

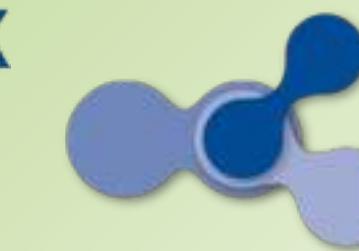
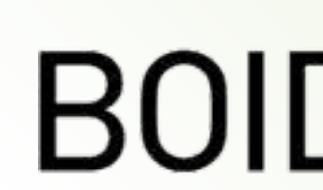
ELECTRICITY | INNOVATION CHALLENGE



INTRODUCTION

Göran Smith & Anders Hjalmarsson
Viktoria Swedish ICT

2015.09.03



Agenda

- **Introduction to ElectriCity**
 - Background, purpose and content.
- **Introduction to ElectriCity Innovation Challenge 2015**
 - Purpose & goal
 - Challenges & opportunities
 - Process
 - Prize
 - To do





Viktoria Swedish ICT

- **Task**

- To do research and development in applied information and communication technology (ICT) in collaboration with the industry, the public sector and universities.

- **Goal**

- To help Swedish automotive and transport industry achieve sustainable development and growth.

- **Application areas**

- Sustainable transport, electromobility, sustainable business, cooperative systems & digitalization strategy

ElectriCity

- **Background**

- Doubling goal & FFF

- **Purpose & goal**

- "An arena for demonstrating new products and services within public transport" and "a source of inspiration and motivation force for future urban development"

- **Content**

- 7 PHEV buses & 3 electric buses
 - New charging stations & bus stops
 - Innovation platform

