



Hoe verkeersdata de logistiek en het verkeersmanagement drastisch efficiënter en effectiever maakt

*Carlo van de Weijer*

*CWI in Bedrijf 2012; 5 oktober 2012, Amsterdam*

# Smart Mobility: Mobility with brains



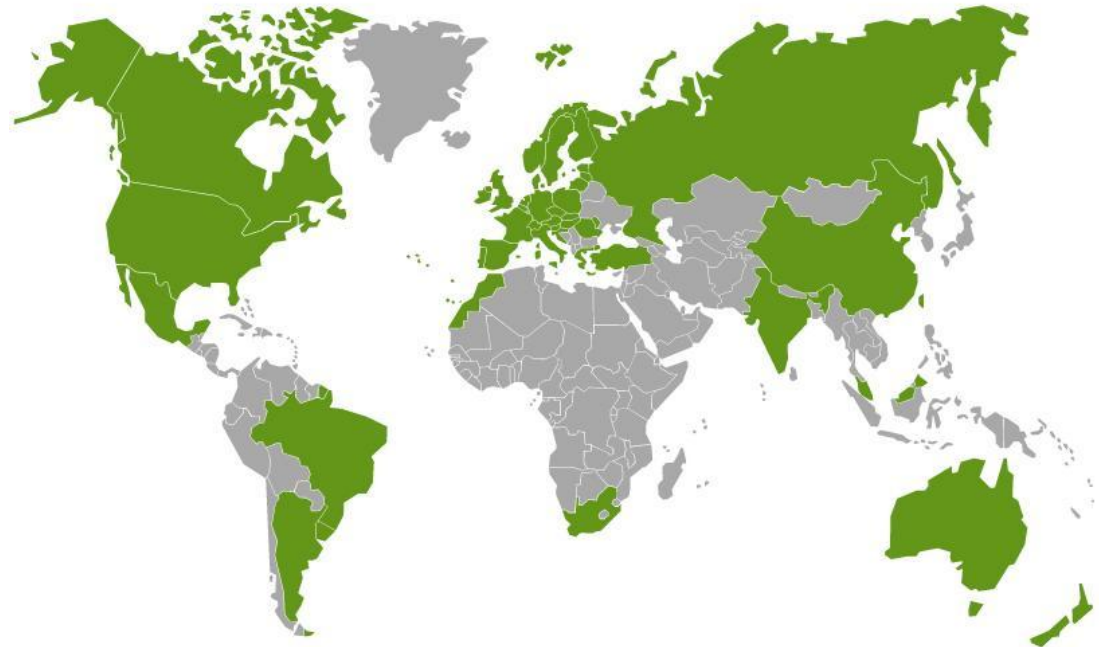


# TomTom

- **Founded 1991**

- **Revenue:**

- 2001: 2M,
- 2002: 8M
- 2003: 40M
- 2004: 192M
- 2005: 720M
- 2006: 1364M
- 2007: 1737M
- 2008: 1674M
- 2009: 1480M
- 2010: 1521M
- 2011: 1273M



- **Core activities:**

- **Customer support**
- **R&D**
- **Marketing**

● Countries where we sell our PNDs

**tomtom** (de (m.); -s) autonavigators, m.n. van het merk TomTom®  
**tomtommen** (onoverg.; tomtomde, h. getomtomd) met een navigatieapparaat in de auto rijden, syn. *navigeren*

# Portfolio

## Consumer



## Automotive



## Business Solutions



## Licensing



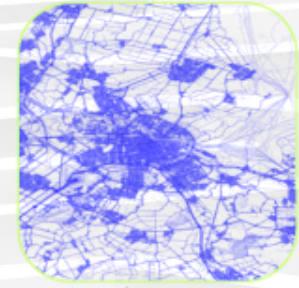
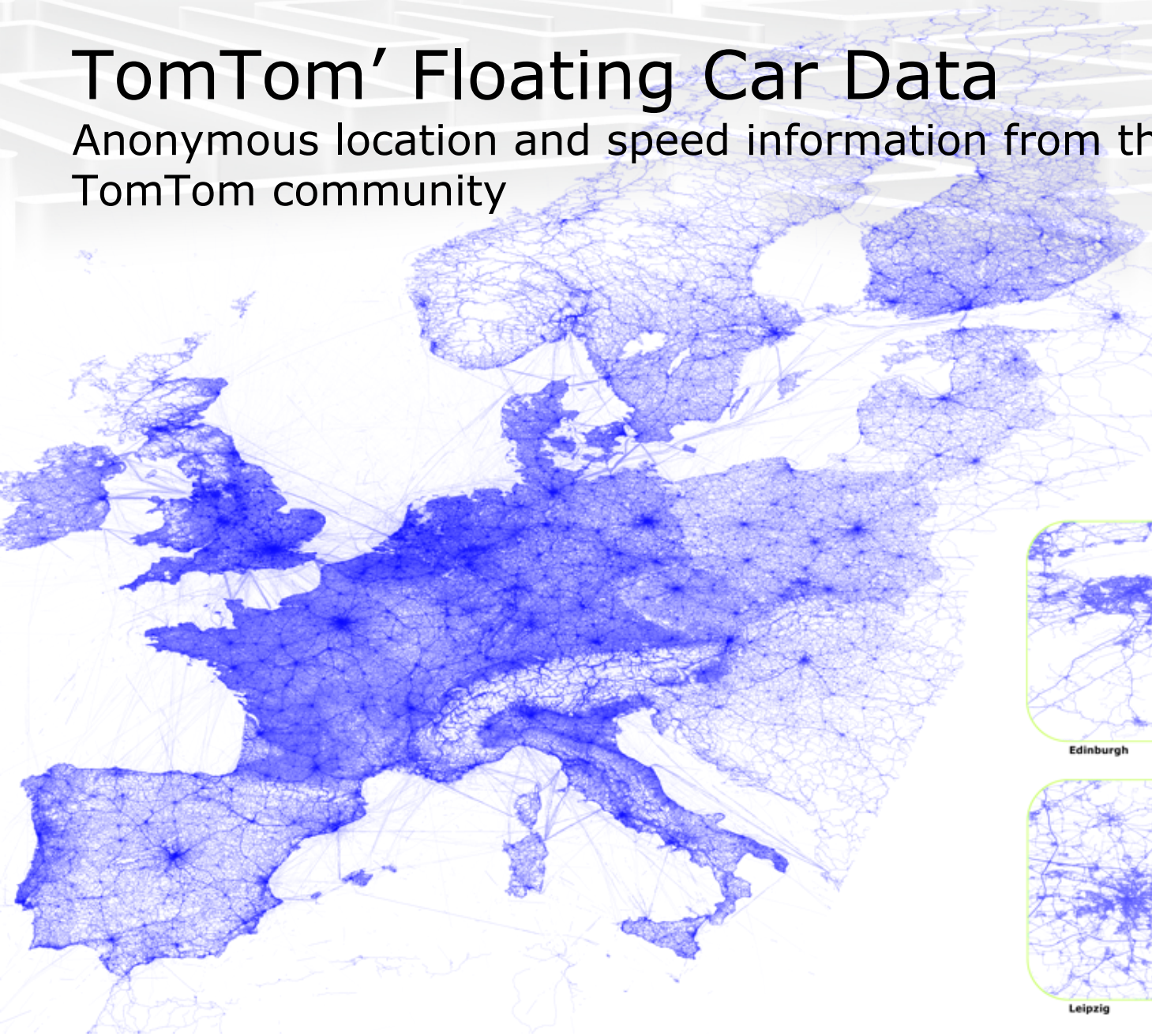
# Using Community Feedback

