

# Management of Dynamic Traffic Data and Connectivity into Vehicles

Peter Hrassnig
ASFINAG Maut Service GmbH
A3PS Conference, 10.11.2015

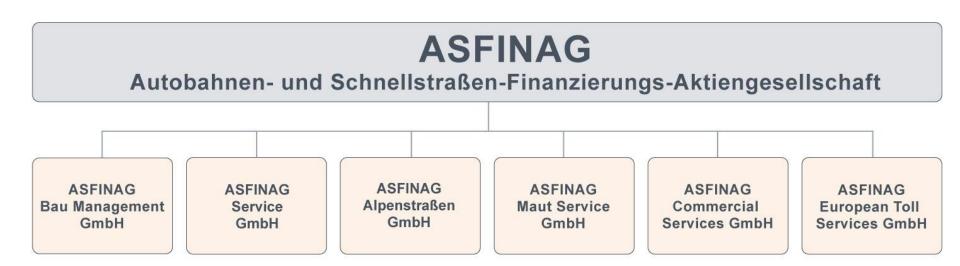




- ASFINAG summary
- Traffic information from the point of view of ASFINAG
- What is dynamic traffic data?
- From "the digital road operator" to "the connected vehicle"



## The ASFINAG Group





#### **ASFINAG Overview**

Tasks:

Planning, construction, maintenance, operation,

funding and tolling of motorways and

expressways in Austria

Road network: In operation: 2,183 km

**Employees – group:** 2,652

Motorway operation and maintenance facilities: 43

National traffic management centre: 1

Regional traffic management centres: 9

Locations: Wien, Graz, Innsbruck, Salzburg,

Ansfelden, Zirl

Financing: Vehicles < 3.5 t: toll stickers + special tolls

Trucks > 3.5 t: mileage-dependent toll





- ASFINAG summary
- Traffic information from the point of view of ASFINAG
- What is dynamic traffic data?
- From "the digital road operator" to "the connected vehicle"



#### **ASFINAG** focus on traffic information

ASFINAG is one of Europe's
leading motorway operator
especially recognised as
content provider
for traffic and travel information
(in Austria)



# Ways to ASFINAG customer information - TODAY

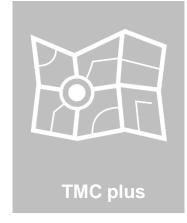
# Not connected vehicles

# Connected vehicles









navigation device



OEM value-added services

online traffic information

ASFINAG-companion for travellers

#### **ASFINAG Services**

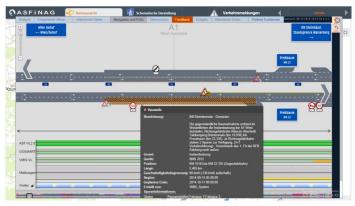


> 580 webcams





#### expert tools

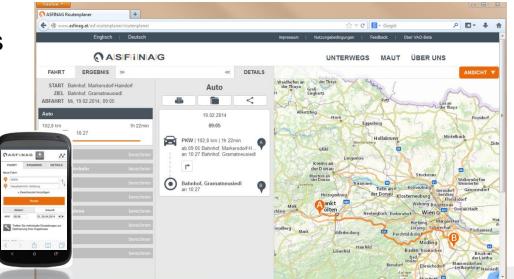


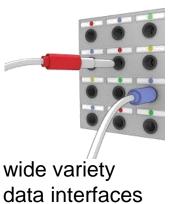
Smartphone App



#### VAO route planner











- ASFINAG summary
- Traffic information from the point of view of ASFINAG
- What is dynamic traffic data?
- From "the digital road operator" to "the connected vehicle"



# **ASFINAG Incident Messages**

- wrong-way driver
- traffic accident
- break-down vehicle
- traffic congestion
- loss of load
- extreme weather conditions

- heavy load
- fire
- system error
- height control
- maintenance measure
- other













# **ASFINAG Incident Management**

> From incidents to information OEM's, National Access Points, **Traffic Management Centre** Mobile Service Provider datex2 **National** Traffic Information ticml Service Provider json Services (apps, etc.) rss Road Regional **Operators** 

#### **ASFINAG** information content







**ASFINAG** incident information



Construction site reports

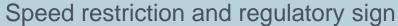
Webcams special view

Calculated data



Traffic situation





**Dynamic data** 



Reduction of speed based on current immissions measured (Austrian law)



Occupancy status of truck parking information



Webcams

Static road data



Infrastructure data (connection point + node)





Distributor (toll sticker, Go-Box, video toll)







Resting opportunities (truck parking, facility for removing snow from trucks, Park&Drive)



### Integration with automotive & internet

**ASFINAG** 

receives

TELEMATICS PLUS
 "Inform as many customers as possibly with high quality real-time information."

