International Transport Forum

What *MaaS* we consider when thinking of data and platform governance?

1. Data
2. MaaS agents and data value
3. Data sharing and governance
4. Data syntax

OECD

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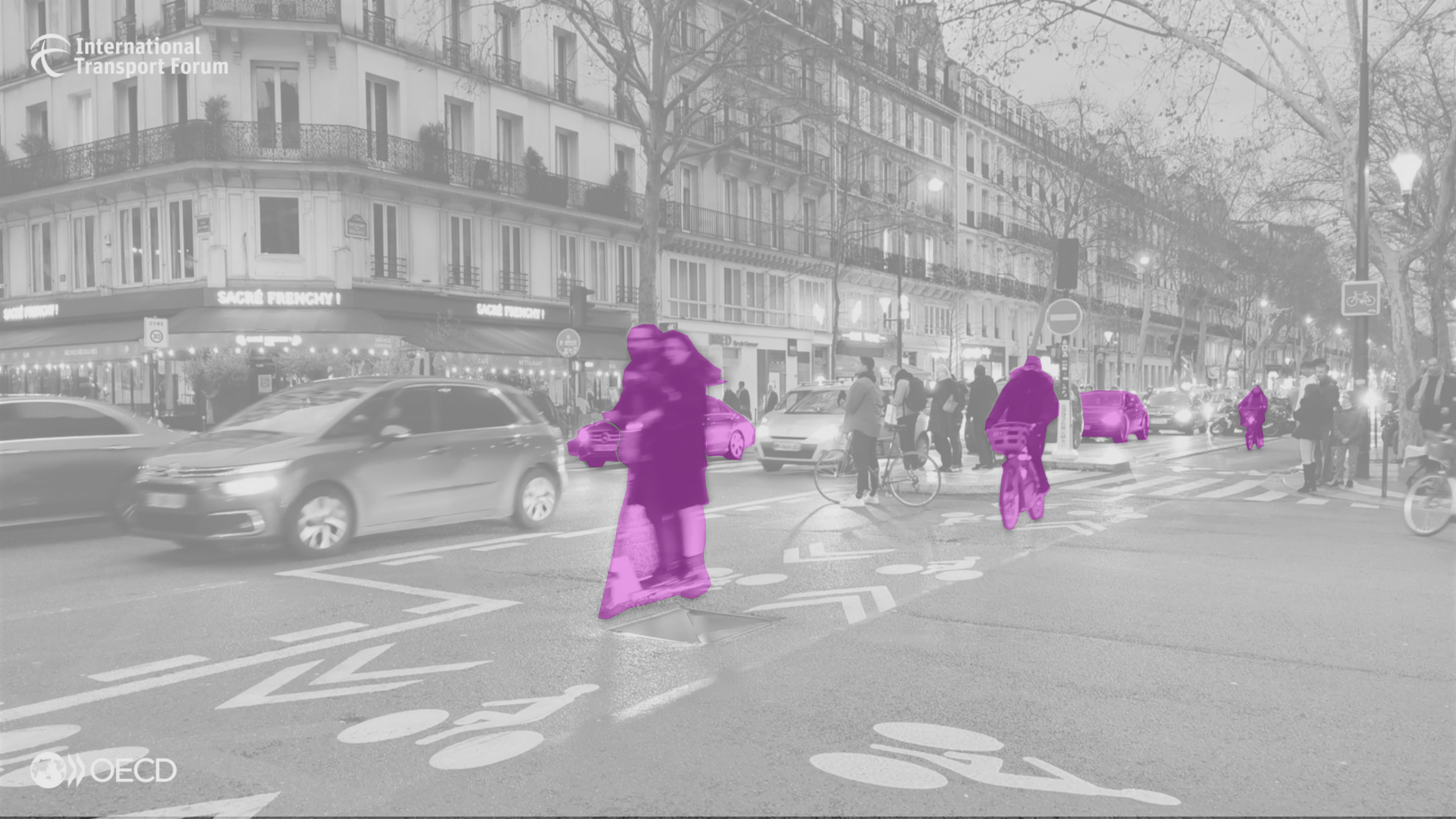
International Transport Forum
SACRÉ FRENCHY !
OECD


