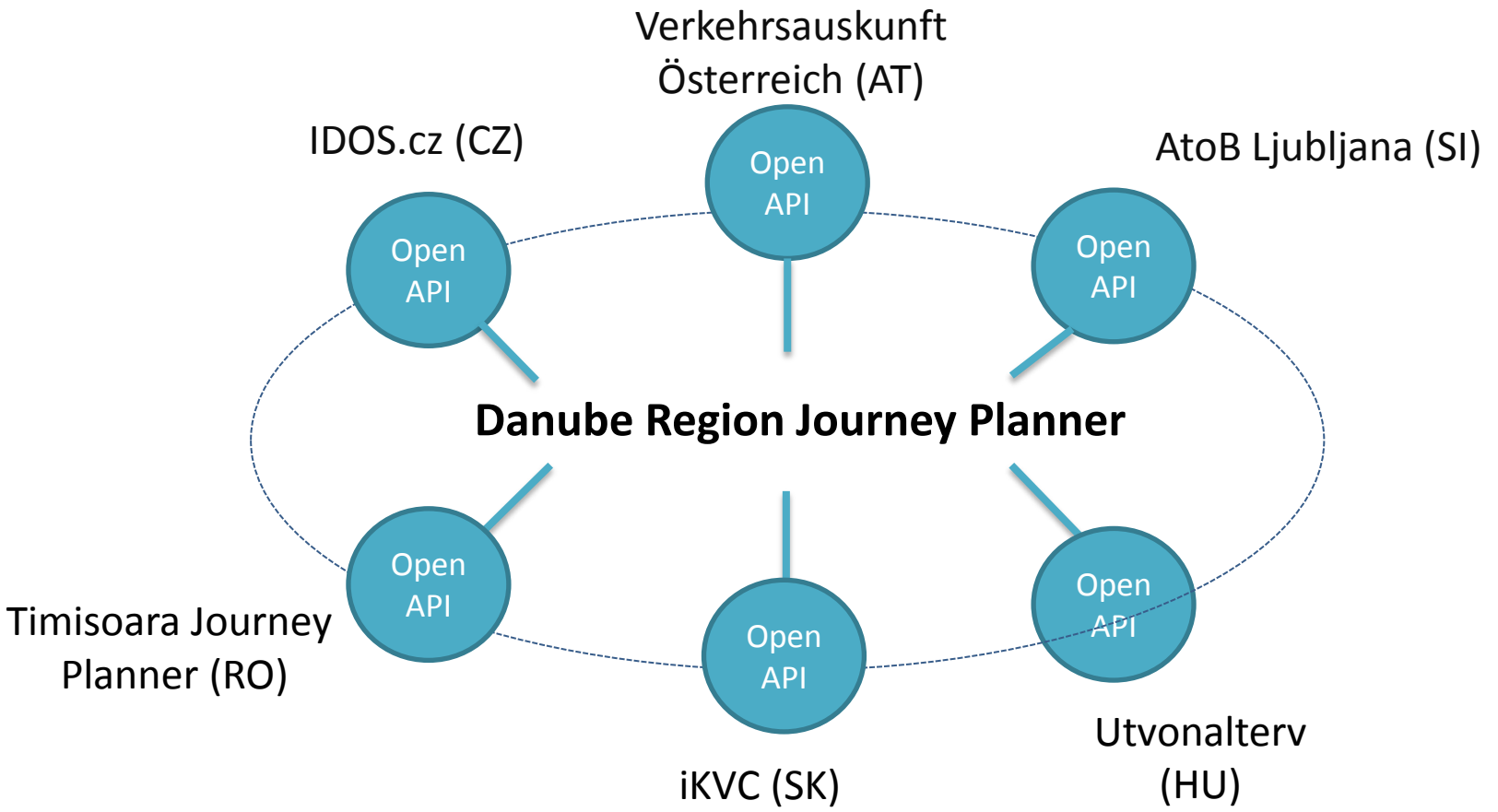


The project is co-financed by the European Regional Development Fund.

