



Fitting Adaptive Real-time Technology to the Population Geography and Regional Resources Across the European Union

AAL Forum 2014

Session A1 Reaching out new markets

A1-2

Stefan Carmien

Tecnalia, Spain

10 September 2014



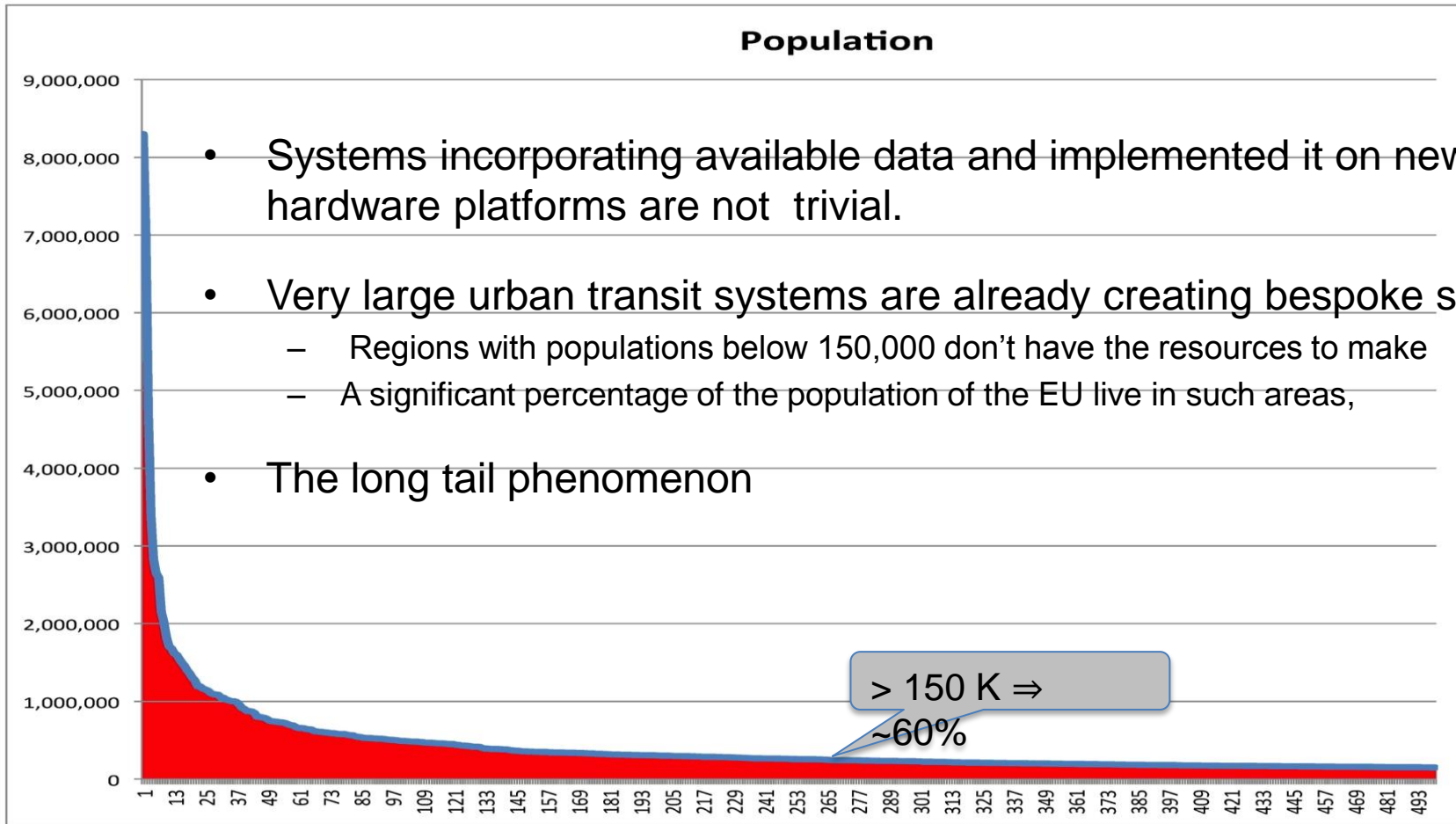
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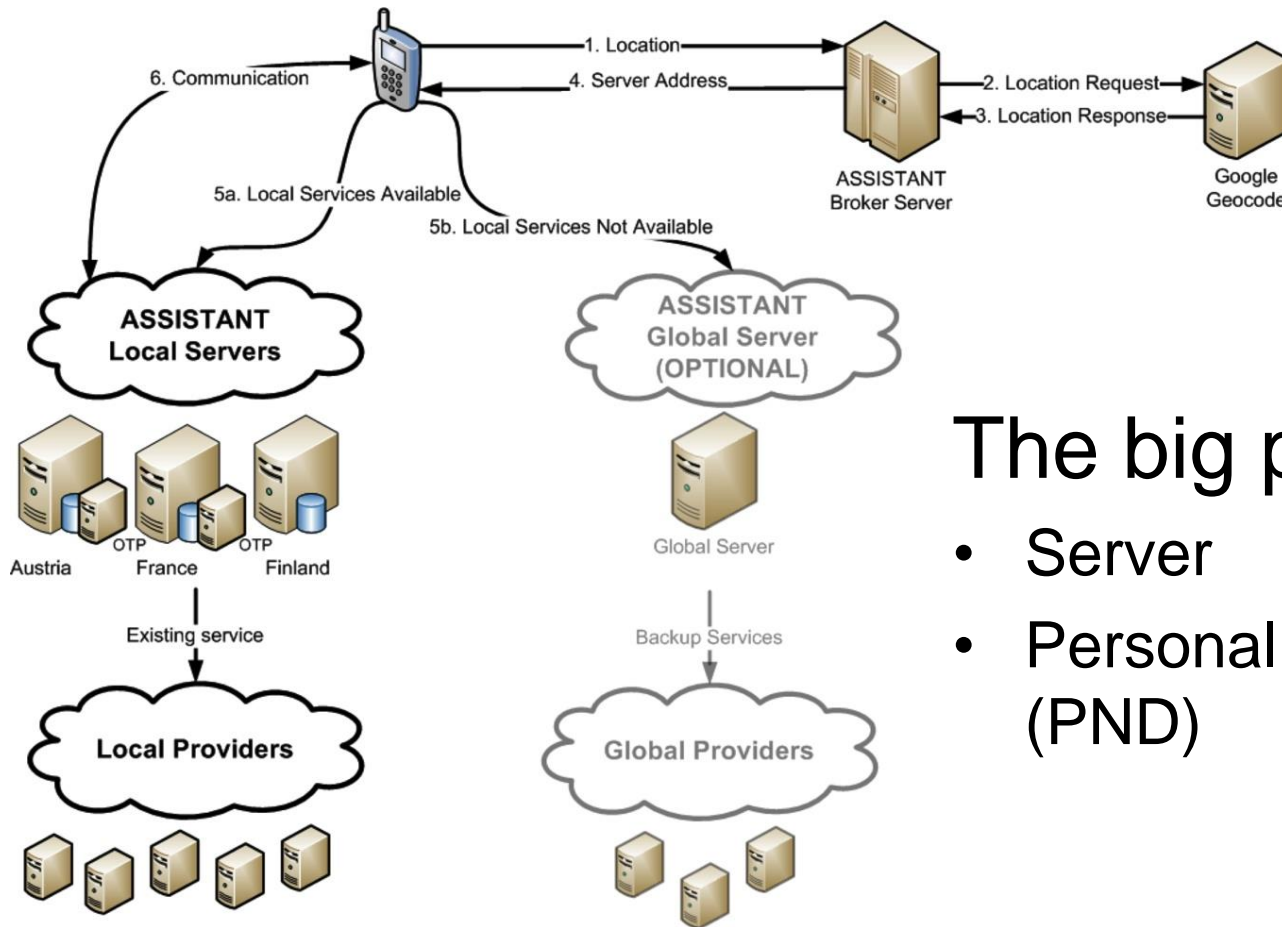
Elders and Public transport

- Ageing well \Rightarrow Independence \Rightarrow mobility (and \Leftarrow too)
- Smaller public transport agencies do not have the resources to create custom transportation support systems
- Current IT environment includes the availability of real-time location data as well as common file structures for storage of telemetric data
 - Widespread mobile data connectivity
 - Ever cheaper smartphones with a plethora of sensors and powerful processors
 - Real time location data and publicly available route and schedule information

Big City / Small City



How to do this?