International Transport Forum
who | what | where | when | how | how much?
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International Transport Forum

New data sources

Apps	Operating systems	Devices

OECD

3 things about mobility data

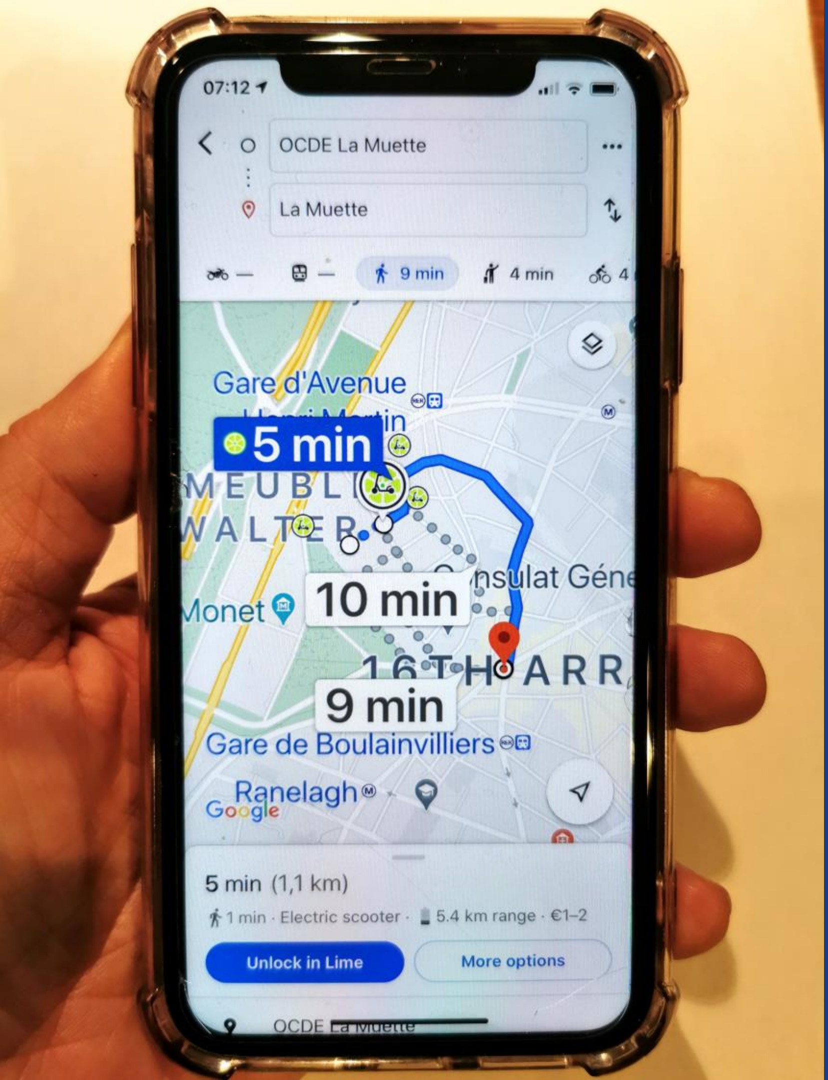
Some (even anonymised) data is inherently privacy-sensitive

Some data is inherently commercially sensitive

Some data is brand-sensitive

The value of data: For whom and for what?

People	Operators	*3rd Party Aggregators*	*Public authorities*
*… **to** access services they value*	*…to improve operations and build their brand*	*…to develop products and sell data insights*	*…to carry out their mandates for citizens*