Linking existing services



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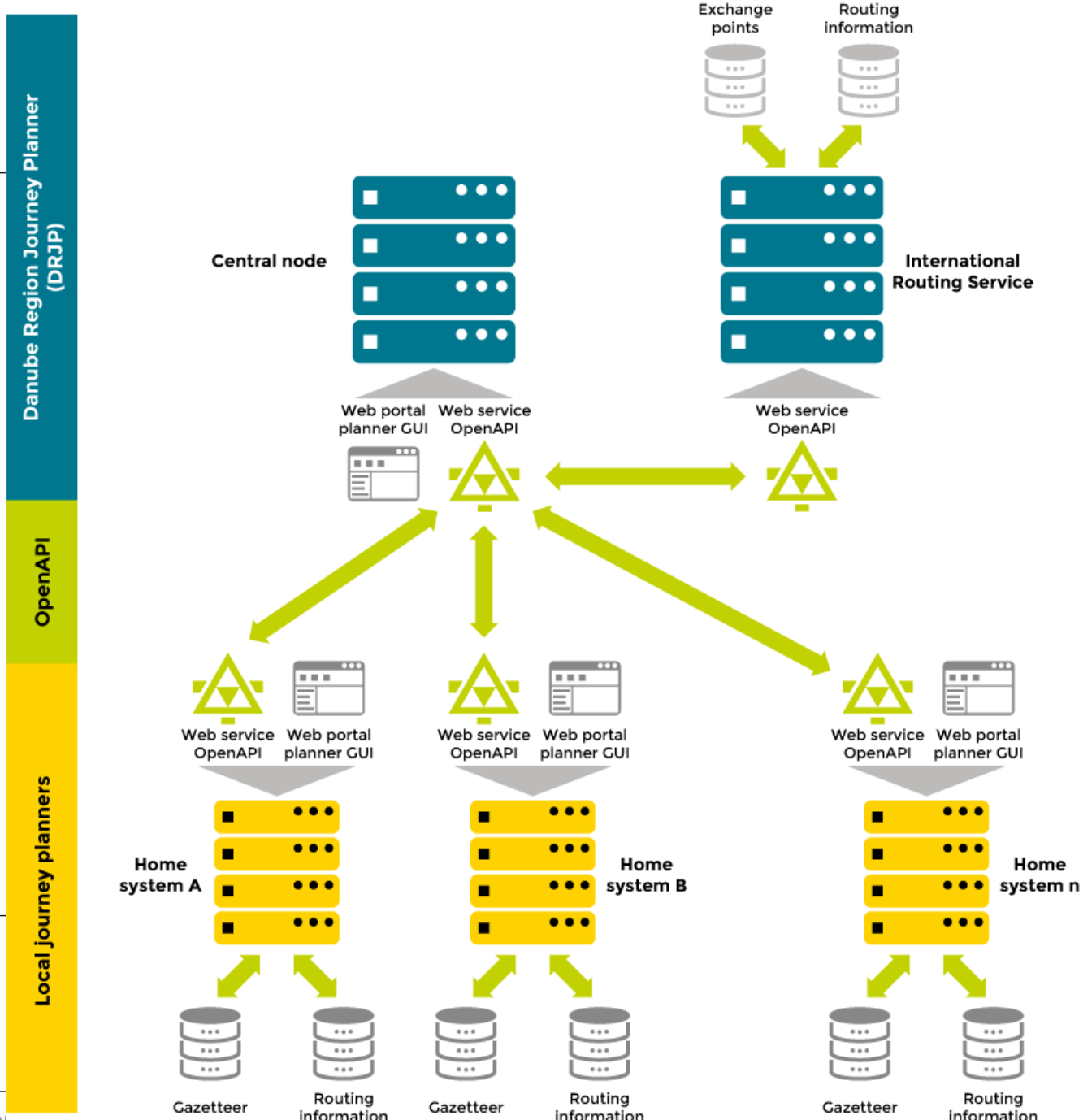
System architecture



