PGS data hub

Development of the generic model parking data hub

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> pictec >

Openness of the parking hubs

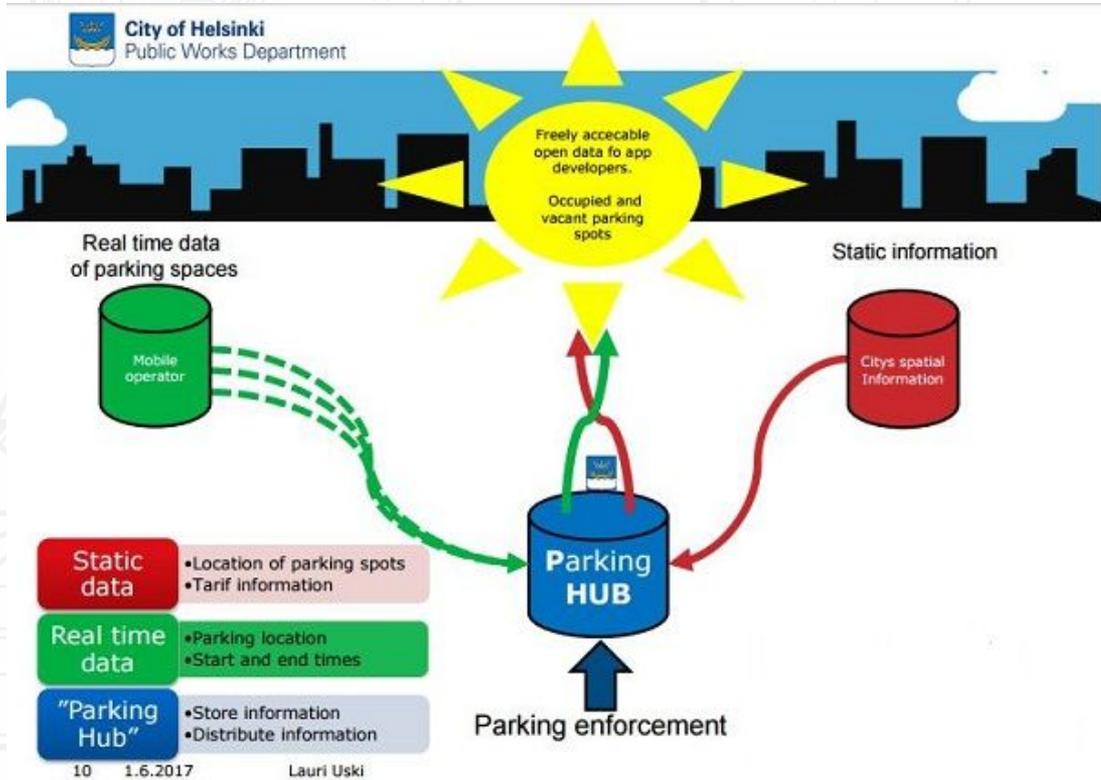| Closed solutions	Semi-open solutions	Open solutions
+ – theoretically better control over collected data,	– enables integrating third party data, – many payment options, – users can choose from various apps, – competition forces continuous application development;	– enables integrating third party data, – many payment options, – users can choose from various apps, – competition forces continuous application development, – unlimited options to create new applications, – citizens gets many insights, – city residents can react to situation and change their behavior;
− – limited payment options, – quality of the control depends strongly on the data manager, – no data integration with third parties, – users are bound to use the dedicated app, – change of the app provider is difficult and expensive;	– quality of the control depends strongly on the data manager, – limited options for third parties to develop their applications;	– no control over how shared data are used, – need for data anonymization;

Source: City of Helsinki; Public Works Department

Generalization

Current version of the Parkkihubi is dedicated to the city of Helsinki. Therefore system is fed with information specific to the city, that need to be **generalized** to make the hub easily adaptable to any other location.

➔ Creating customizable structure (ready to integrate chosen city geospatial information data)
➔ Containerization (with *e.g.* Kubernetes) as a preparation of easier and faster deployment
➔ Proper cloud platform preparation (*e.g.* Azure)

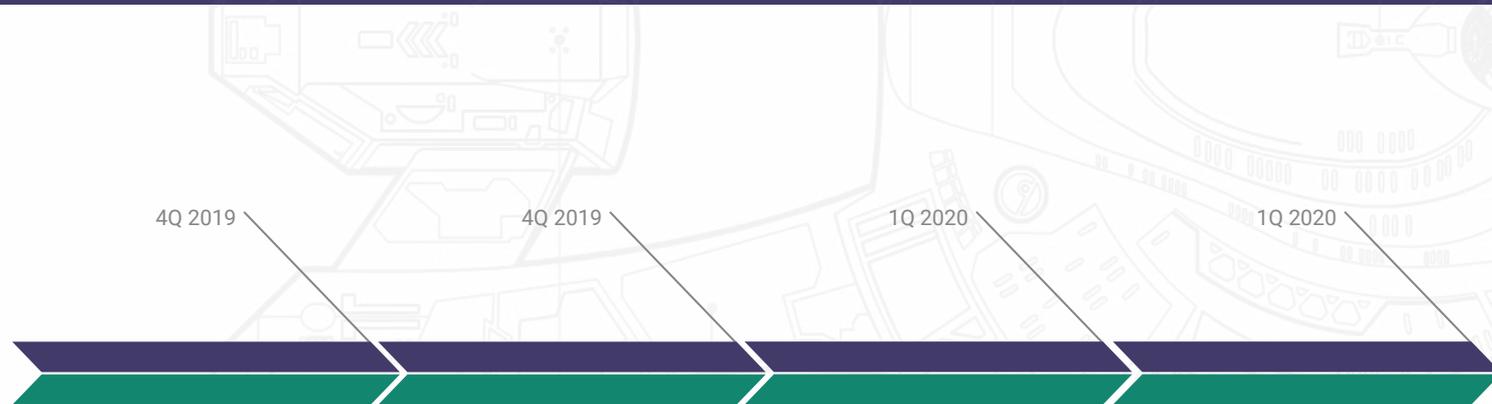When released the **generic PGS hub** will be available in form of a package containing:

→ **Ready to deploy** on chosen platform
→ Interface to **visualize data** for parking management and planning
→ **Open API** for sharing anonymized data
→ **Ready to integrate** with local geospatial and transactions data

Due to recent administrative changes in the planned pilot deployment municipality, status of this stage is **still open** and no decisions or steps have been taken regarding deployment process.

As a mitigation of the possible risks associated with the situation, **alternative placements** for the pilot are currently under discussion.

4Q 2019   4Q 2019   1Q 2020   1Q 2020

Generalization

Removing hardcoded
elements, developing
configuration features.

First deployment

Generic hub package
deployed, sample data
ingestion, first demonstration.

DevOps

Applying DevOps technology
(e.g. Docker, Kubernetes) to
create a software package
easy to deploy, maintain and
update (cloud or on-premise).

Release

Generic parking-data-hub
released and supported.
Ready for license-free
implementation in PGS
municipalities.