 Data exchange with international providers TOMTOM Ontinental Bosch

INRIX. Driving Intelligenc

Incidents
Traffic situations
Traffic sign display
Road works

ASFINAG delivers Traffic jam index
Automatic detection of construction sites
Automatic traffic jam warning
Traffic situation secondary road network





- ASFINAG summary
- Traffic information from the point of view of ASFINAG
- What is dynamic traffic data?
- From "the digital road operator" to "the connected vehicle"



# **ASFINAG Vision "Cooperative Driving"**





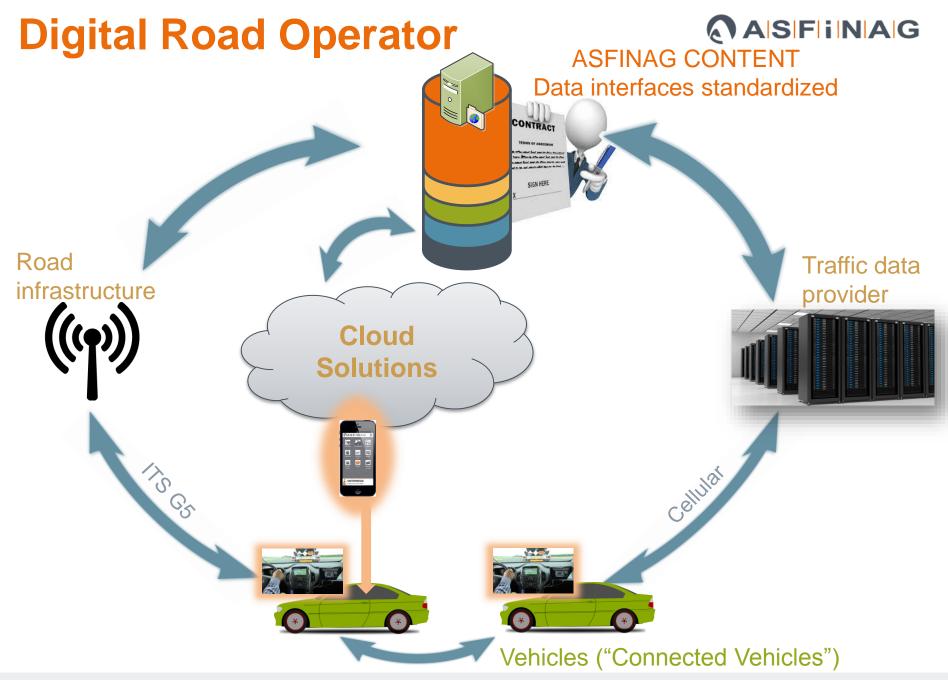
real-time data exchange



Receives additional information directly from the vehicles

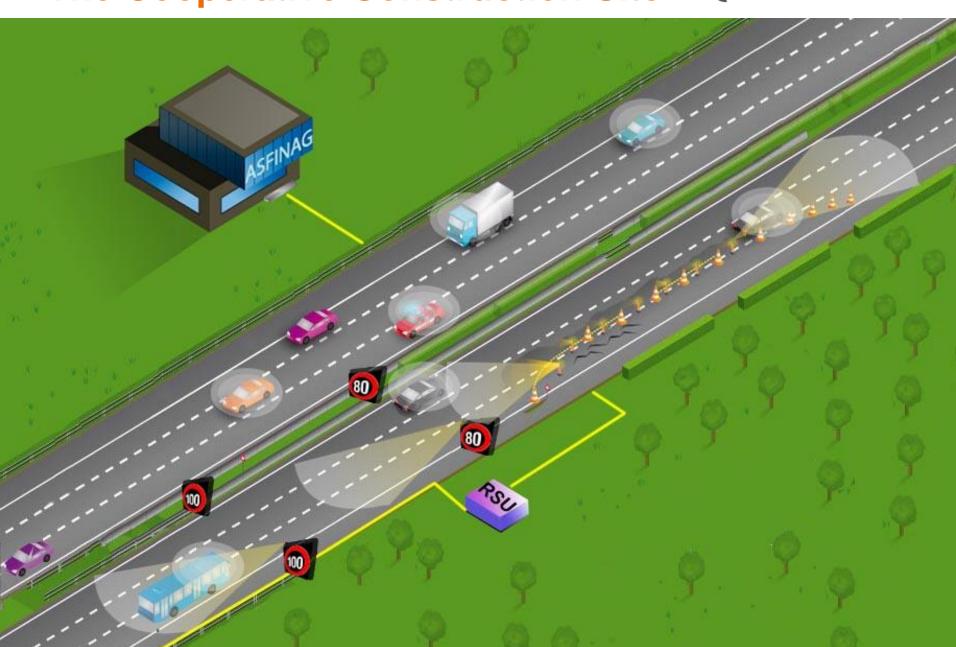


Provides improved traffic information and management measures



# **The Cooperative Construction Site**









## **Positioning and Key Messages**

- Evaluation about specific events will become even more important in the future
- ASFINAG wants to provide data for OEMs
- Differentiation between not connected vehicles and connected vehicles
  - Not connected vehicles 1.0: via online traffic information, ASFINAG-companion for travelers, apps, etc.
  - Connected vehicles 2.0 >: Cooperation with OEMs for data exchange
    - Sign giving orders: Cooperation with OEMs in any case
    - Event warnings: Cooperation with OEMs for additional information

Verlässlichkeit auf allen Wegen 19