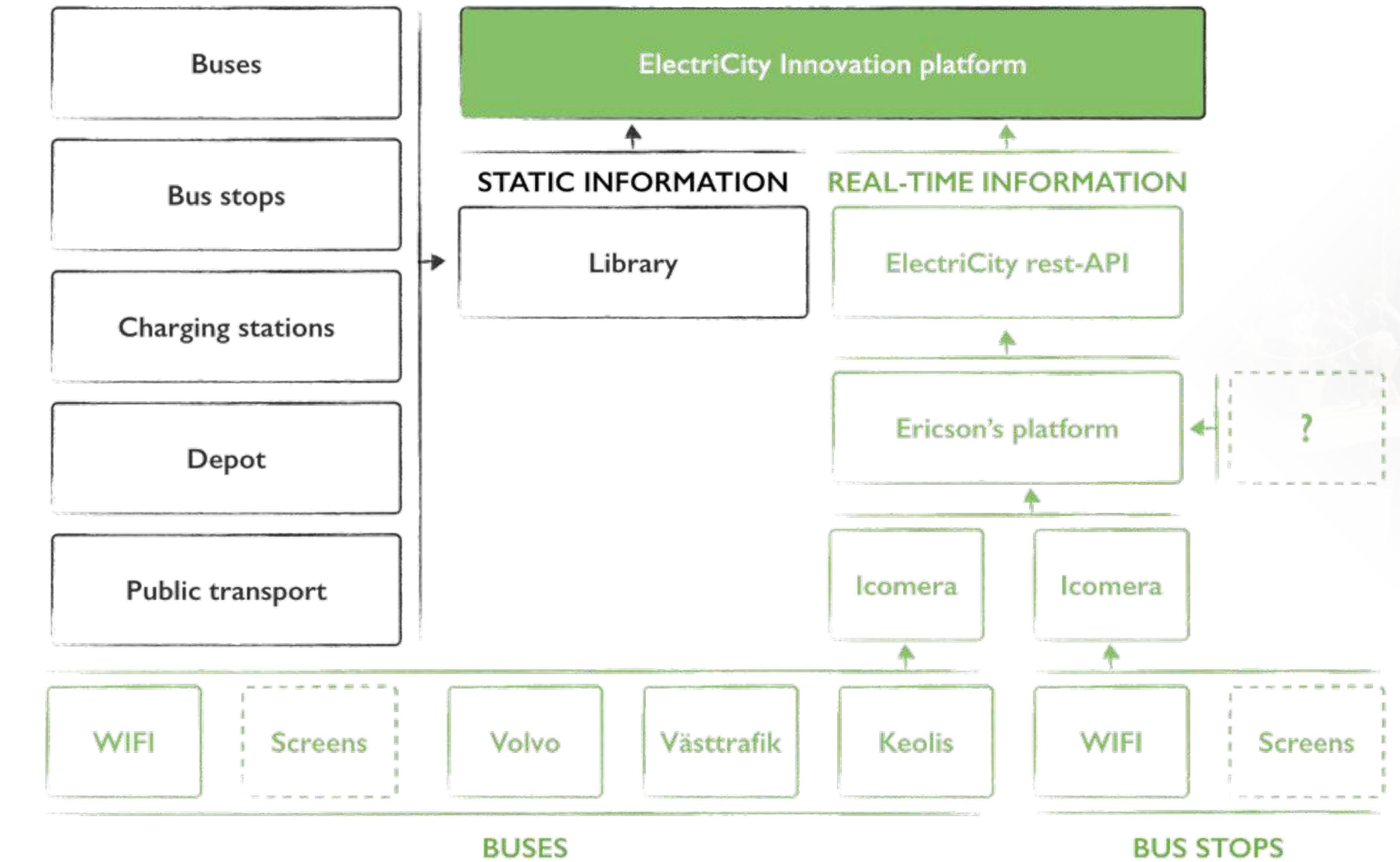


Route

1. Grön depå
2. Teknikgatan
3. Lindholmsplatsen
4. Lindholmen Science Park
5. El- & hybridbussar
6. Frihamnen
7. Götaplatsen
8. Sven Hultins gata
9. Chalmersplatsen



Innovation platform



ELECTRICITY | INNOVATION CHALLENGE



Purpose & goal

- **Contest purpose**

- Catalyze innovations that can contribute to increasing the attractiveness of using public transport.
- Test the innovation platform
- Involve the public in ElectriCity.

- **Contest goal**

- Develop as many viable prototypes as possible
- Expose and test prototypes on the arena after the competition.
- Stimulate from idea to business

Challenge:

tomorrow's bus trips



**EFFICIENT
AND FUN**



**ATTRACTIVE
BUS STOPS**



**BUS TRIPS
FOR ALL**



A blurred background image of a woman sitting on a bus. She is wearing black headphones around her neck and is looking down at an open book she is holding. The book has a yellow cover with the name "Carl-Johan Vallgren" visible. The bus interior, including yellow handrails and seats, is visible.

Efficient & fun

- **Challenge**

- How can bus trips become both more efficient and fun?

- **Problem**

- Bus trips are perceived as slow, unreliable and uncomfortable.

- **Examples of issues to address**

- Can we aid travelers in using the time on buses and bus stops better?
- Can we encourage social interaction?
- Can we make it easier to plan and carry out bus trips?

Attractive bus stops

- **Challenge**

- How can bus stops be designed to be perceived as both safe and attractive?