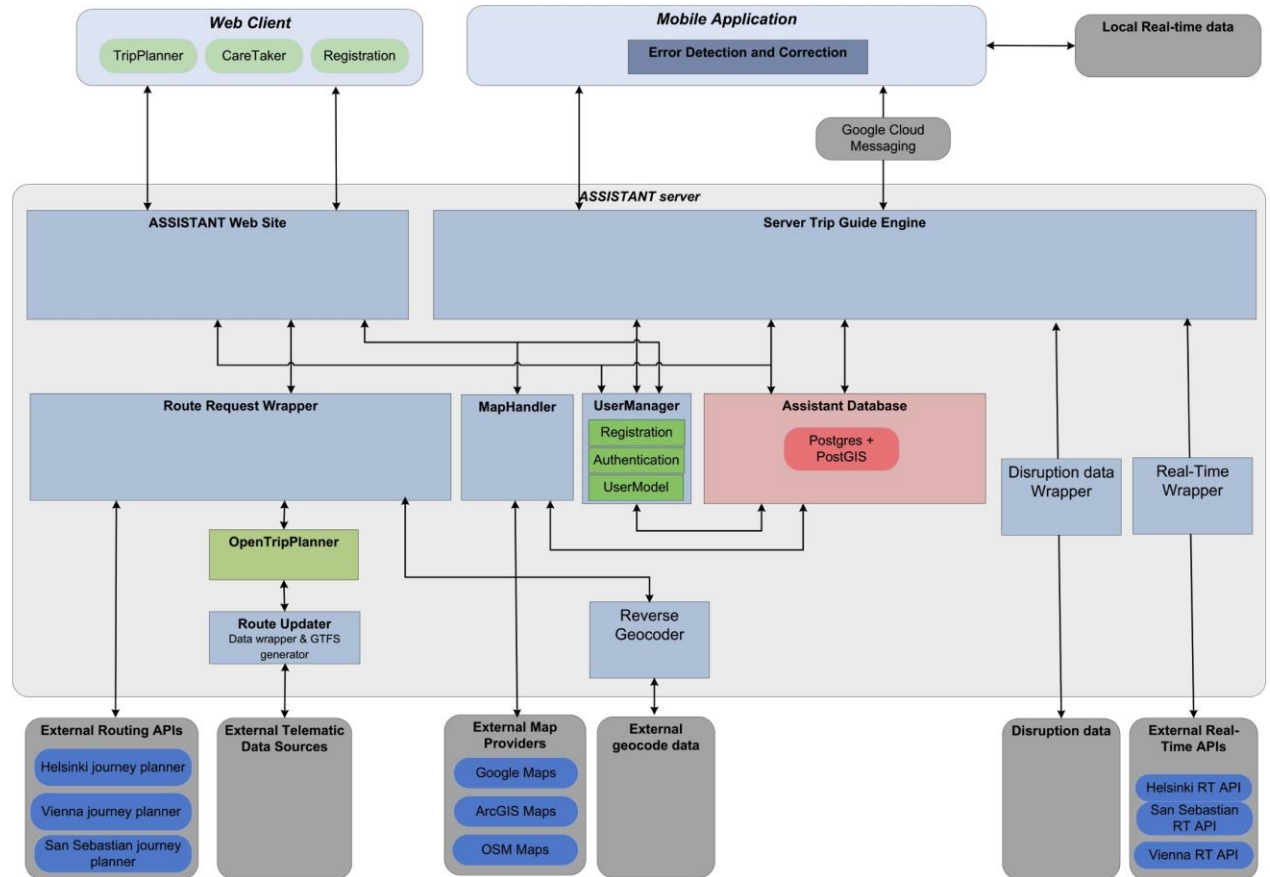
The big picture:

- Server
- Personal Navigation Device (PND)

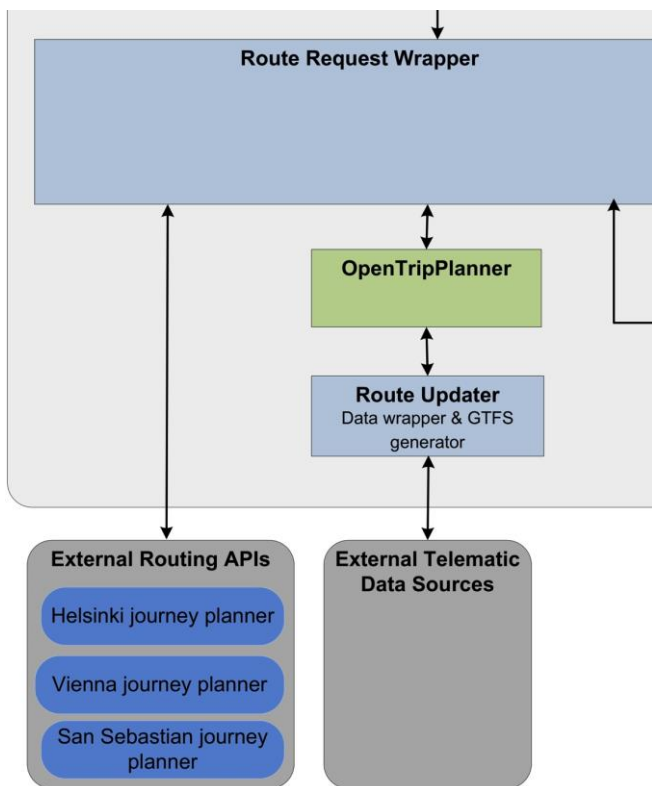
More Detail

Loose coupling allows proper localization

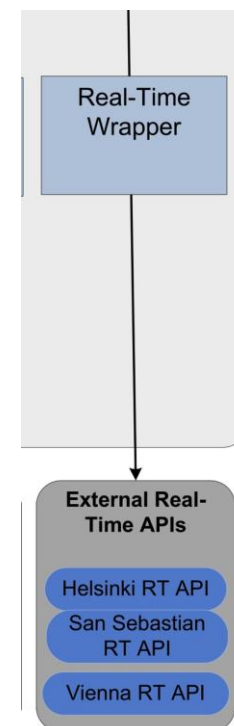
- Language
- Data
- Plans



Regional Implementation



- Plans
 - Schedules
 - Routes
 - Stops
- Events
 - Real-time data



Two approaches: API & OTP

Helsinki API -

<http://developer.reittiopas.fi/pages/en/home.php>

<http://developer.reittiopas.fi/pages/en/http-get-interface-version-2.php#route>

http://api.reittiopas.fi/hsl/prod/?request=route&user=assistant&pass=3ld3rc4r3&format=xml&psg_out=4326&epsg_in=4326&from=24.950054410130715%2C60.18282725412065&to=24.941256764562475%2C60.16707531793251&detail=normal