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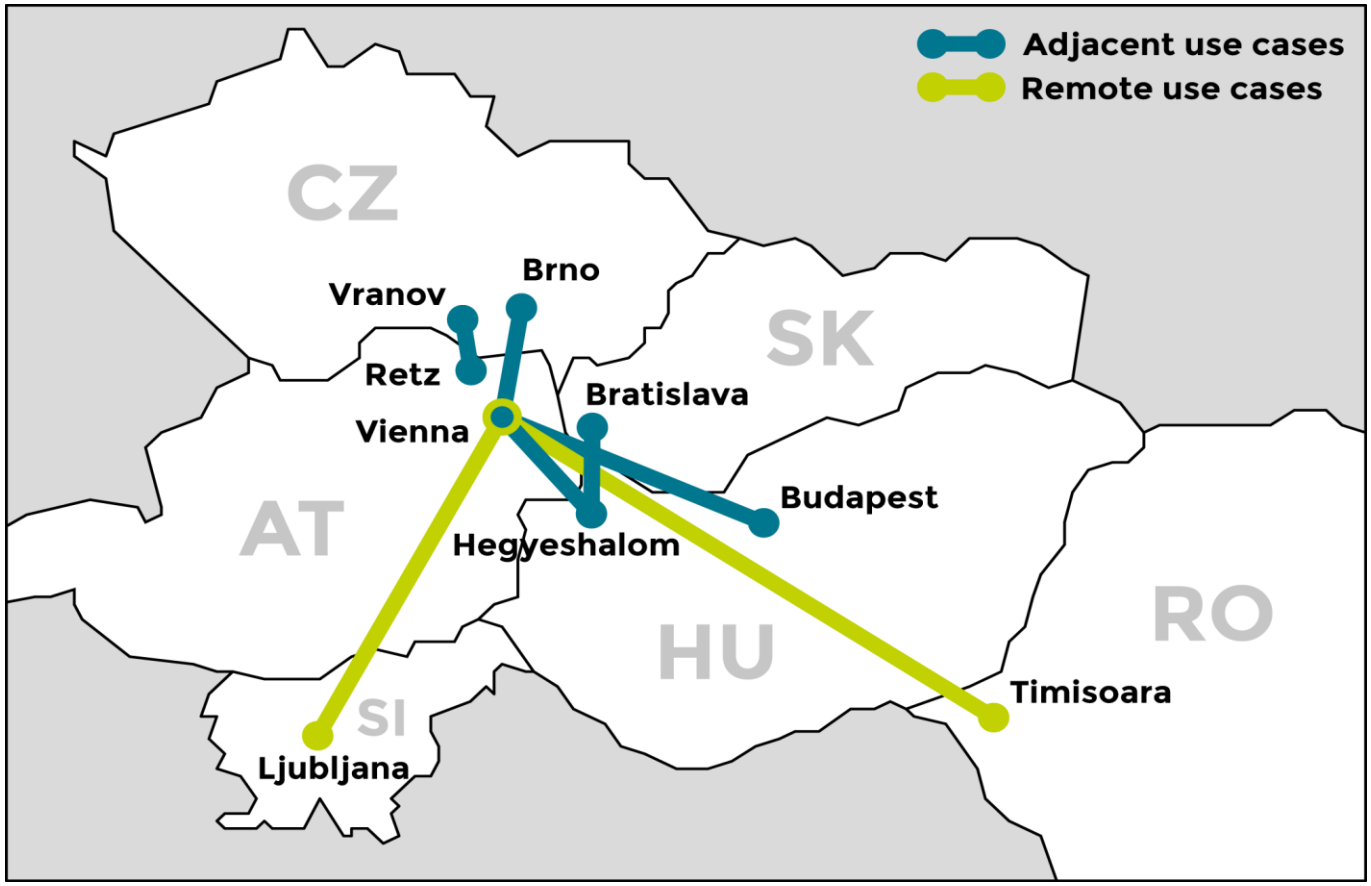
Pilots & Use cases



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Pilot & Use cases

Linking services

On-demand transport

Remote

→ **Linking two non-neighbouring services**

Adjacent

→ **Linking two neighbouring services**

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LinkingDanube Concept

on transnational, multimodal journey planning in the DR

- **Overarching scenario – Distributed JP for Danube Region**
  - Vision
  - Requirements for linking services (OpenAPI)
  - Organisational and legal aspects
  - System architectures (central vs. distributed)
  - Integration of on-demand transport
- **LinkingDanube scenario – Distributed JP in LinkingDanube**
  - Introduction of local journey planners
  - Pilots (project use cases)
  - LinkingDanube system architecture
  - Minimum content specifications
  - Requirements for system functionalities
- **Conclusions and outlook**