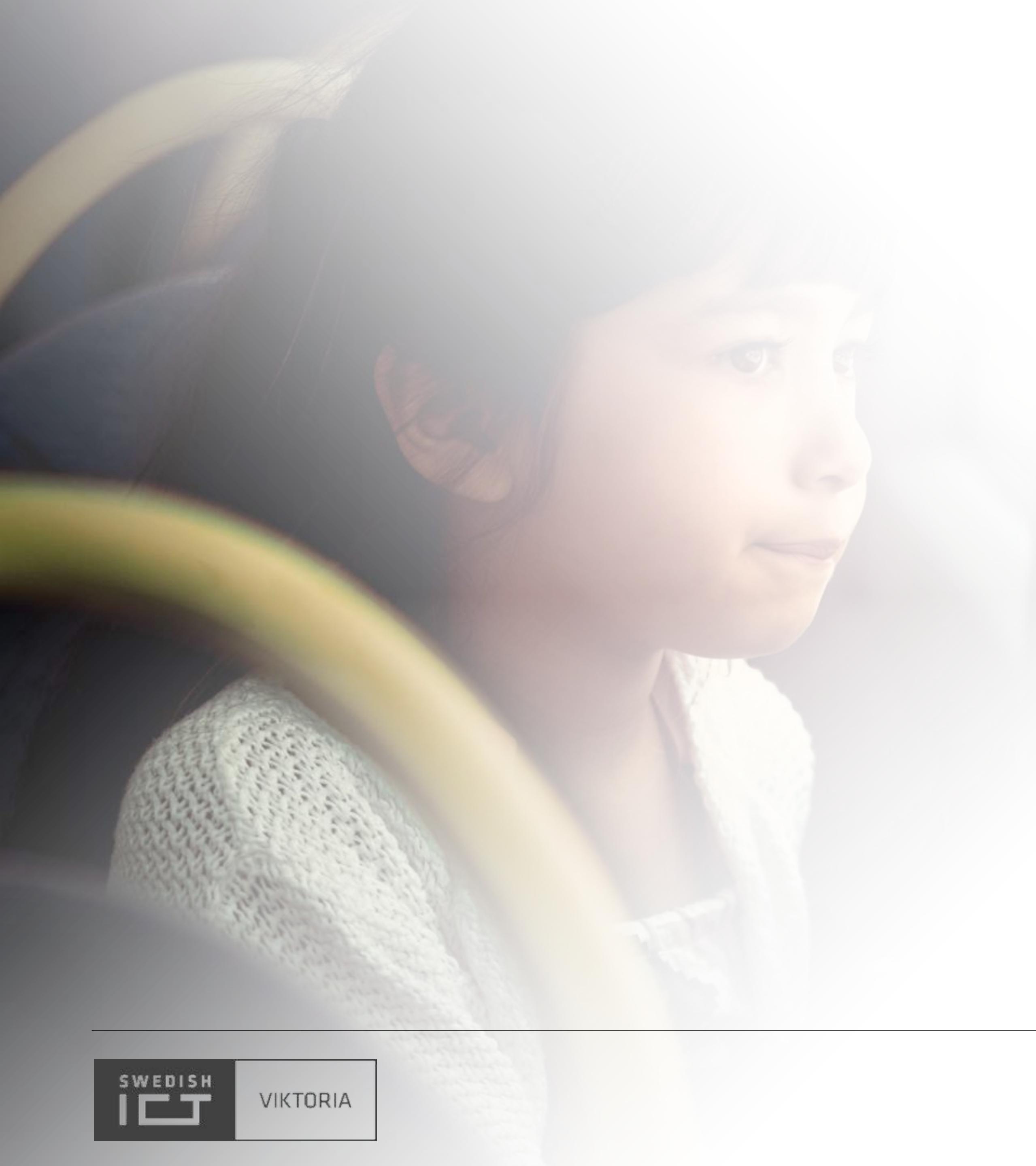
- **Problem**

- Bus stops are perceived as boring, unsafe and uncomfortable.

- **Examples of issues to address**

- Can bus stops become something more than just a bus stop?
- Can bus stops become better integrated into the local environment?