- TomTom has more than 80 Million customers
- Most of them are willing to contribute to make TomTom's systems better (eg Mapshare)
- TomTom uses it's connected navigation strategy to establish this

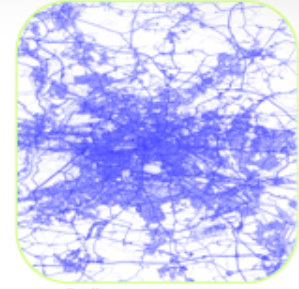


# TomTom' Floating Car Data

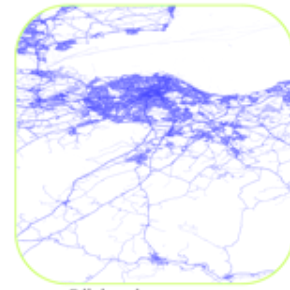
Anonymous location and speed information from the TomTom community



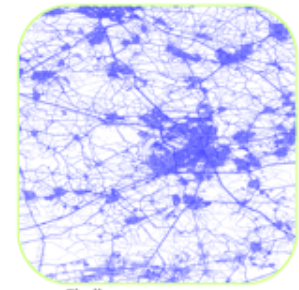
Amsterdam



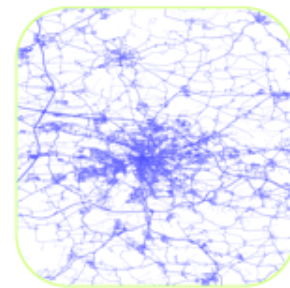
Berlin



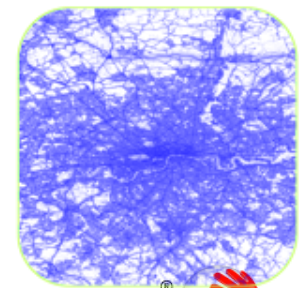
Edinburgh



Eindhoven

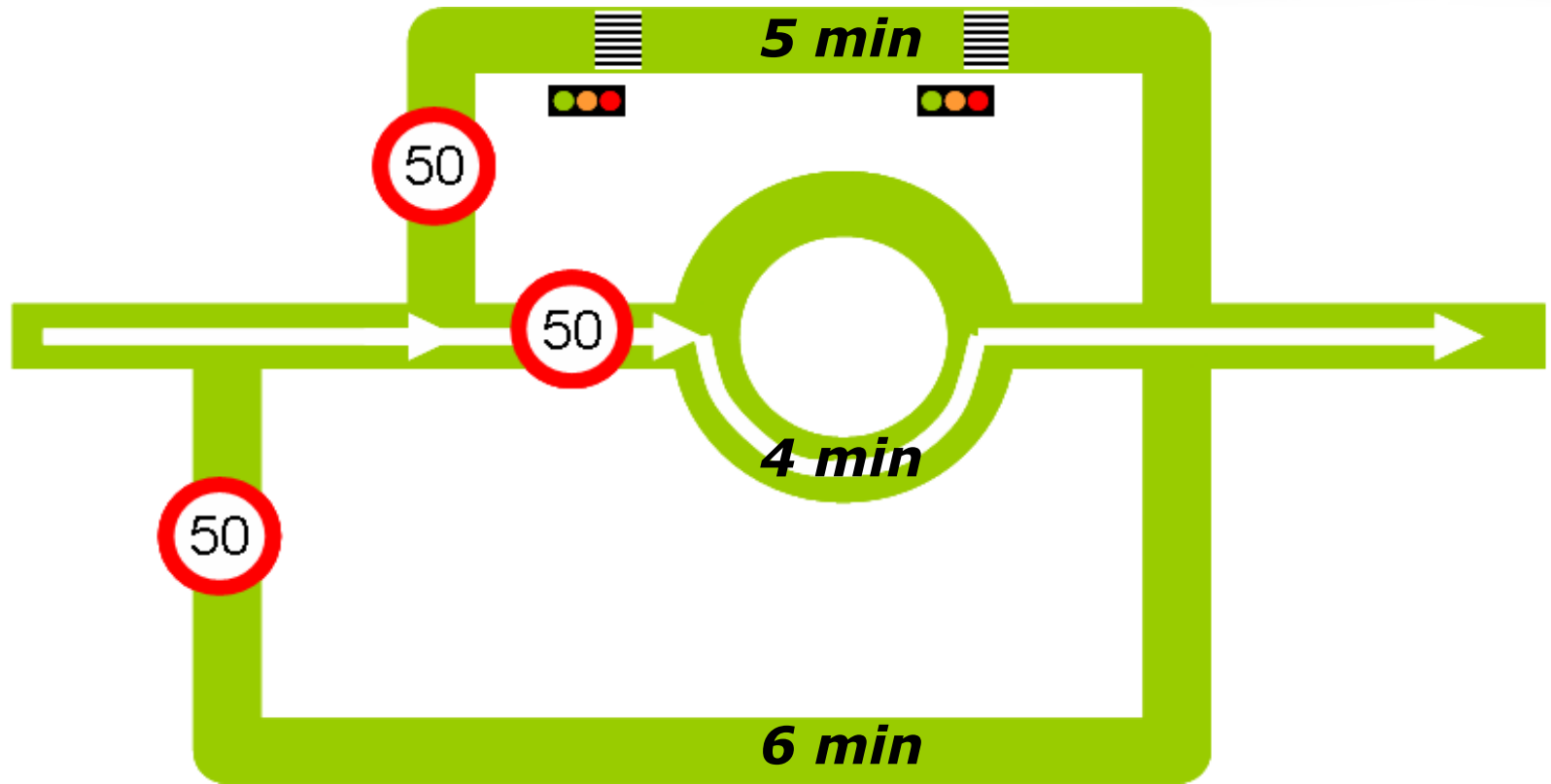


Leipzig



# Using Community Feedback for Better Routing

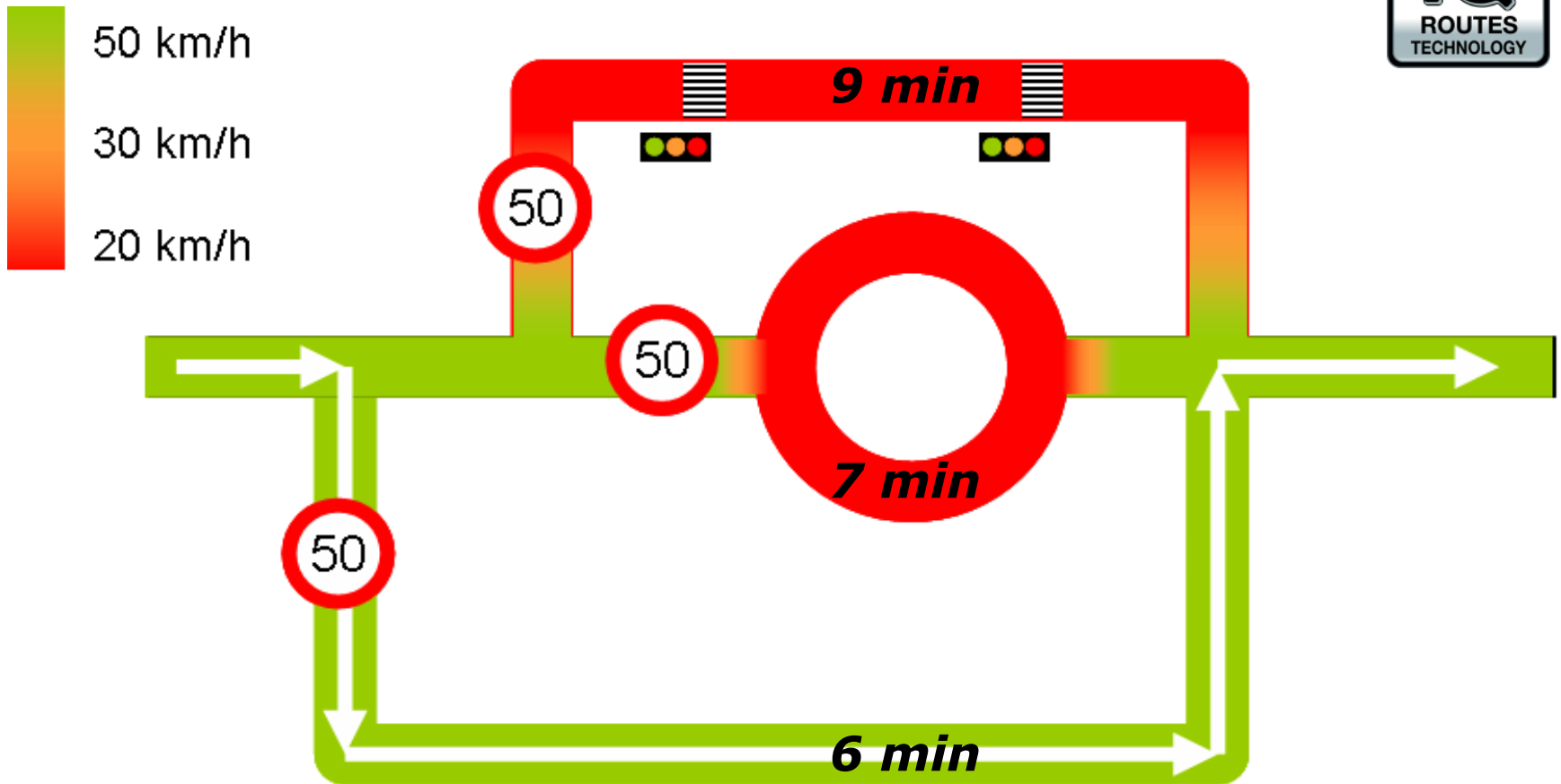
Traditional navigation system:





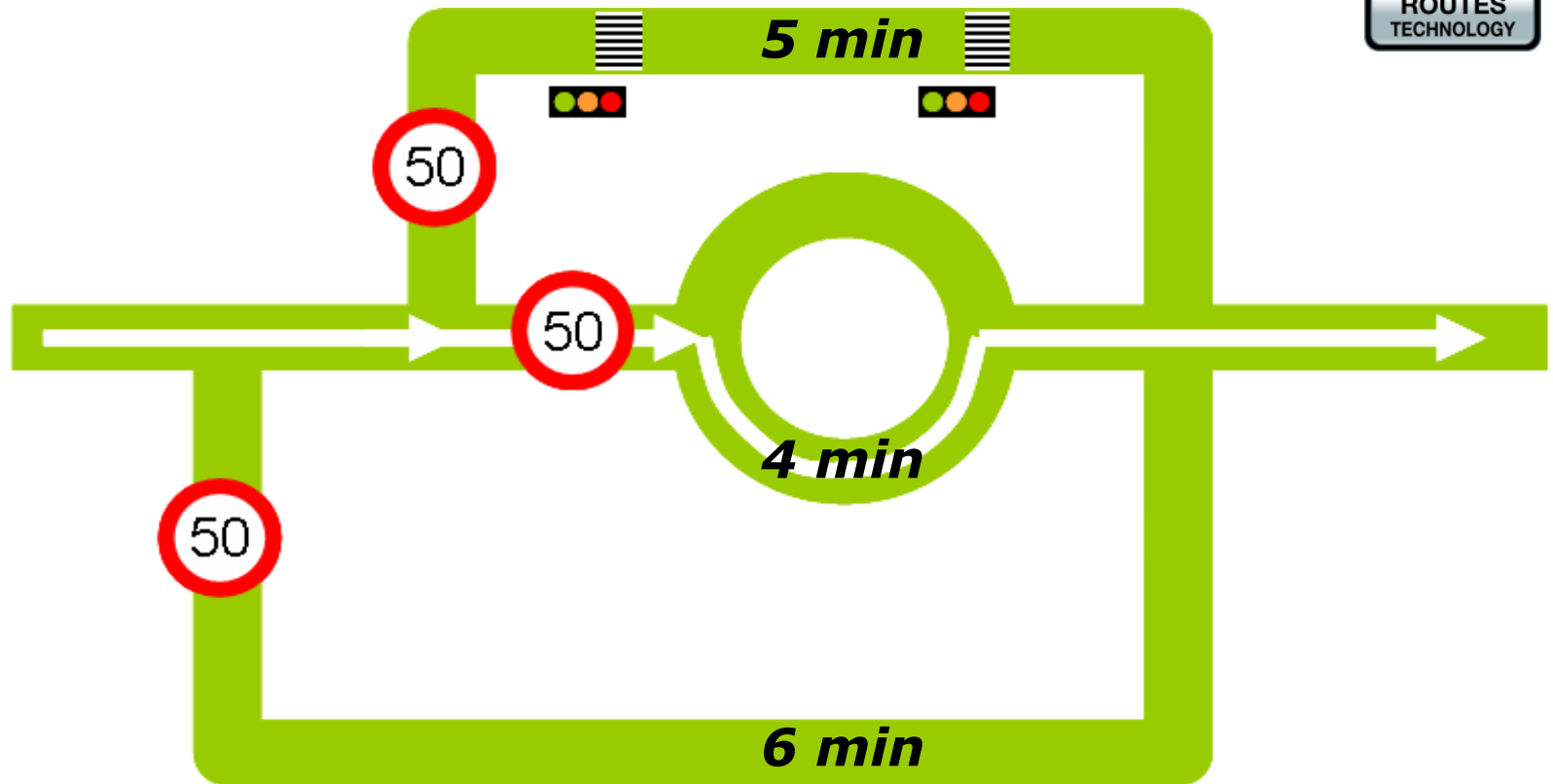
# Using Community Feedback for Better Routing