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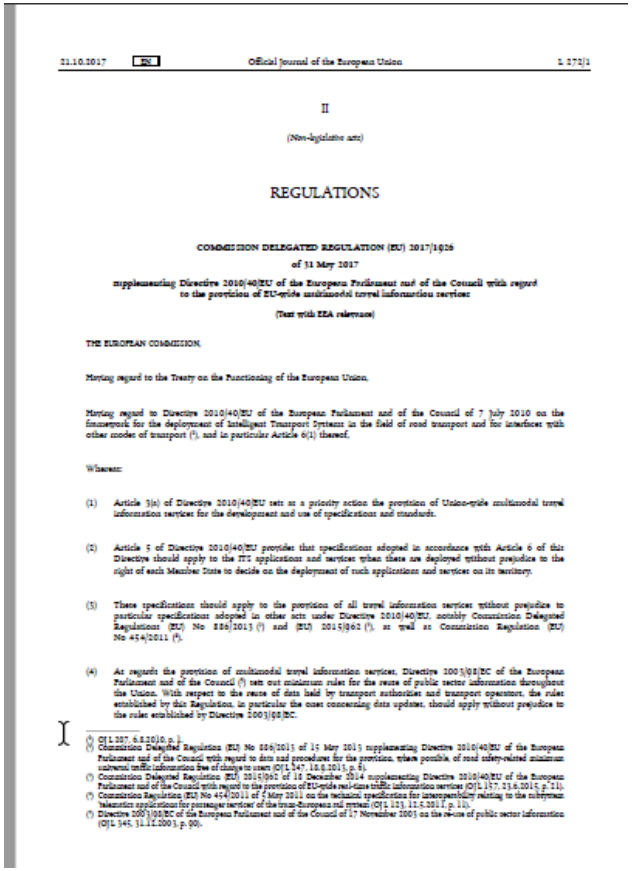
Significance

- **ITS Directive 2010/40/EU**
  (European Directive on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport

- Priorty Action a)
  the provision of EU-wide multimodal travel information services

- Delegated Regulation 2017/1926
  of the ITS Directive for the provision of EU-wide multimodal travel information services
  publsihed on 21.10.2017



21.10.2017 EN Official Journal of the European Union L 272/1

II

(Non-legislative acts)

REGULATIONS

COMMISSION DELEGATED REGULATION (EU) 2017/1926

of 31 May 2017

supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport (1), and in particular Article 6(1) thereof,

Whereas:

(1) Article 3(a) of Directive 2010/40/EU sets as a priority action the provision of Union-wide multimodal travel information services for the development and use of specifications and standards.

(2) Article 5 of Directive 2010/40/EU provides that specifications adopted in accordance with Article 6 of this Directive should apply to the ITS applications and services when these are deployed without prejudice to the right of each Member State to decide on the deployment of such applications and services on its territory.

(3) These specifications should apply to the provision of all travel information services without prejudice to particular specifications adopted in other acts under Directive 2010/40/EU, notably Commission Delegated Regulations (EU) No 886/2013 (2) and (EU) 2015/962 (3), as well as Commission Regulation (EU) No 454/2011 (4).

(4) As regards the provision of multimodal travel information services, Directive 2003/98/EC of the European Parliament and of the Council (5) sets out minimum rules for the reuse of public sector information throughout the Union. With respect to the reuse of data held by transport authorities and transport operators, the rules established by this Regulation, in particular the ones concerning data updates, should apply without prejudice to the rules established by Directive 2003/98/EC.

(1) OJ L 207, 6.8.2010, p. 1.
(2) Commission Delegated Regulation (EU) No 886/2013 of 15 May 2013 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users (OJ L 247, 18.9.2013, p. 6).
(3) Commission Delegated Regulation (EU) 2015/962 of 18 December 2014 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide real-time traffic information services (OJ L 157, 23.6.2015, p. 21).
(4) Commission Regulation (EU) No 454/2011 of 5 May 2011 on the technical specification for interoperability relating to the subsystem 'telematics applications for passenger services' of the trans-European rail system (OJ L 123, 12.5.2011, p. 11).
(5) Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information (OJ L 345, 31.12.2003, p. 90).

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Significance

Article 19

(19) At present, there are a substantial number of multimodal travel information services in Europe but those services that offer a full door-to-door routing result are mainly limited to the territory within a Member State. A key solution to enhance the geographical coverage of travel information services and to support Union-wide multimodal travel information is by linking local, regional and national travel information services. This involves the use of technological tools including interfaces to link existing information systems to exchange routing results. It is recommended that travel information services should use the European Technical Specification entitled 'Intelligent Transport Systems – Public Transport – Open API for distributed journey planning 00278420' currently under finalisation when performing distributed journey planning. When service providers establish handover points for distributed journey planning, such handover points should be listed in the national access point.