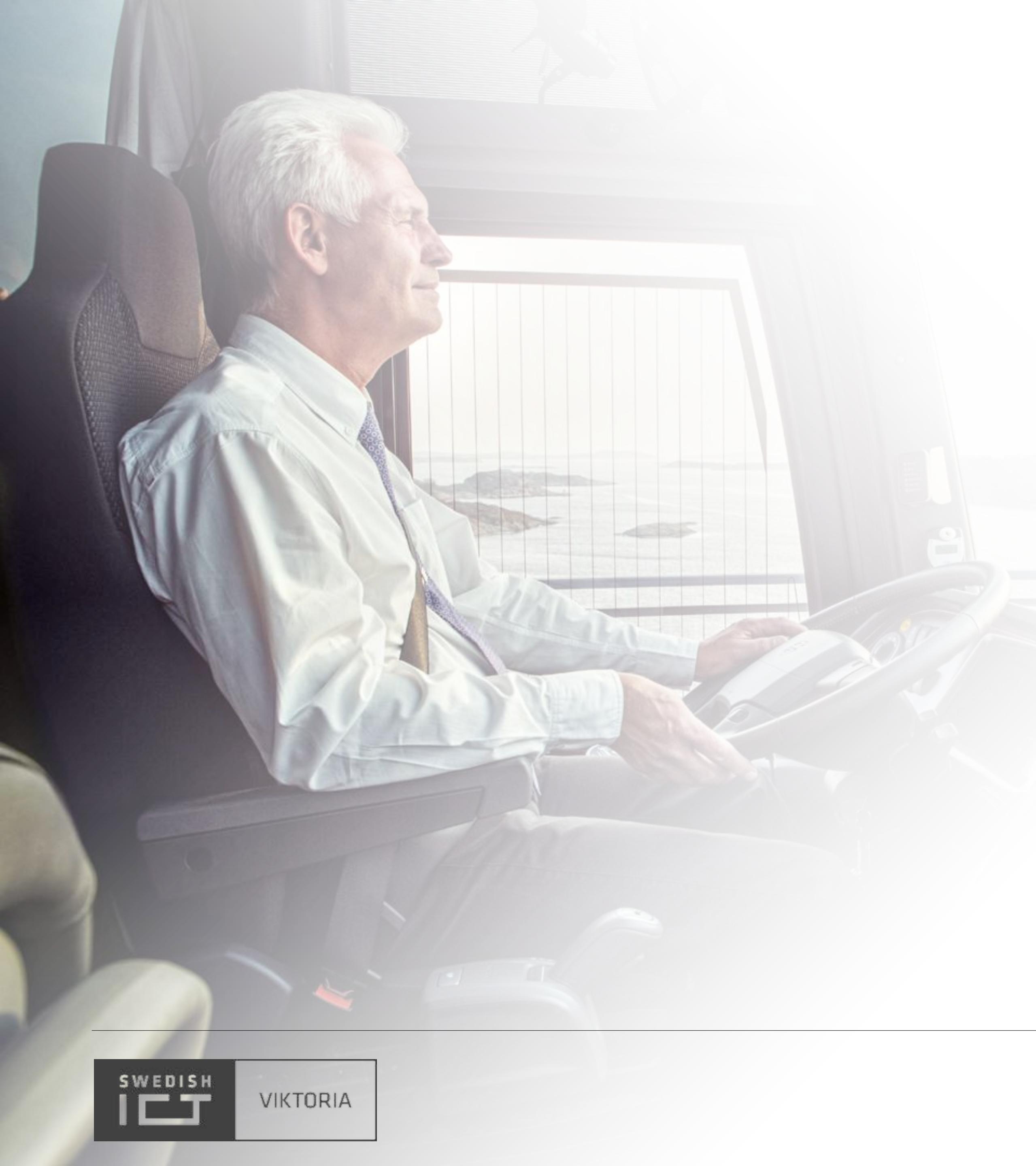
Bus trips for all

- **Challenge**
 - How can bus trips become accessible and safe for everyone?
- **Problem**
 - The system is not designed for children, elderly, people with disabilities (physical and cognitive), inexperienced travelers and those who do not know the language
- **Examples of issues to address**
 - How can we attract new user groups that don't use public transport today?
 - How can bus trips become more personalized?
 - How can it become easier to combine the bus trip with other modes of transport?

Opportunities

- **Domain knowledge & methodology support**
 - Industry + academy + public sector.
- **Demonstration arena**
 - Changeable bus stops and screens.
- **Innovation platform**
 - Library
 - API
- **Other resources**





Library

- **Bus stops**
 - Drawings, technical specifications & pictures
- **Green depot**
 - Drawings, process model
- **Buses**
 - Technical specifications, pictures etc.
- **Charging stations**
 - Technical specifications, pictures etc.