TomTom IQ Routes navigation system:

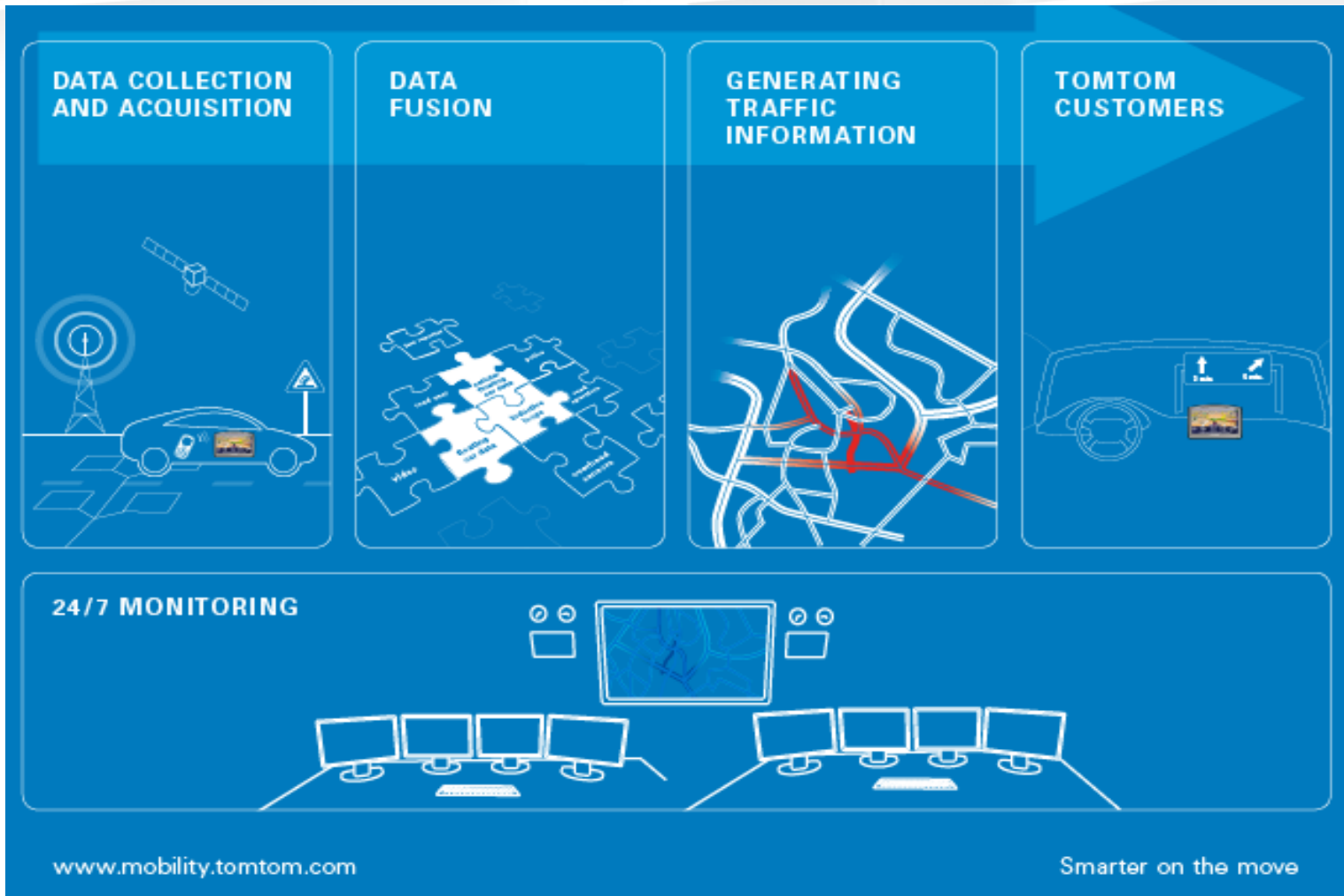


# Using Community Feedback for Better Routing

TomTom IQ Routes navigation system during night:



# Most accurate FCD based real-time traffic



# February 3<sup>rd</sup>, 2012. 11.45; Snow in the Netherlands



[zoeken]

Buienradar

actueel weer

verwachting

zon & wolken

foto's

video's

mijn radar

winter

gadgets

623

-6

.mobi

## Buienradar

### Europa

afgelopen 3 uur

loop 6, 9, 24 uur

wolken & radar

bliksem Europa

[13:45](#) [13:30](#) [13:15](#)

[13:00](#) [12:45](#) [12:30](#)

[12:15](#) [12:00](#) [11:45](#)

[11:30](#) [11:15](#) [11:00](#)

[10:45](#) [10:30](#) [meer..](#)

Google maps

archief Europa

### verwachting

komende 3 uur

komende 3 dagen

[14:00](#) [14:15](#) [14:30](#)

[14:45](#) [15:00](#) [15:15](#)

[15:30](#) [15:45](#) [16:00](#)

[16:15](#) [16:30](#) [16:45](#)

### mijn radar

uw radar instellen

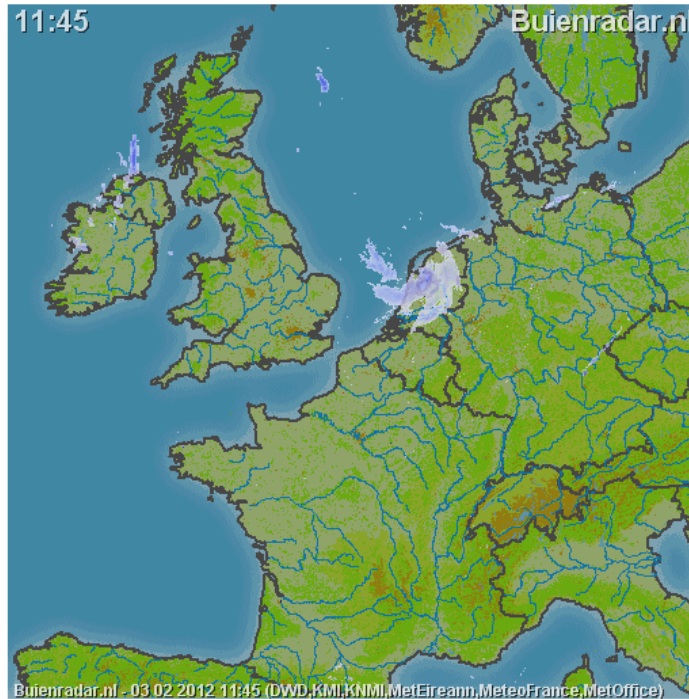
### Nederland

afgelopen uur

komende 3 uur

onweer Nederland

archief Nederland

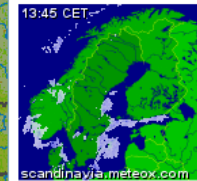
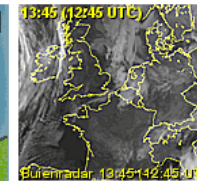