The power of the user interface

All of MaaS is only ~ 30 cm^2

Presentation bias is significant in determining user preference*

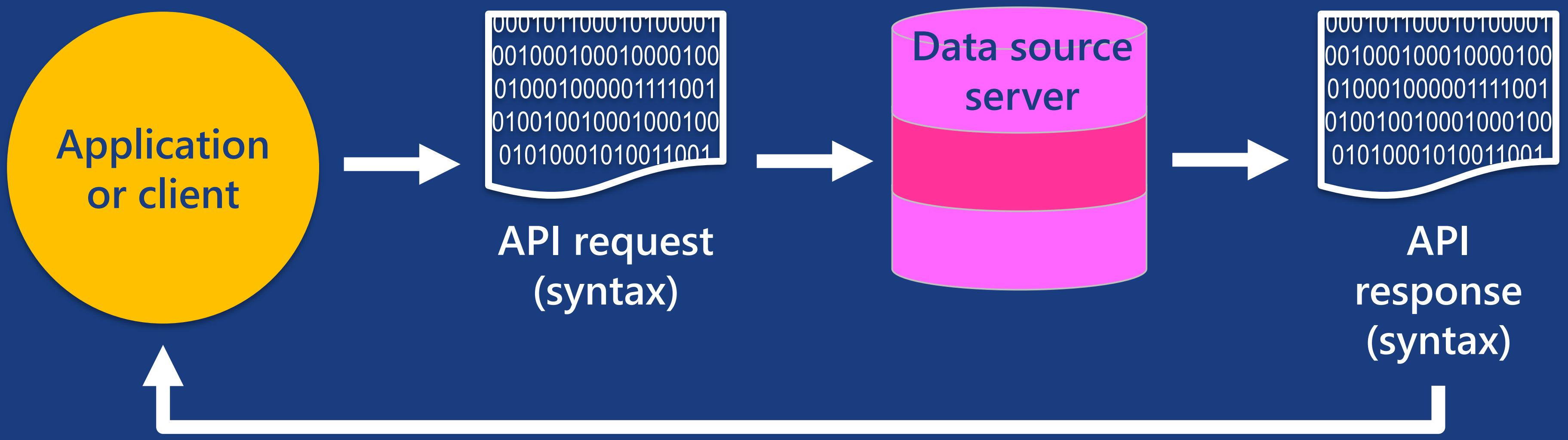
Issue common to other digitally-mediated services – e.g. airline CRS

Should the potential recourse be MaaS-specific or medium-specific?

Judit Bar-Ilan,et al (2009): https://doi.org/10.1002/asi.20941

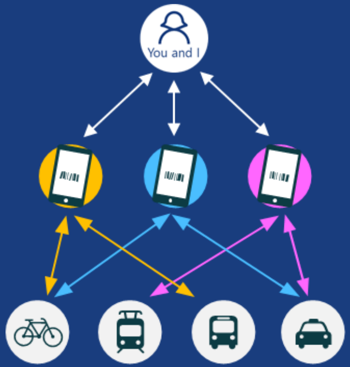
Data sharing, governance and MaaS models

Application programming interface - API



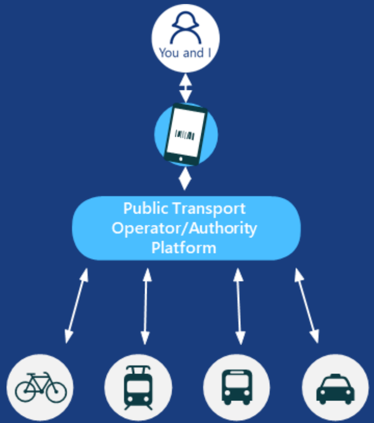
Data sharing, governance and MaaS models

Commercial Integrator



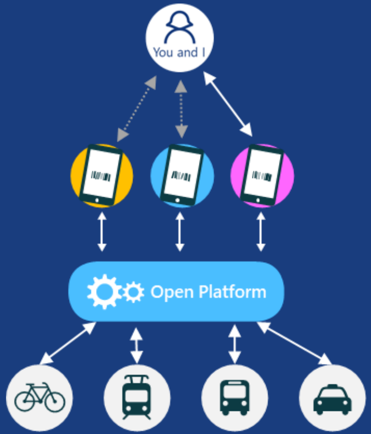
« *walled gardens* »
curated
bespoke/open APIs

