



11th ITS EUROPEAN CONGRESS
DELIVERING FUTURE CITIES NOW

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MOBiNET: Architecture and experience from a marketplace for mobility services

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Structure

- Project overview and vision
- Overview of architecture and its components
- Platform details
- Current state and experiences
- Summary



MOBiNET

- Project name: Europe-Wide Platform for Connected Mobility Services
- Collaborative project (IP), 7th EU Framework Programme for Research & Technological Development
- 34 partners from different sectors
- 56 months duration (until 30.6.2017)
- <http://www.mobinet.eu>



Vision – Use Case Example

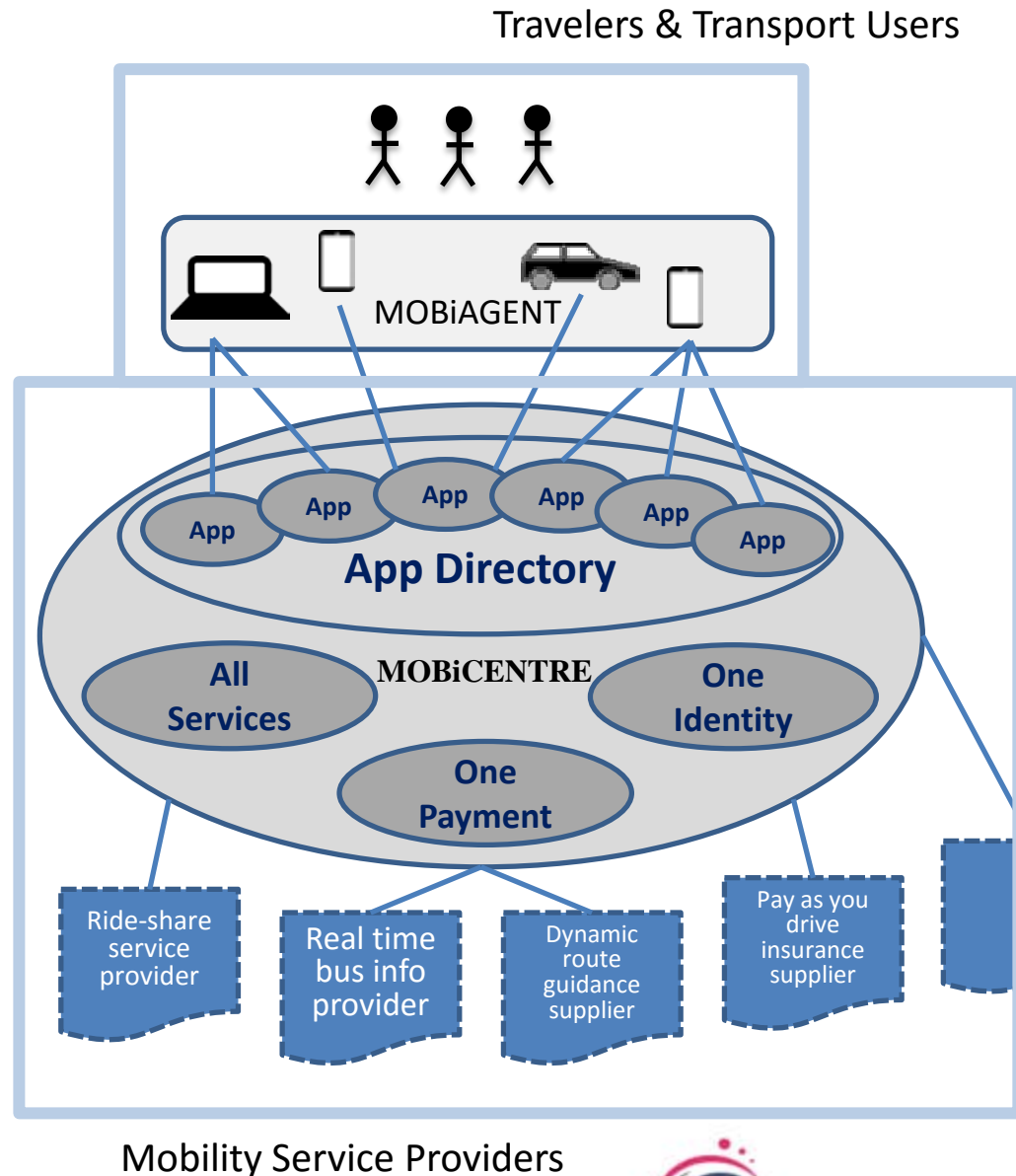
- Drive through Europe, e.g. from Aalborg (Denmark) to Trikala (Greece)
- Use your favourite app to find parking place, book ticket and pay for it
- In the background, the app
 - queries platform for locally offered services
 - integrates them based on provided service description
 - uses identity and common billing interface for payment