API – large systems

- Reflect Changes

OTP – smaller areas

- Standards based



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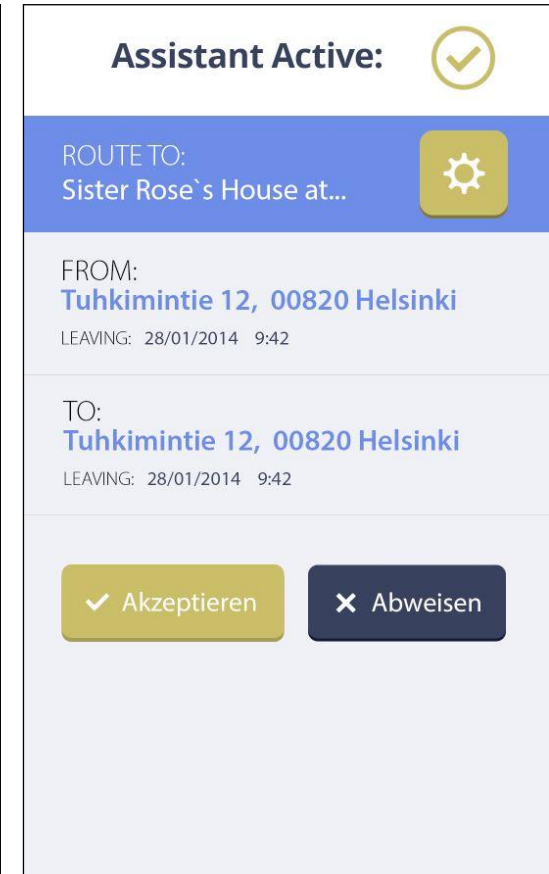
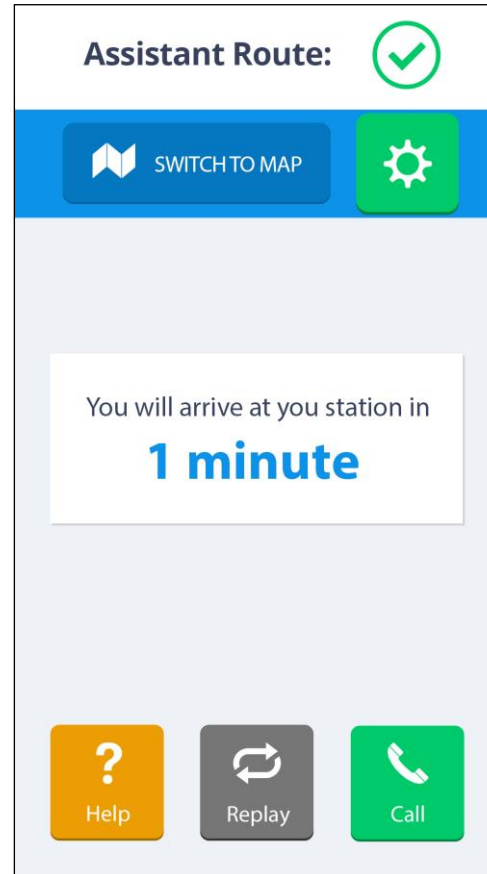
OPENTRIPPLANNER (OTP), GOOGLE TRANSIT
FEED SPECIFICATION (GTFS) AND DBUS

Alfonso Dominguez Garcia
alfonso.dominguez@tecnalia.com
December 2nd, 2013
ASSISTANT AAL project