Buienradar.nl - 03 02 2012 11:45 (DWD,KMI,KNMI,MetEireann,MeteoFrance,MetOffice)

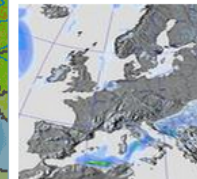
Herladen pagina

Elke 5 minuten

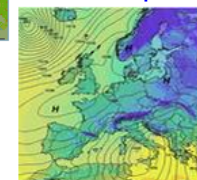
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### Regen verwachting



### Luchtdruk & temperatuur



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English

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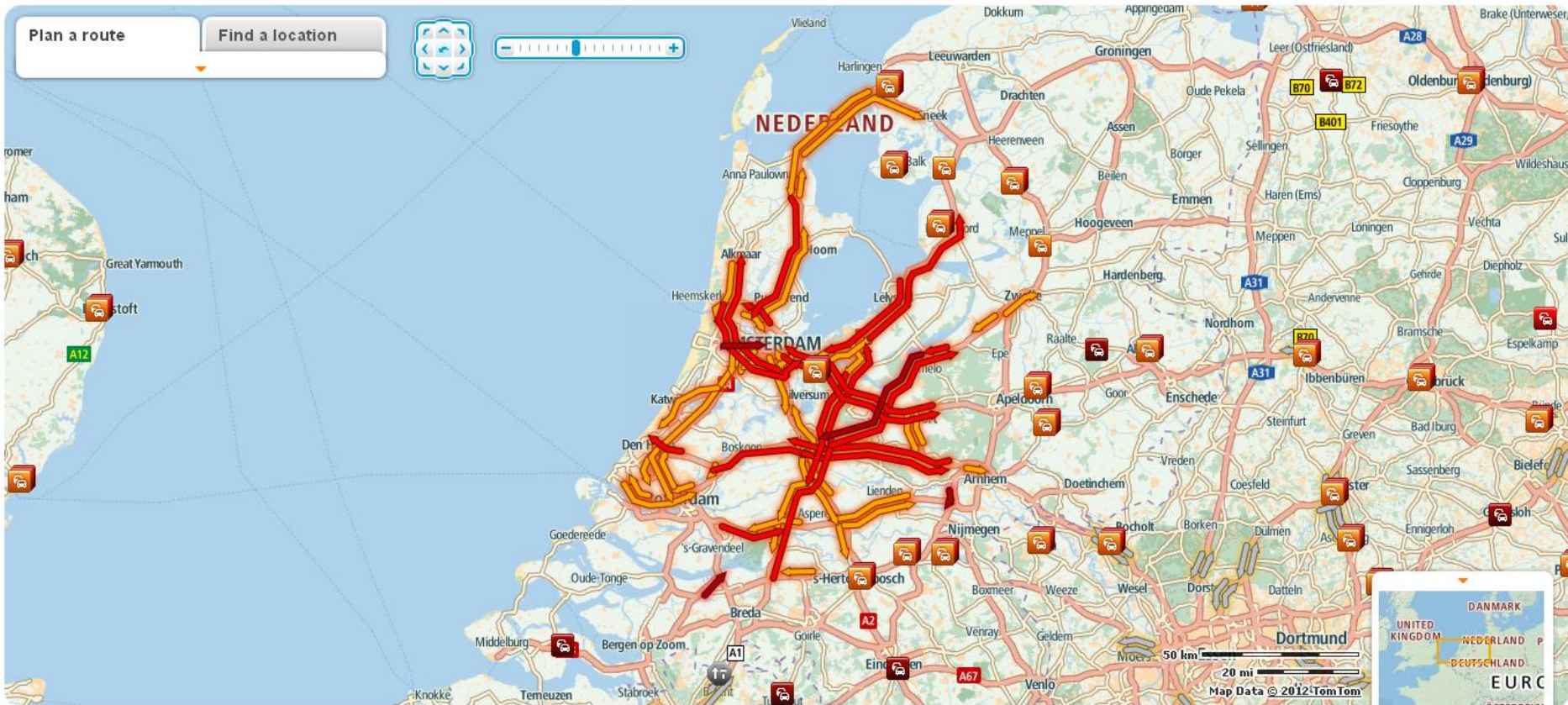
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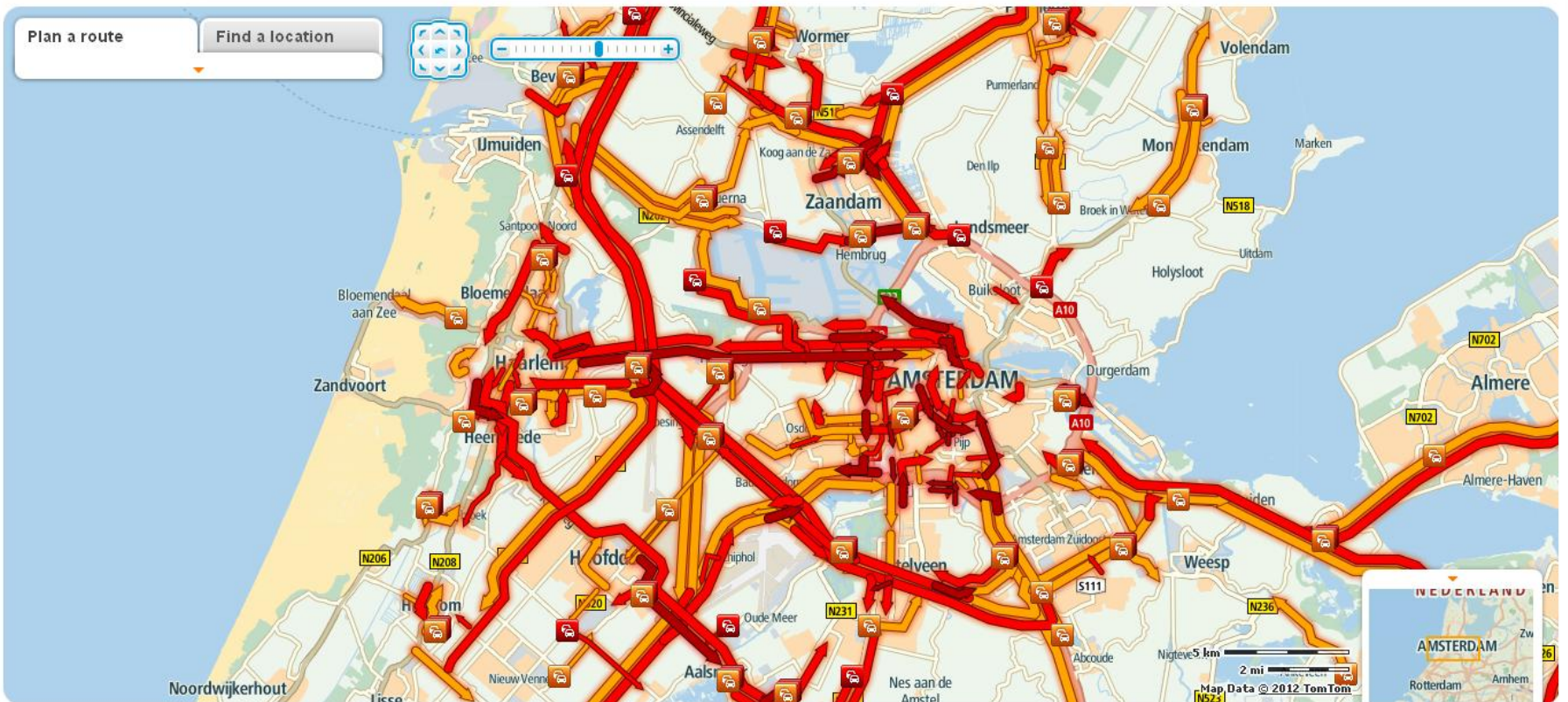
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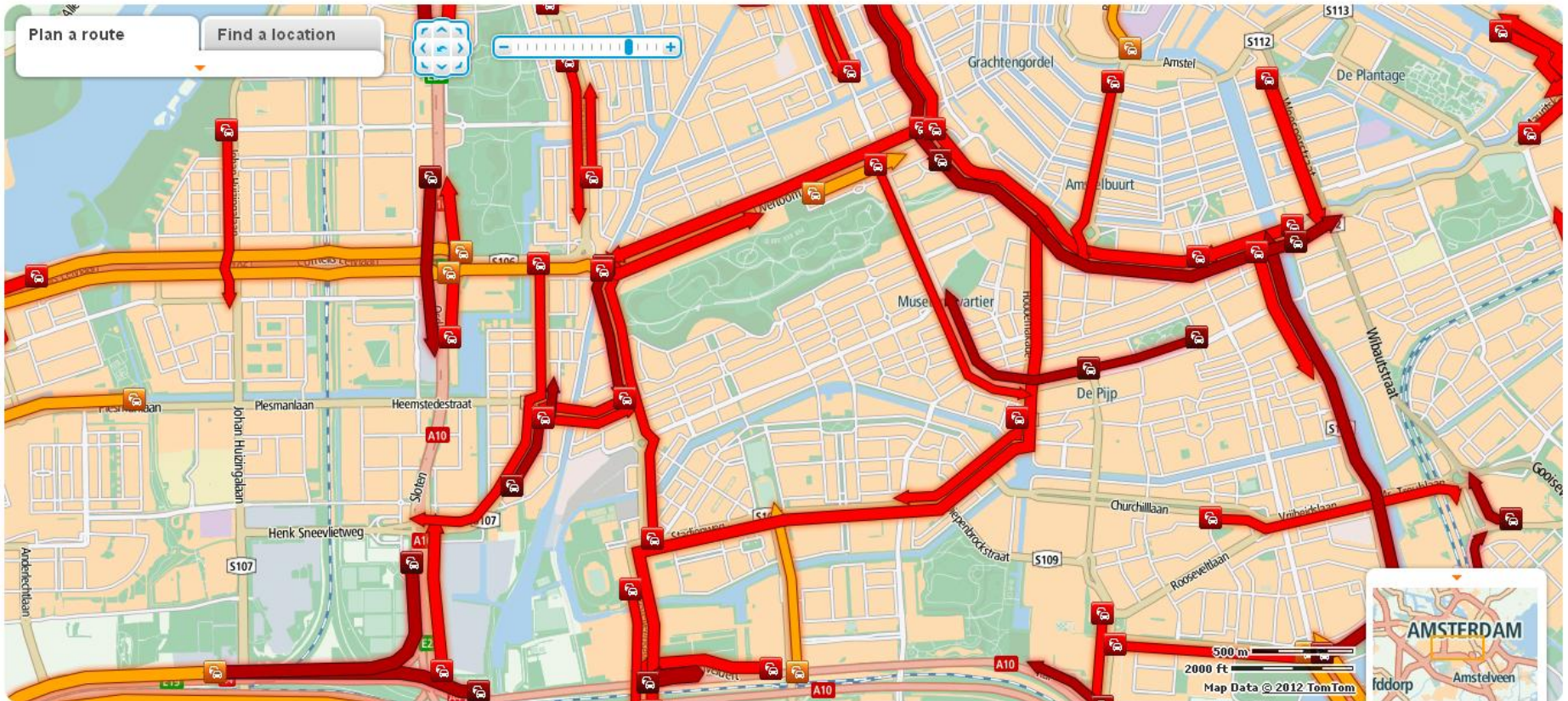
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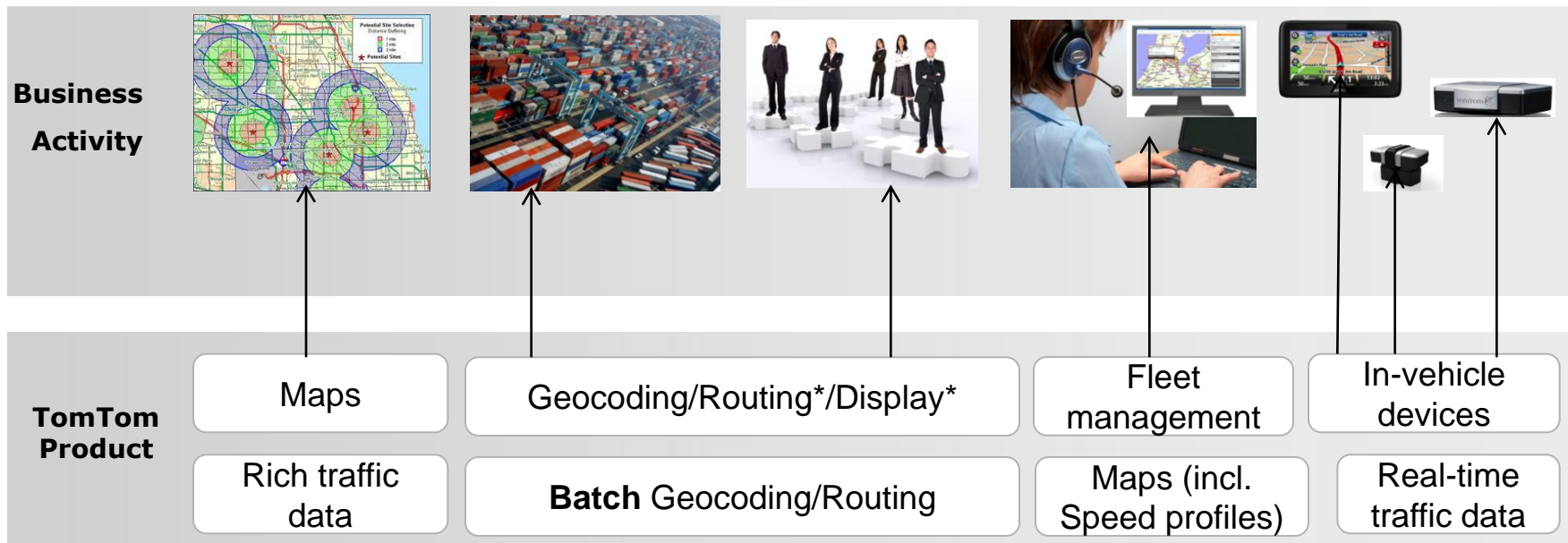
# Value proposition for B2B and B2G

