Day 1
Big Data

Data for maximum reuse

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Your system

Agree on a protocol
Will determine which questions can be answered in a timely fashion

Car manufacturers and Data reusers

Can ask questions to your system as previously agreed
A story of raising interoperability

When I have 2 datasets, how easy is it to turn them into 1 dataset?

- legal
- technical
- syntactic
- semantic

Querying
An API for your mobility system

http://api.{mysystem}/?from={A}&to={B}
A long tail for transport data services

Hard to guess what to provide:
Wheelchair accessible? Quiet car? Maximum transfers?
An API for your carsharing system

http://api.{mysystem}/?from={A}&to={B}
&departureTime=2016-10-11T12:45
&wheelchairAccessible=true
&maxTransfers=3
&algorithm_mode=shortest

...
http://api.{mysystem}/?from={A}&to={B} &departureTime=2016-10-11T12:45 &wheelchairAccessible=true &maxTransfers=3 &algorithmMode=shortest &mode=train,bus,taxi,ridesharing,carpooling &foldableBike=true...

**DOESN’T SCALE**

**NOT A GOOD WAY TO PUBLISH OPEN DATA**
Transport has become a data sharing problem

How can we fix it?
Maximizing reuse → need to raise the interoperability
Open Data starts with an open license
A story of raising interoperability

When I have 2 datasets, how easy is it to turn them into 1 dataset?

- **legal** → Open Definition & open licenses
- **technical** → The Internet: exchanging data world-wide
- **syntactic** → JSON, XML, CSV, HTML... Open Standards
- **semantic** → Linked Data

Querying
Where can you get in what amount of time?

under specific conditions:
taking into account: multimodality, criminality, your subscriptions,
what you’re carrying, route speed limits, disabilities, etc
Is our data interface striking the golden mean?

Data publishing (cheap/reliable)

Smart agents

Data dumps

Dataset split in fragments

Data services (rather expensive/unreliable)

Smart servers

algorithms as a service

Entire query languages over HTTP
ETSI ISG-CIM - Context Information Management

Use cases in Smart City transport, Citizen involvement, Smart Agriculture

Many trials and pilots running ... but where are the "recommendations"?

Need further Stakeholders to expand ISG CIM Group

- Open Source developers
- Database experts for Linked-Data
- City administrators
- ...

Confenece Connected and Automated Driving
TOGETHER, SHAPING THE FUTURE
A world where knowledge creates power for the many, not the few

Questions?

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