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Conclusions

- **Service providers**: Extend coverage, improve features and thus reinforce their position on the market
- **Accessibility**: Changing mobility behaviour will result in more balanced use of transport and improve the interconnection of cities and regions
- **Investments**: Current and previous investments in regional development will not be stranded but linked along with the services thus contribute to converging regions and services
- **End users**: More information of higher quality and experience individual benefits of multimodal mobility options

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Thank you

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LinkingDanube
http://www.interreg-danube.eu/linking-danube

The project is co-financed by the European Regional Development Fund.

EUSALP ANNUAL FORUM 23-24/11/2017 MUNICH

WORKSHOP 5 – MOVING IN INTER-CONNECTED TRANSPORT SYSTEMS

INTEGRATED PLATFORM FOR PUBLIC TRANSPORT IN THE DOLOMITES

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EUSALP Action Group 4

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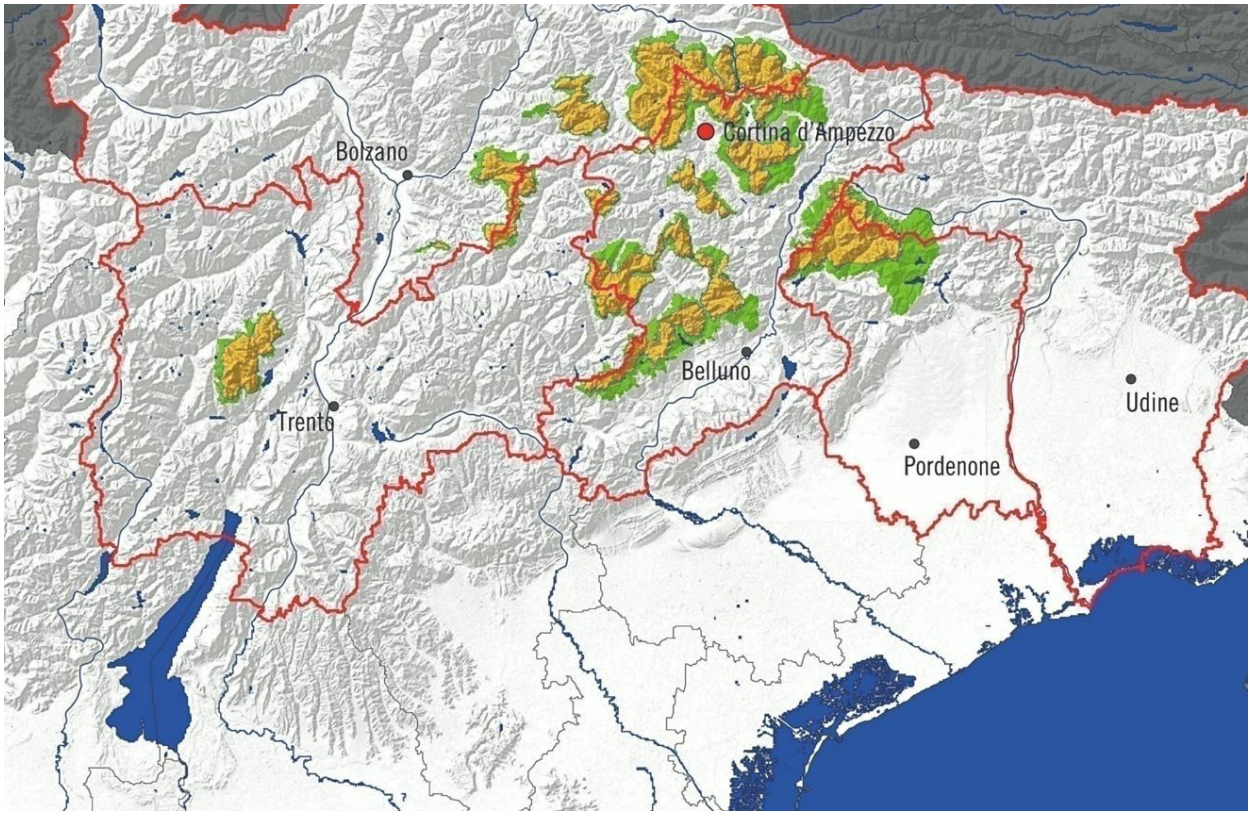
(1/4) Continuity: a single UNESCO property, many administrations