Public Transport/ Authority Integrator



« *public MaaS* »
Uni-directional APIs

Open and regulated back-end platform



« *regulated utility MaaS* »
Multi-directional APIs

Decentralised MaaS ecosystem

« *Mesh-y MaaS* »
Smart contracts
instead of APIs

Adapted from UITP, EMTA, Polis, ITF

Platform economics and competition

Platform mediation reduces coordination (transaction) costs

Network effects in two-sided, multi-sided markets: early and large players develop advantage – contestability of the market untested

Data sharing helps building services but bypasses operator self-distribution channels– trust “contracts” and “smart” contracts

Common basic fare APIs, bespoke contract-based joint fare APIs built on open standards

“Who do you trust?”

trust architecture models

operator

public authority

Trust Architectures

"don't trust public authorities"

Trust Architectures

"don't trust operators/platforms"

Trust Architectures

"don't trust anyone"

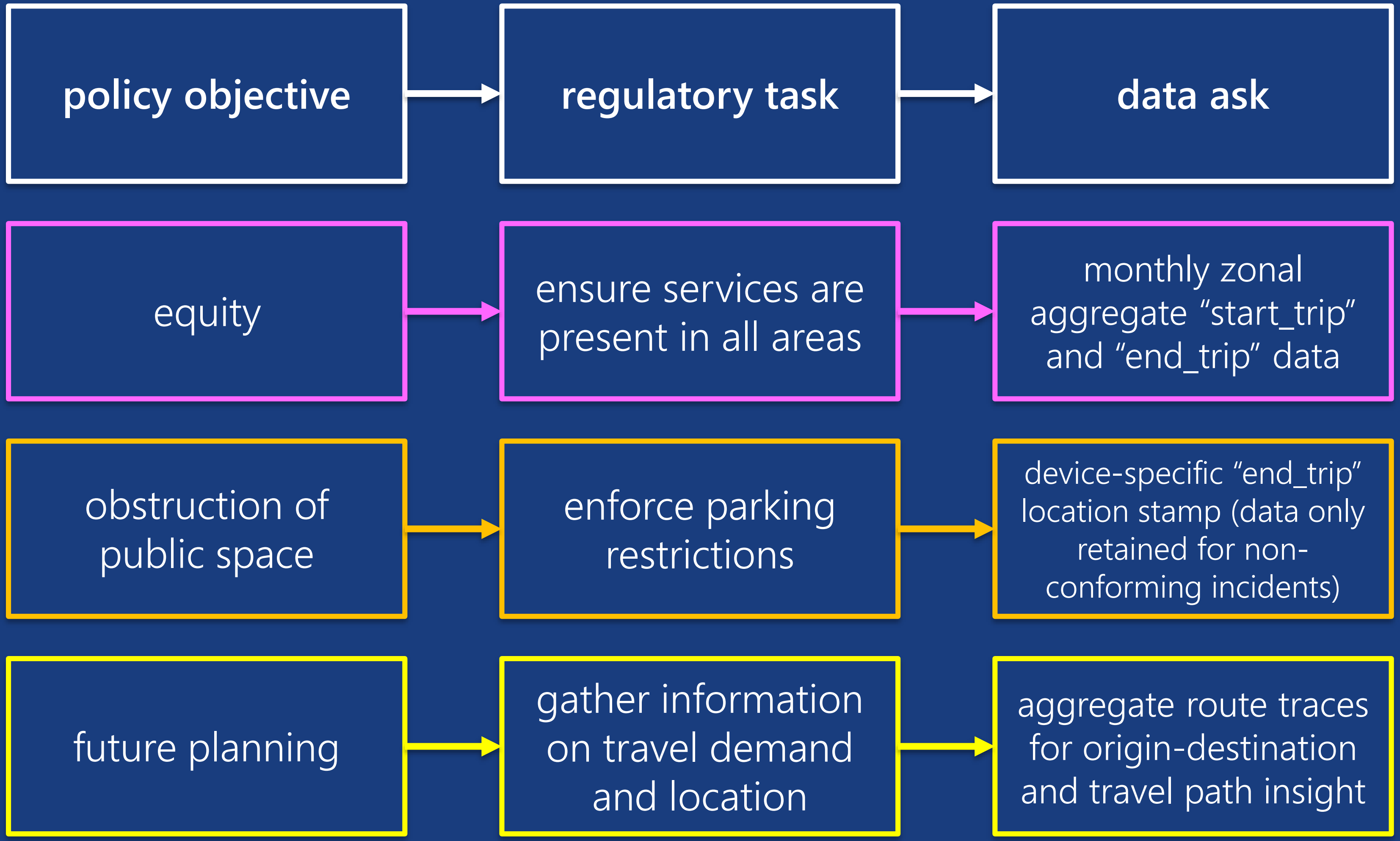
operator

trusted 3rd party
data processing

public authority
audit

Trust Architectures

Trust linked to transparency on purpose, use and data minimisation


policy objective
regulatory task
data ask
equity
ensure services are present in all areas
monthly zonal aggregate "start_trip" and "end_trip" data
obstruction of public space
enforce parking restrictions
device-specific "end_trip" location stamp (data only retained for non-conforming incidents)
future planning
gather information on travel demand and location
aggregate route traces for origin-destination and travel path insight