TomTom extends the value of its

1. Dynamic Traffic feed and
2. Historical Database

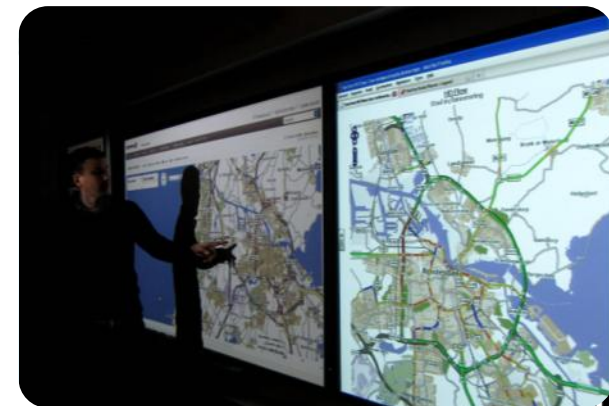
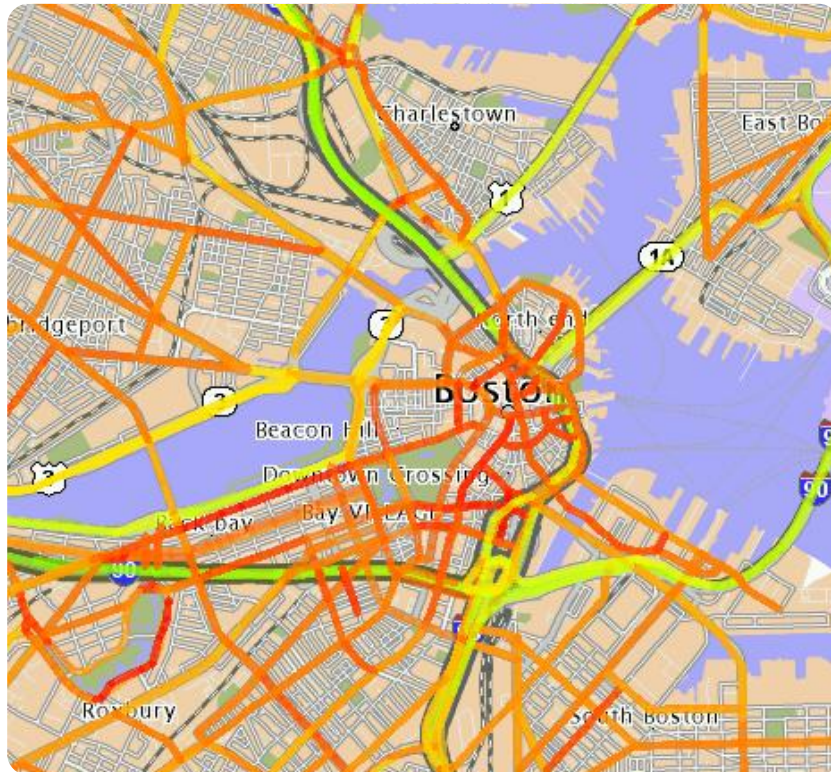
...to business and governments and jointly make traffic management drastically more efficient as well as effective...

# Conclusions: TomTom for smarter logistics

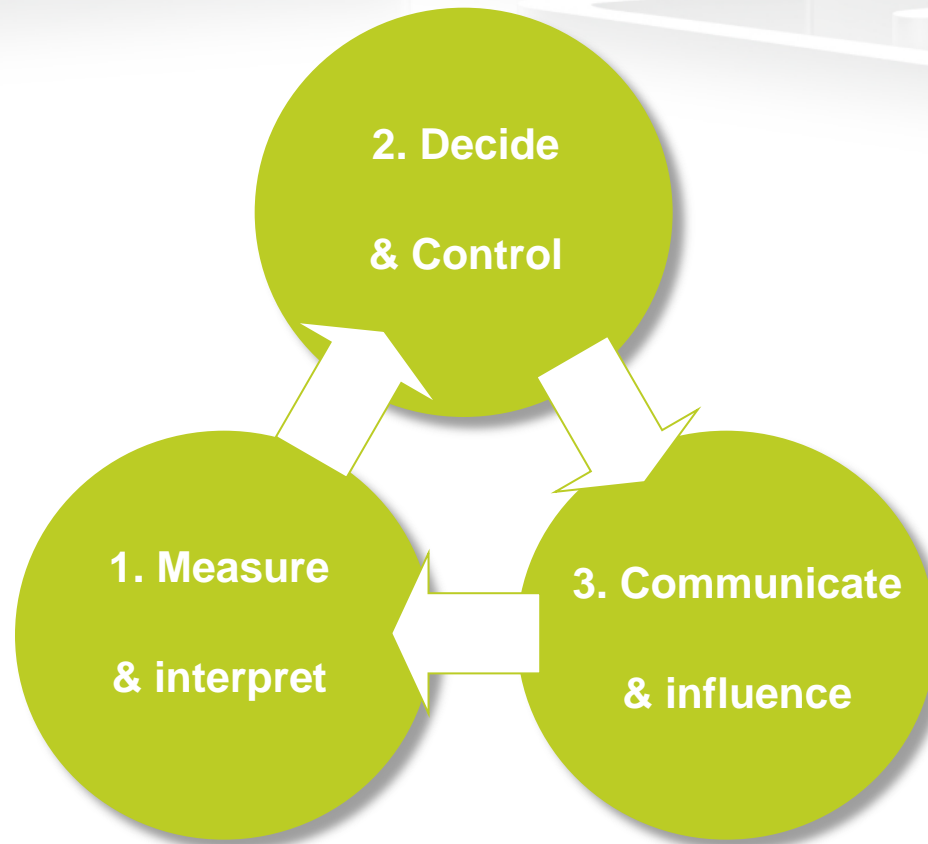


# Example: HD Flow

- Real-time speeds for the entire road network
- Updated every minute with either TMC or OpenLR location referencing
- XML feed in Datex2 for server to server communications
- Uses real-time probe measurements with historical data in the background



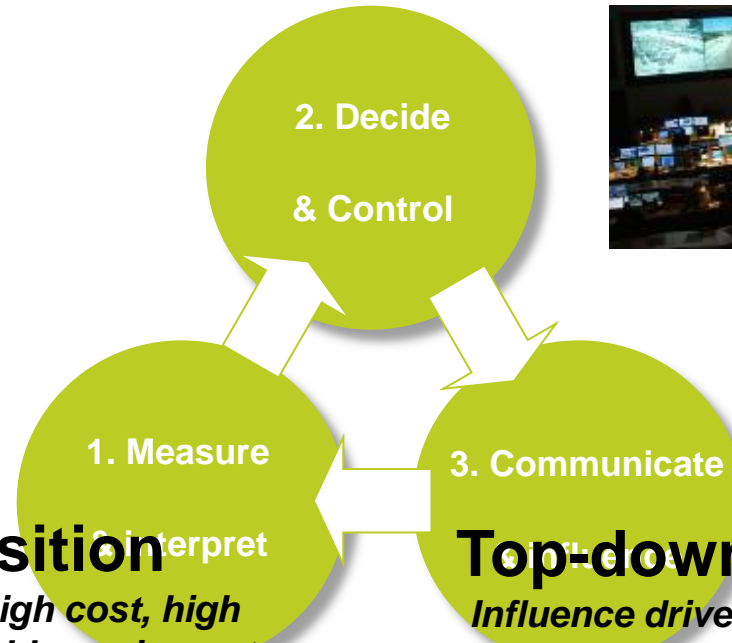
# Traffic Management process



# The current Traffic Management process

## Traffic Management Centers

*Low degree of automation, high human capital cost, inflexible, only feasible for big cities or regions*