1 UNESCO World Heritage site made of **9 mountainous system**

5 provinces:
Belluno, Bolzano, Pordenone, Trento, Udine

2 regions:
Veneto, Friuli Venezia Giulia

4 languages:
Friulian, German, Italian, Ladin

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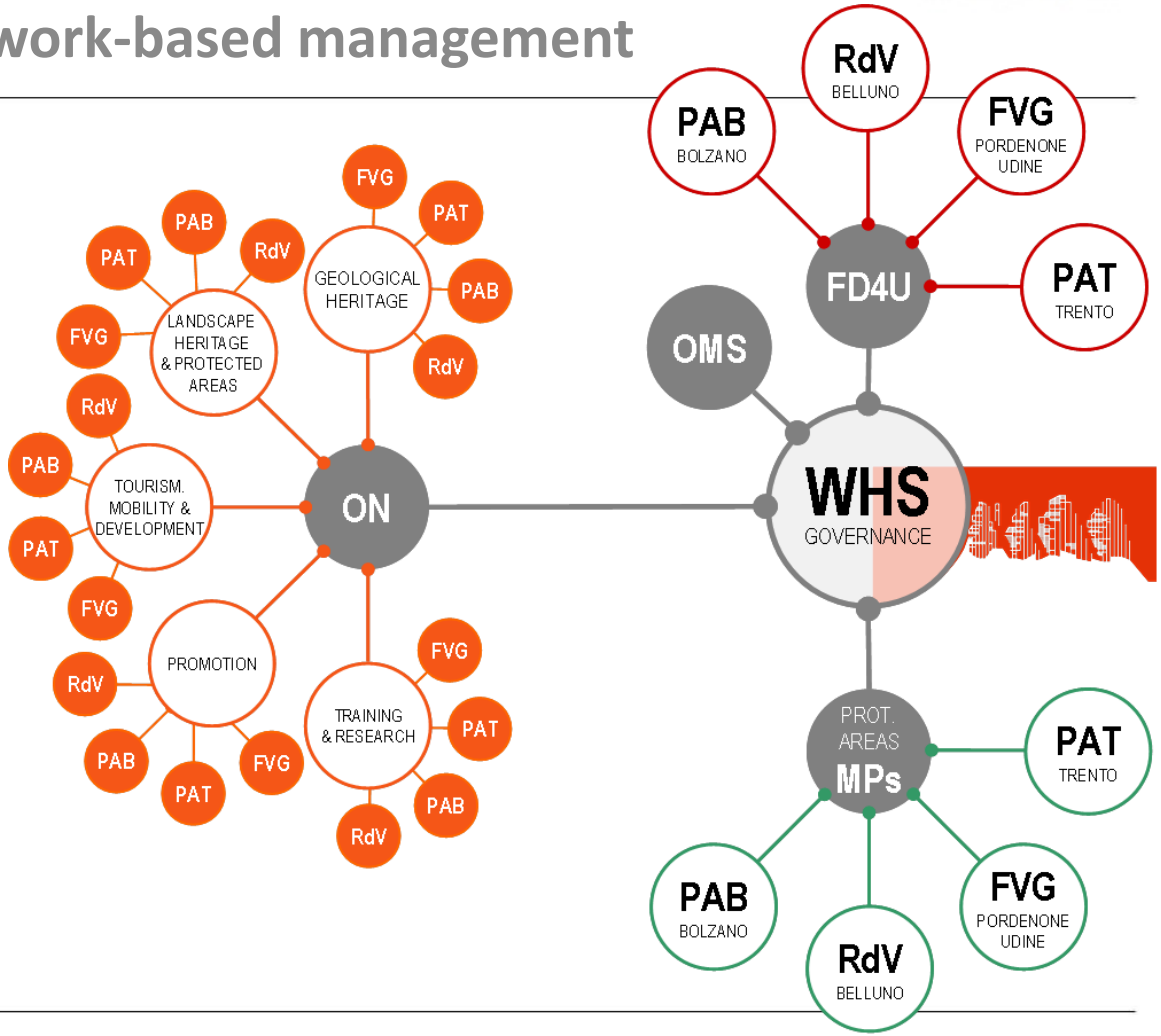
(2/4) Connectivity: network-based management

2009: the **Dolomites** are listed as a **World Heritage Site**

2010: the **UNESCO Dolomites Foundation** was set up

2016: **Overall Management Strategy** (OMS)