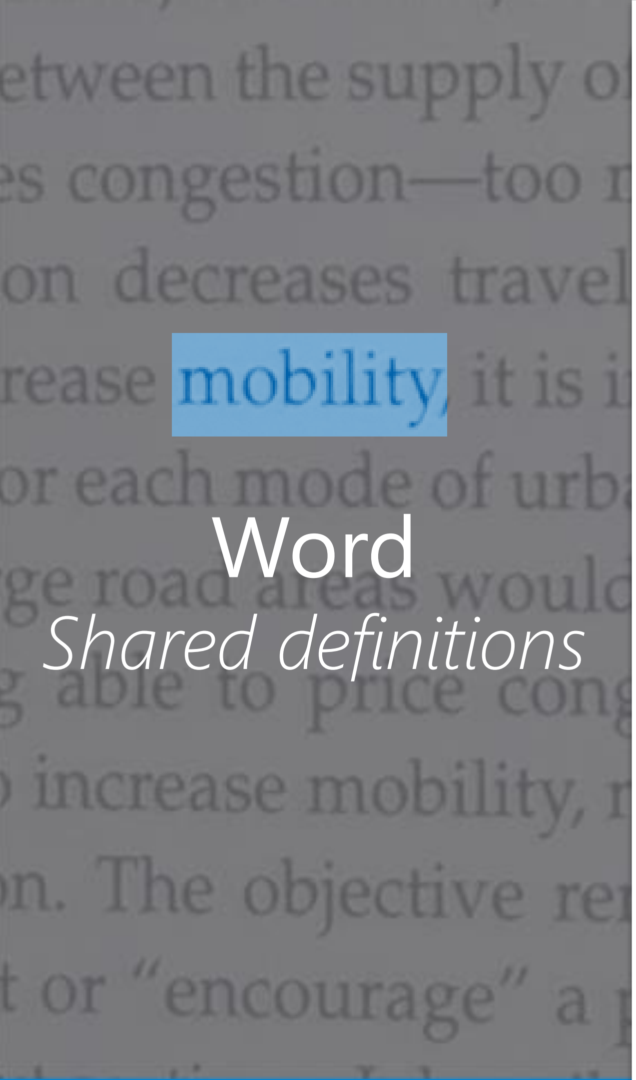
Issues regarding data sharing

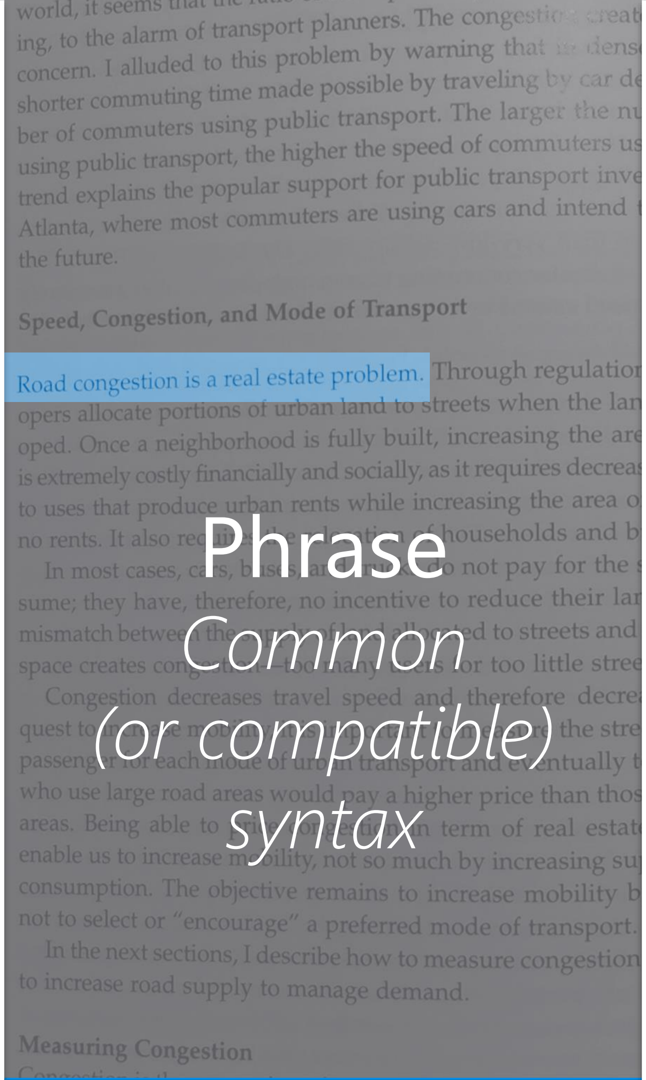
Direct access to data (lakes) or ensuring competitive access (APIs)

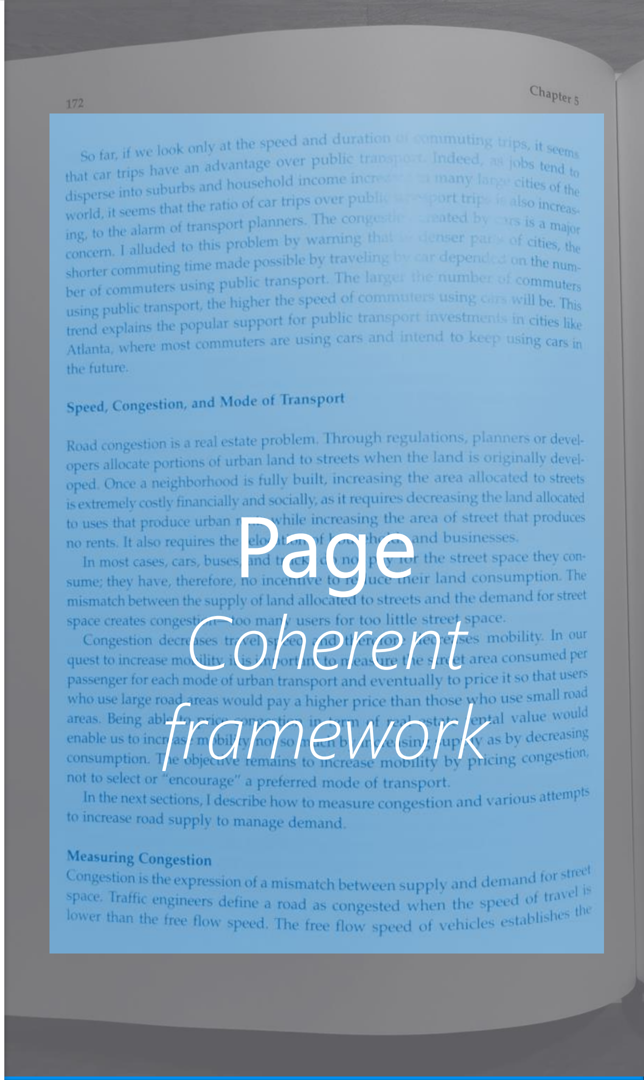
Data specification or functional outcome specification

Data sharing under different regulatory/operating regimes (PT vs others)

MaaStory-telling


mobility
Word
Shared definitions


Road congestion is a real estate problem.
Phrase
Common
(or compatible)
syntax


Page
Coherent
framework

Glossary and Metrics

Regulators—from policymakers to infrastructure managers and planners—rely on data to make decisions. It is imperative that performance metrics are consistent across operators and regions to enable stakeholders to effectively communicate and measure the impact of new forms of mobility. *Data Sharing Glossary and Metrics for Shared Micromobility* provides a consensus-based set of definitions for commonly used terms and metrics.