Vision

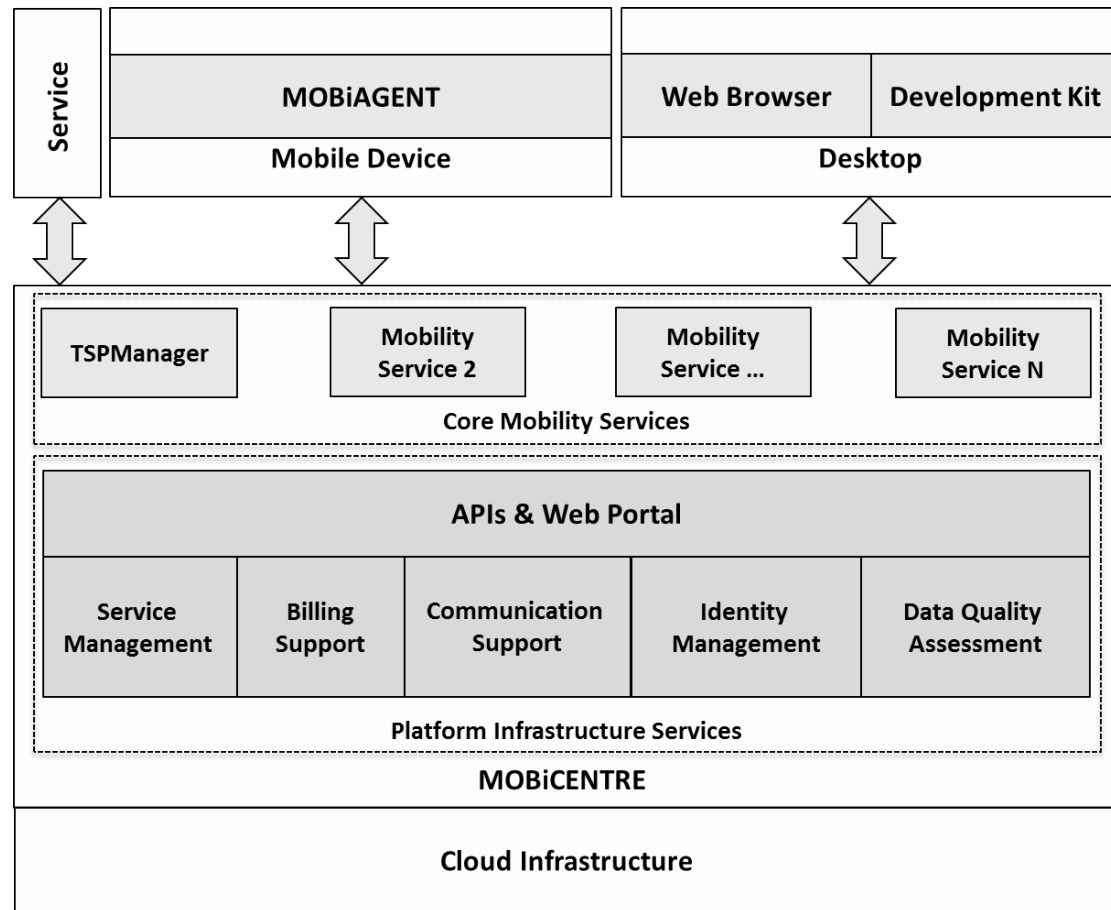
“Open” marketplace platform for seamless travel & transport services for travelers & transport users

- **Single** sign-on, identity and account
- **Unified** billing and clearing system
- **Availability** and **interoperability** for services throughout Europe
- **Enabling** enhanced products and access to new customers



Overall Platform Architecture

- Platform functionalities provided by dedicated components
- Hosted on scalable cloud infrastructure
- Dedicated environment for testing and 2 productive environments
- Open and well known protocols for low barriers
 - Usually based on REST
- Use components as much as you need