### Data-acquisition

*Infrastructure based, high cost, high maintenance, non-scalable equipment*



### Top-down traffic control

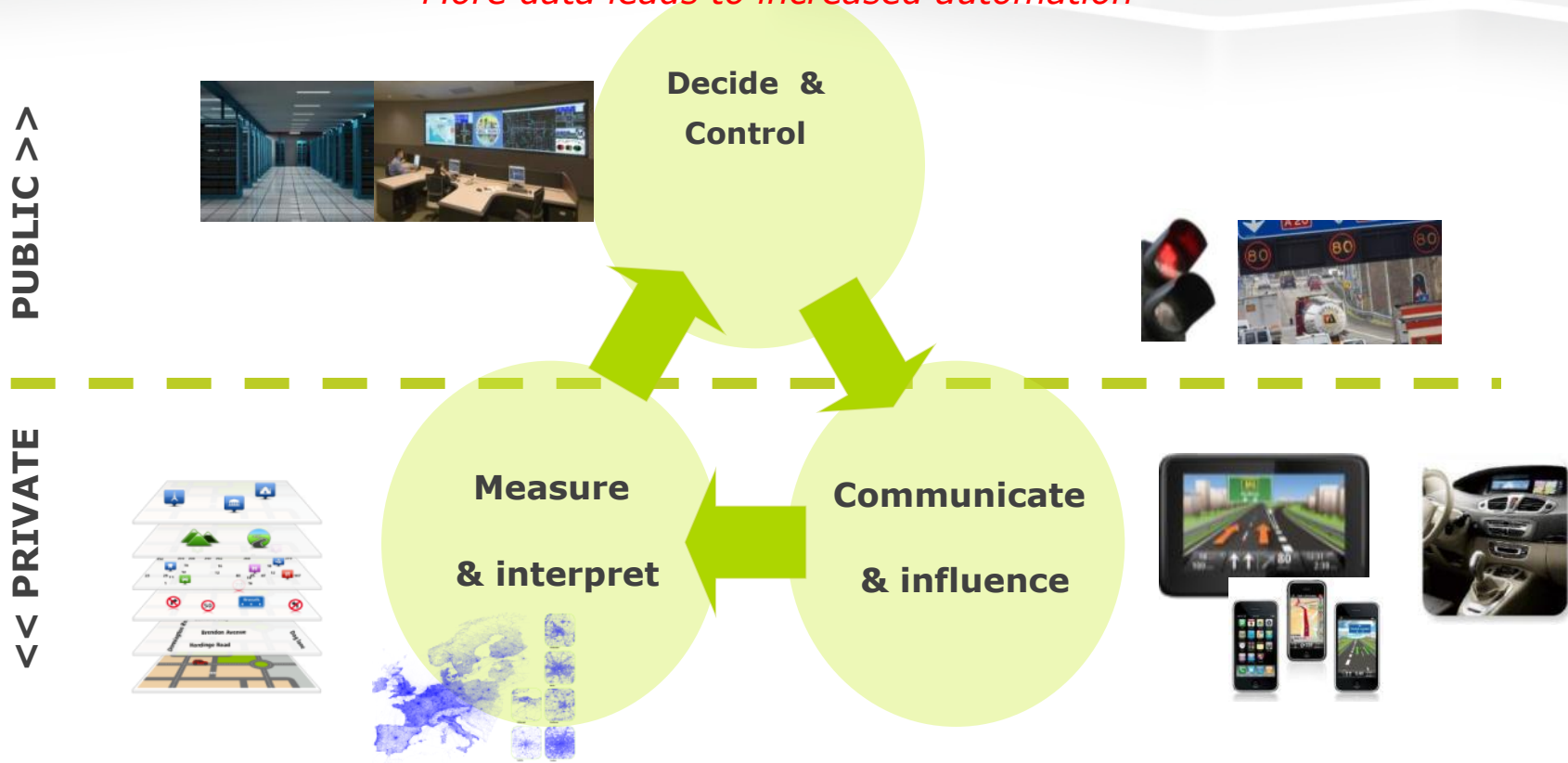
*Influence drivers behavior via top-down traffic management using public signing*



# Traffic Management 2.0

## Traffic Management Centers

More data leads to increased automation



**Buy data**

*Data offered by market*

**Communicate in-car**

*In Public Private Partnerships*



# Product concept



**65 parking spaces available**



Dynamic POI data via 3G enables real time info on parking availability, fuel prices and local offers.



Dynamic traffic light interaction via WiFi-P, or cellular, green wave assistance and adjusting traffic light timing



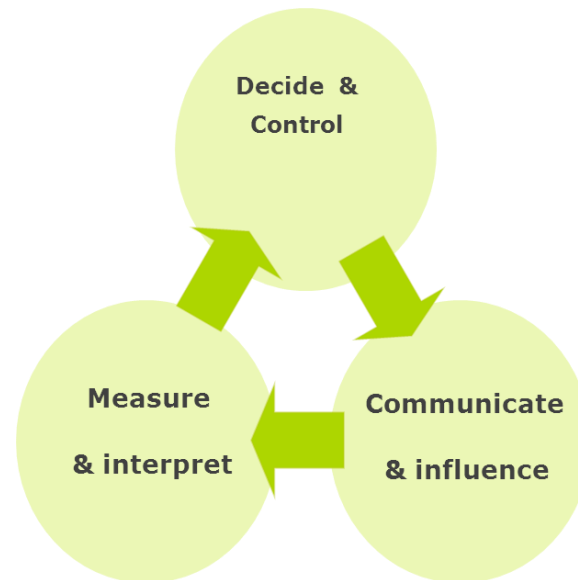
**Green in 12 seconds**





# In-car Centric Traffic Management's win-win-winners:

1. **Government:** Save money, receive more and better data, better traffic management
2. **Consumer:** Better routing experience, better information, cleaner, safer and more efficient driving
3. **Industry:** Revenue from road authorities (data) and consumer market (new in-car solutions)



# A vision into the future:

- ICT and traffic data will significantly raise efficiency in transport and logistics
- In the future, nobody can outsmart the car. Neither the driver, nor the road authorities. Let's make use of that
- In the future cars will have no pollution and will be inherently safe, and being in a traffic jam will be a predictable and voluntary happening
- To stimulate the innovation in traffic management, Road Authorities should withdraw from traffic information as well as data acquisition. Roads will be two-dimensional again

Thank you

Any questions?