DOWNLOAD

shared definitions

Why GitHub? Team Enterprise Explore Marketplace Pricing

NeTEx-CEN / NeTEx

Code | Issues 26 | Pull requests 36 | Actions | Projects | Security | Insights

master · 4 branches · 0 tags · Go to file · Code

seime Added missing keyref to AdministrativeZone (#106) · 3f80f64 on Aug 21 · 76 commits

.circleci	Changes and fixes up until May 17th 2019 (#88)	6 months ago
examples	Added missing keyref to AdministrativeZone (#106)	last month
xsd	Added missing keyref to AdministrativeZone (#106)	last month
.gitignore	Changes and fixes up until May 17th 2019 (#88)	6 months ago
.travis.yml	Disable ruby installation for Travis	3 years ago
LICENSE	Create LICENSE	3 years ago
NeTEx.spp	Changes and fixes up until May 17th 2019 (#88)	6 months ago
NeTEx.xpr	Changes and fixes up until May 17th 2019 (#88)	6 months ago
README.md	(minor) updated copyright period to include 2020 (#91)	5 months ago

About

NeTEx is a CEN Technical Standard for exchanging Public Transport schedules and related data.

netex-cen.eu

public · transport · xsd · schema · cen · netex · timetable · exchange

Readme

GPL-3.0 License

Releases

No releases published

common/compatible syntax

Why GitHub? Team Enterprise Explore Marketplace Pricing

TOMP-WG / TOMP-API

Code | Issues 32 | Pull requests 1 | Actions | Projects 8 | Wiki | Security

master | 8 branches | 11 tags | Go to file | Code

bonbakermans Add files via upload — 8917c09 5 days ago — 333 commits

.github/ISSUE_TEMPLATE	Updated bugreport to also incorporate changes	5 months ago
documents	Add files via upload	5 days ago
LICENSE	Create LICENSE	9 months ago
README.md	Update	4 months ago
TOMP-API.yaml	Remove planning inheritence from planning-request	3 months ago
styleguide.md	#59: overlays can now be handled in a composit-leg,	8 months ago

README.md

Transport Operator Mobility-as-a-service Provider

About

Transport Operator to Mobility-as-a-Service Provider-API development for Mobility as a Service