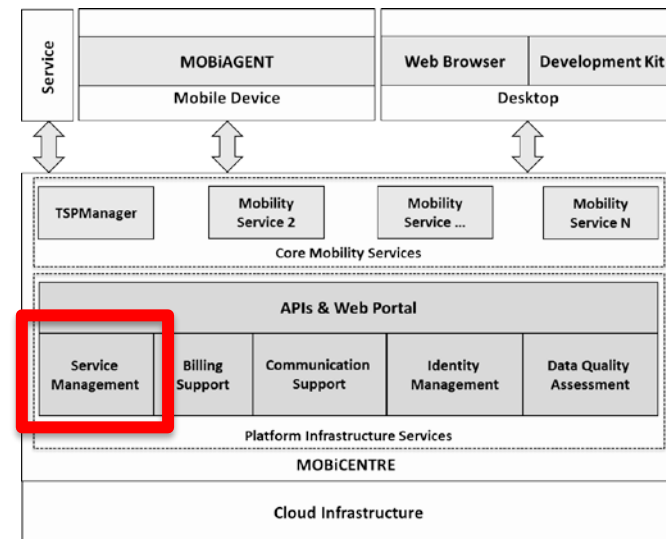


Service Management

- Core component to realize eMarketplace
- Publishing mobility related data and services, in order to offer these to anyone interested, business or consumers
- Search for data and services: categories, tags, location based, data format, company and other
- Publish data formats
- Use Service Directory possibilities in own services with an API
- Minimal steps needed to become part of it (ca. 15 min.)

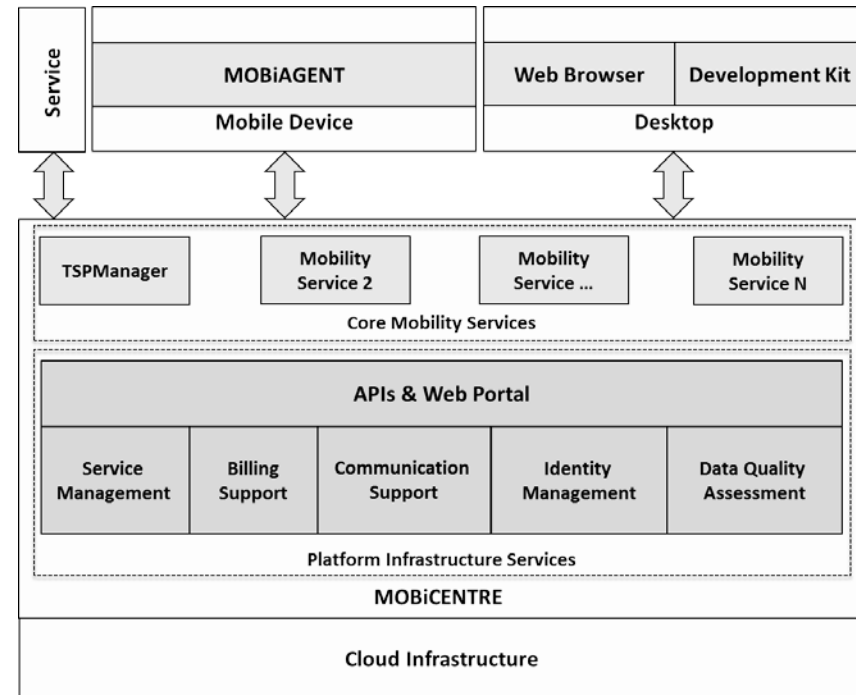


(Map: Google)