San Sebastián install manual

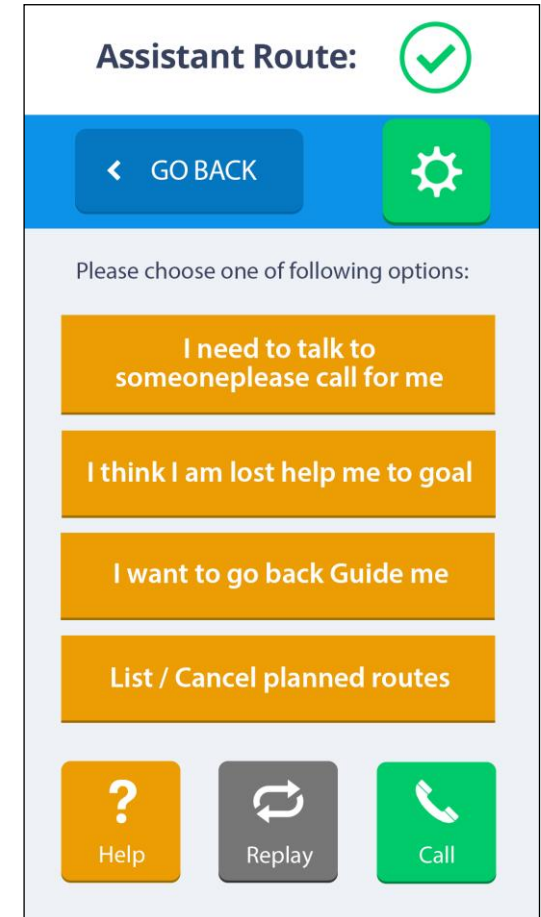
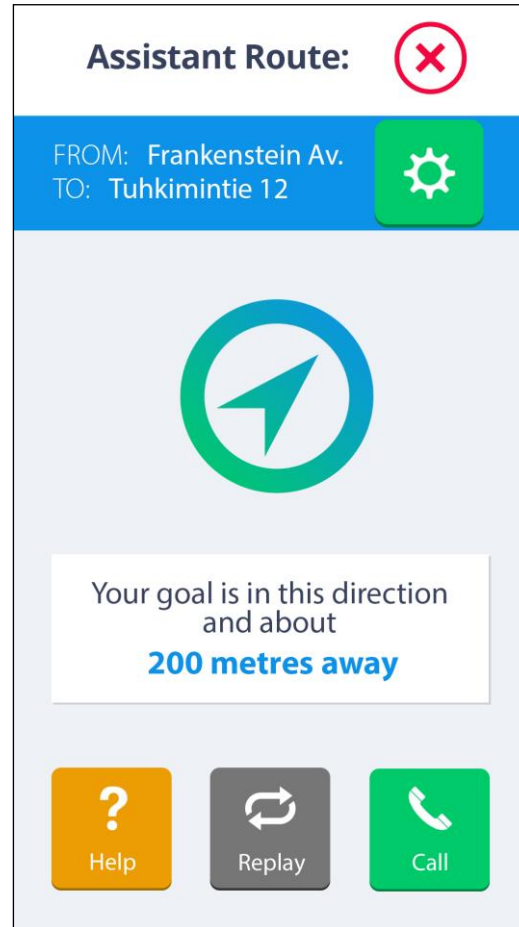
ASSISTANT on the PND

- PND on Smartphone
- Senior friendly GUI
 - And transparent synchronization
- The 5 R's



More PND user interface

- Last KM
- User Preferences



Web based route planning

The screenshot shows a web-based route planning application. At the top, there is a navigation bar with links for Home, Route planner, My information, and Error preferences. The user is logged in as 'Welcome, Hanno Motolla' and has a 'Sign Out' button. Below the navigation bar is a 'Create route' button. The main interface is divided into a left sidebar and a right map area. The sidebar contains input fields for 'From' and 'To' (both set to 'Vilnius'), a 'Date' selector (set to '07 / 01 / 2014'), and a 'Time' selector (set to '10' and '30'). There are also 'Search' and 'Save for next time' buttons. The map area shows a route from point A to point B in Helsinki, Finland. The route is highlighted in blue and orange. The map includes labels for various locations such as 'Lansiväylä', 'Västerledet', 'Lauttasaarentie', 'Käapelitehdas', 'Kellosaarenpuisto', 'Ruoholahti', 'Jätkäsaari', 'Hietalahti', 'Munkkisaari', 'Pyhiinvaeltajanpuisto', 'Eiranpuisto', 'Eiranranta', 'Merikatu', 'Havsgatan', 'Sirpalesaari', 'Tapahtumakeskus Telakka', 'Hietalahti', 'Tyyneimerenkatu', 'Tupaarinkuja', 'Hietalahdenpuisto', 'Sinebrychoffin puisto', 'Telakkakatu', 'Eteläesplanadi', 'Pohjoisesplanadi', 'Helsinki tuomiokirkko', 'Nykytaiteen museo Kiasma', 'Eduskunta', 'TempPELLIAUKION kirkko', 'Hietaniemen hautausmaa', 'Suomen Kaartin hautausmaa', 'Helsingin ortodoksinen hautausmaa', 'Kotkavuori', 'Pajalahden puisto', 'Lauttasaari', 'Kokkapuisto', 'Hällönnäisgatan', 'Käälähti', 'Eteläsaari', and 'Kirurgin sairaala He'. A 'Send to mobile' button is visible at the bottom of the map area. The route planning details show a travel time of 15min and a distance of 1,2 km for walking.



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Thanks

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stefan.carmien@tecnalia.com

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