2017: first concept of the **DIVA-EFA Platform**



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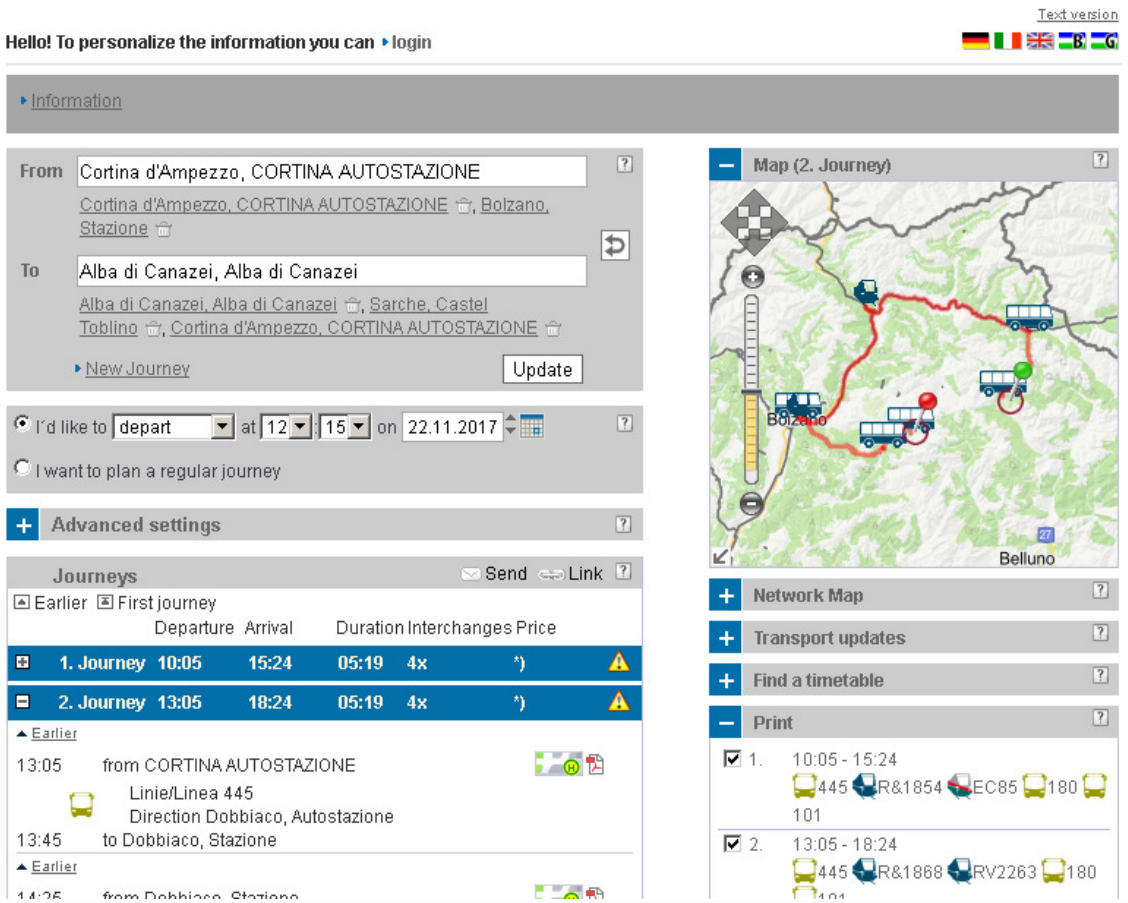
(3/4) Commitment: DIVA-EFA Platform

What people want: more information on connections and services, clearer timetables

How to do it: one single platform

Behind the platform: database with data from 5 provinces (DIVA transport management system)
+ Openstreetmaps



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(4/4) Community: next steps towards a common mobility

A path full of challenges:

- ✓ Common platform
- ❑ Completion of data gathering
- ❑ Automatization of data merging
- ❑ Interface enhancement

Wish-list:

- More interprovincial connections
- A single ticket for the whole Dolomites

The project is co-financed by the European Regional Development Fund.

Thank you for your attention!

UNESCO Dolomites Foundation

www.dolomitiunesco.info

DOLOMITI
DOLOMITEN
DOLOMITES
DOLOMITIS

EUROPAREGION EUREGIO
Tirol Südtirol Trentino
Tirolo Alto Adige Trentino

European Commission

Interreg
Alpine Space
AlpGov

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