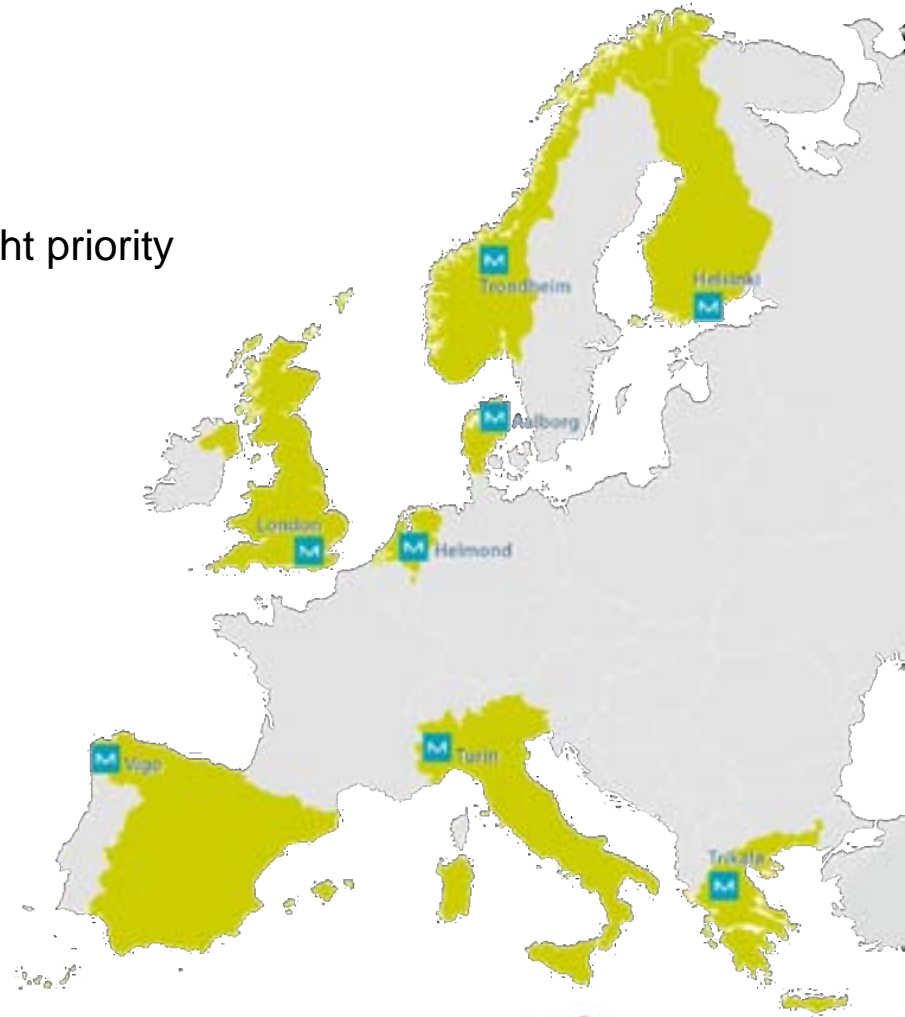
Platform Components

- Service Management
- Identity Management
- Billing Support
- MOBiAGENT
- SDK
- Dashboard
 - Analytics Server
- Communication Support
- TSP Manager
- Data Quality Assessment
- Privacy Framework