Readme

Apache-2.0 License

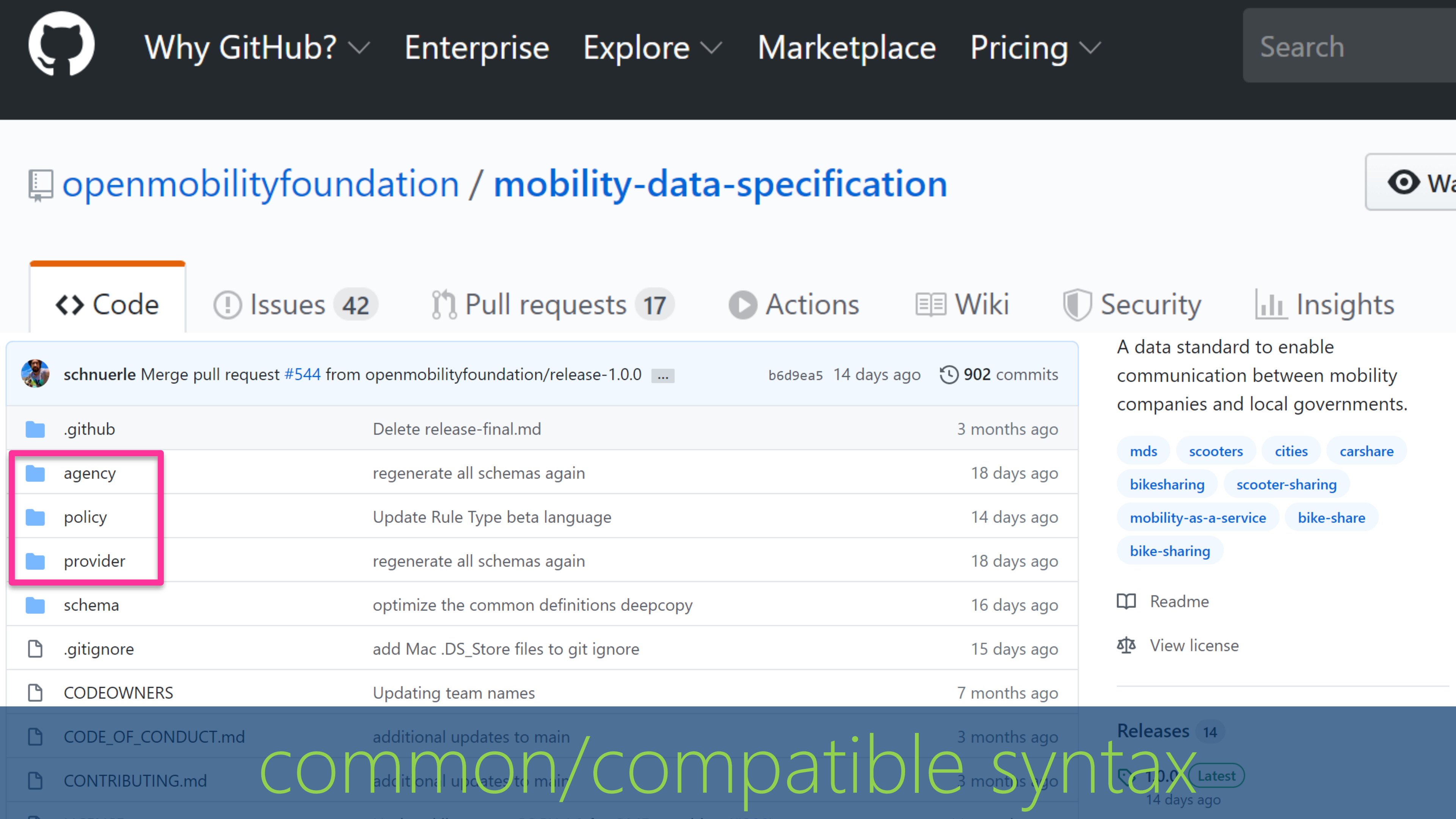
Releases

11 tags

Packages

No packages published

common/compatible syntax



Why GitHub?
Enterprise
Explore
Marketplace
Pricing
Search
openmobilityfoundation / mobility-data-specification
Code
Issues 42
Pull requests 17
Actions
Wiki
Security
Insights
schnuerle Merge pull request #544 from openmobilityfoundation/release-1.0.0 …
b6d9ea5 14 days ago
902 commits
.github
Delete release-final.md
3 months ago
agency
regenerate all schemas again
18 days ago
policy
Update Rule Type beta language
14 days ago
provider
regenerate all schemas again
18 days ago
schema
optimize the common definitions deepcopy
16 days ago
.gitignore
add Mac .DS_Store files to git ignore
15 days ago
CODEOWNERS
Updating team names
7 months ago
CODE_OF_CONDUCT.md
additional updates to main
3 months ago
CONTRIBUTING.md
3 months ago
A data standard to enable communication between mobility companies and local governments.
mds
scooters
cities
carshare
bikesharing
scooter-sharing
mobility-as-a-service
bike-share
bike-sharing
Readme
View license
Releases 14
Latest
14 days ago
common/compatible syntax

RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
Fraternité

Vie publique
Au cœur du débat public

Dernière modification : 26 décembre 2019 à 17h13

Loi du 24 décembre 2019 d'orientation des mobilités

coherent framework

EU Data-sharing Framework (MMTIS-NAP – 2017)

EU-wide multimodal travel information services – standardised traffic and travel data for all mobility providers (MMTIS)

National Access Points for linking to MMTIS data (NAP)

Does not address open booking and payment

International Transport Forum

Thank you

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