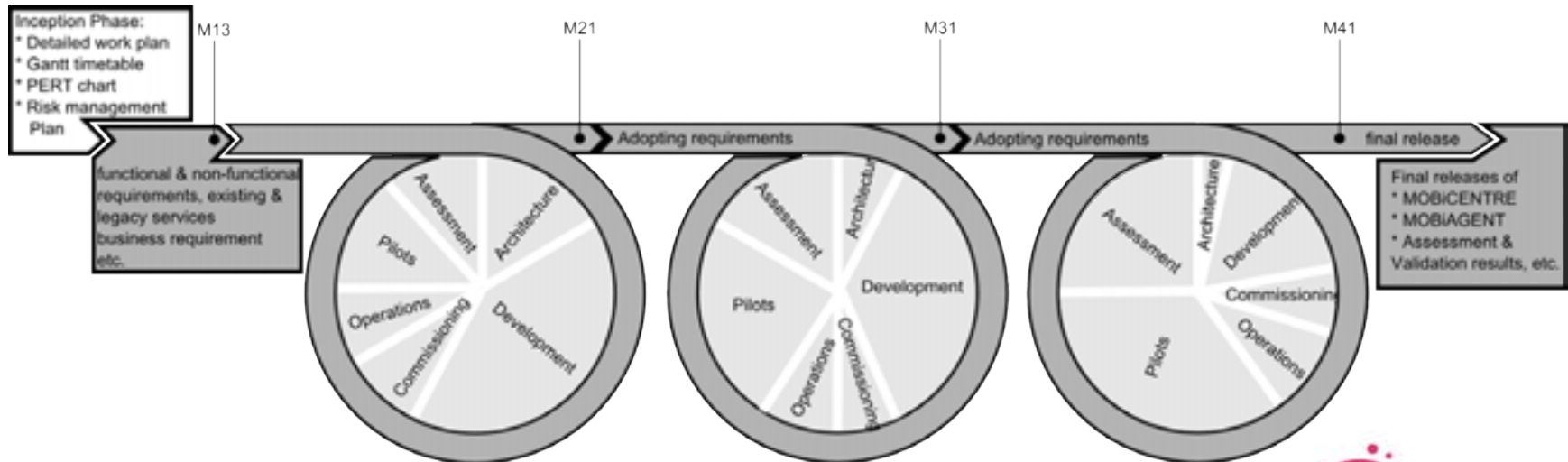
MOBiNET Use Cases and Pilot Sites

- Green Light Optimal Speed Advise
- Use-based insurance
- Multimodal travel assistant
- Ad-hoc priority routing
 - Efficient traffic management – traffic light priority
 - Traffic priority for emergency vehicles
- Demand-responsive transit
 - Personal Rapid Transit
 - Dial-A-Ride
- Non-stop truck
- Floating vehicle data
- Parking service
- Real-time traffic information
- Mobility and strategy advisor (B2B service)
- Social traffic
(social media-shared traffic information)



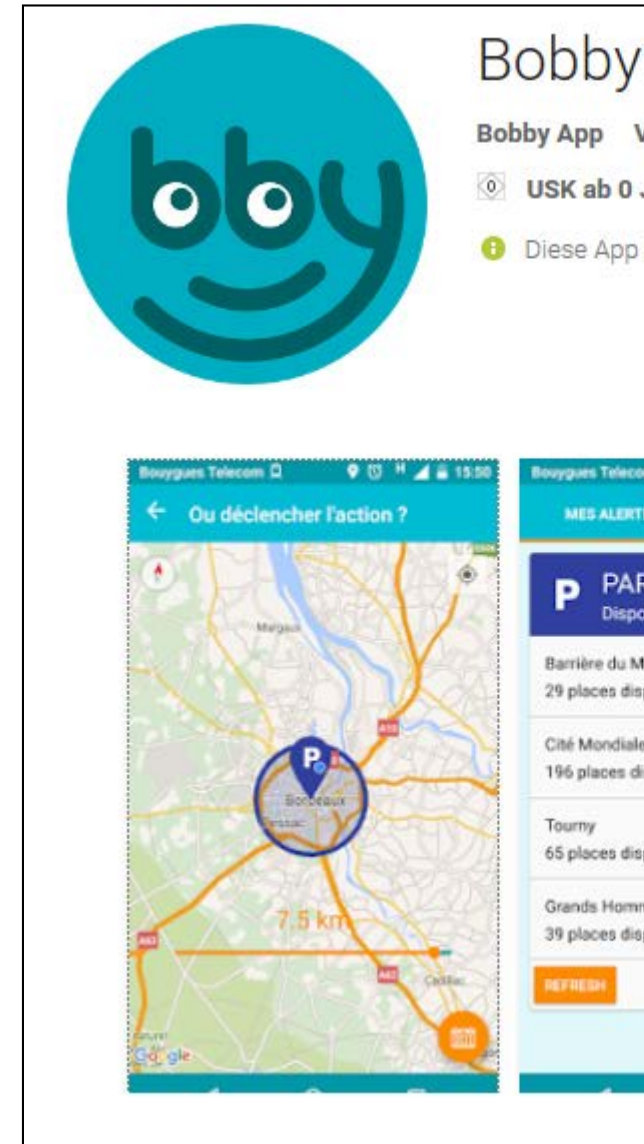
Current Status

- Research project with initial prototype as result
- Iterative development with 4 major releases and several minor releases
- Release 3.0 prepared for ITS Bordeaux with first time access on hackathon
- Release 3.1 currently under preparation for this summer



Experiences

- Internal usage by service working groups
 - Service working groups discussions often more complicated than for platform with focus on “organizational” issues
- First external access to platform on hackathon
 - A lot of valuable feedback
 - Very different views / groups
 - Available services at least important as platform itself
 - Possible to develop results for MOBiNET within 2 days
 - One of the winner teams “Bobby” also here on ITS Glasgow
- Research project with limited focus on UI
 - UI extremely important for users
- Open public access planned for end of year



Summary

- Marketplace linking end users, content- and service-providers
- Open architecture based on established standards and open protocols
- Several use cases and services
- European research project with local stand at ITS

MOBiNET: the Europe-wide e-market place of mobility services for businesses and end users

See you @ MOBiNET stand C40!



@MOBiNET_EU



Group MOBiNET “the Internet of (Transport and) Mobility”

www.mobinet.eu