API

Volvo	Västtrafik	Keolis	Icomera
Accelerator pedal position	GPS-position - buses (1)	GPS-position - buses (2)	GPS-position - buses (3)
Air temperature inside the bus	Whether the bus is at a bus stop	Air temperature inside the cabin	No of WIFI users - buses
Instrument panel info regarding the air conditioner	Next bus stop	Mobile signal strength	GPS-position - bus stops
Instrument panel info regarding the stroller button	Stop button pressed or not		No of WIFI users - bus stops
Instrument panel info regarding the stop button	On or off route		
Instrument panel info regarding the turn signals	Door open or closed		
Door position			Plus three more signals that we are yet to understand what they mean.
Total driven distance			

Other resources

- **APIs**

- Trafiklab
- Trafikverket
- Göteborg stad
- SMHI
- API-katalogen

- **Public transport**

- Svensk kollektivtrafik
- K2
- Västra Götalandsregionen

- **Other**

- Google play services
- Whatever it takes!

Questions?

ELECTRICITY | INNOVATION CHALLENGE

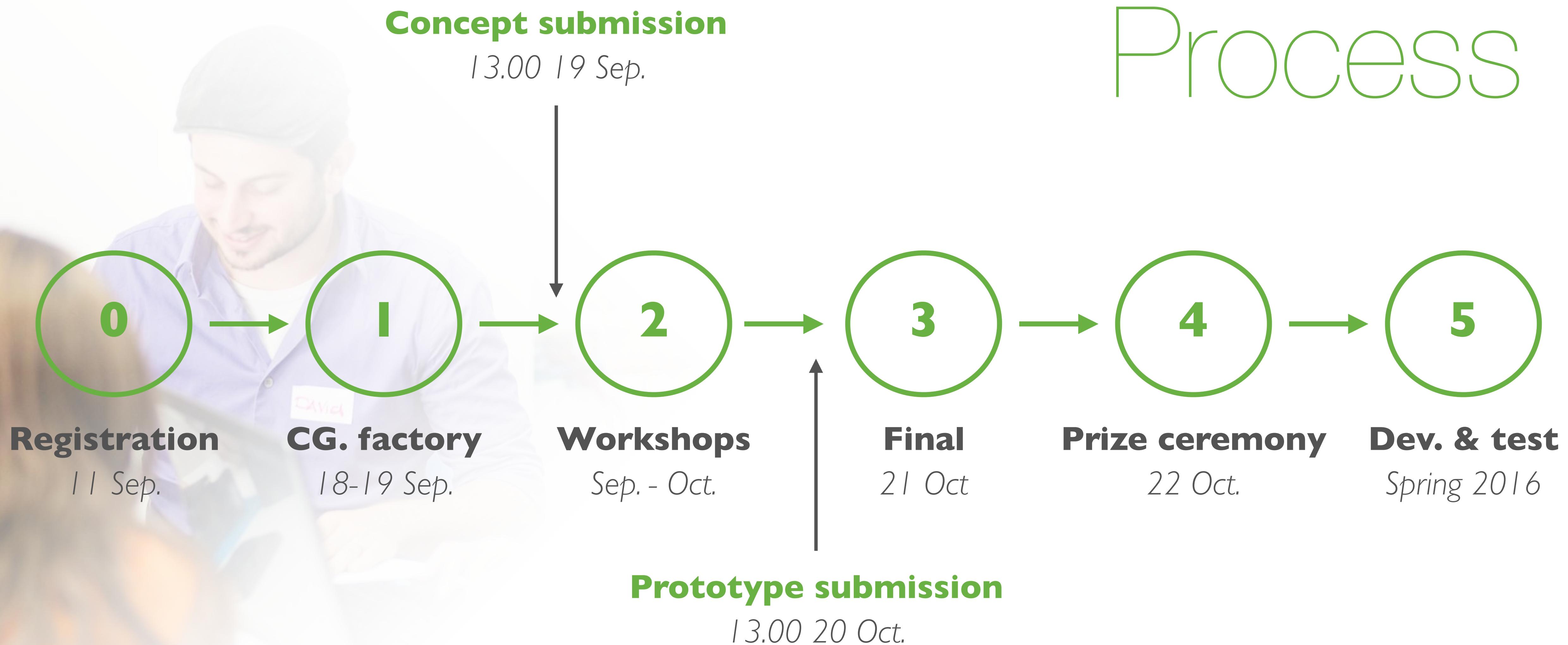


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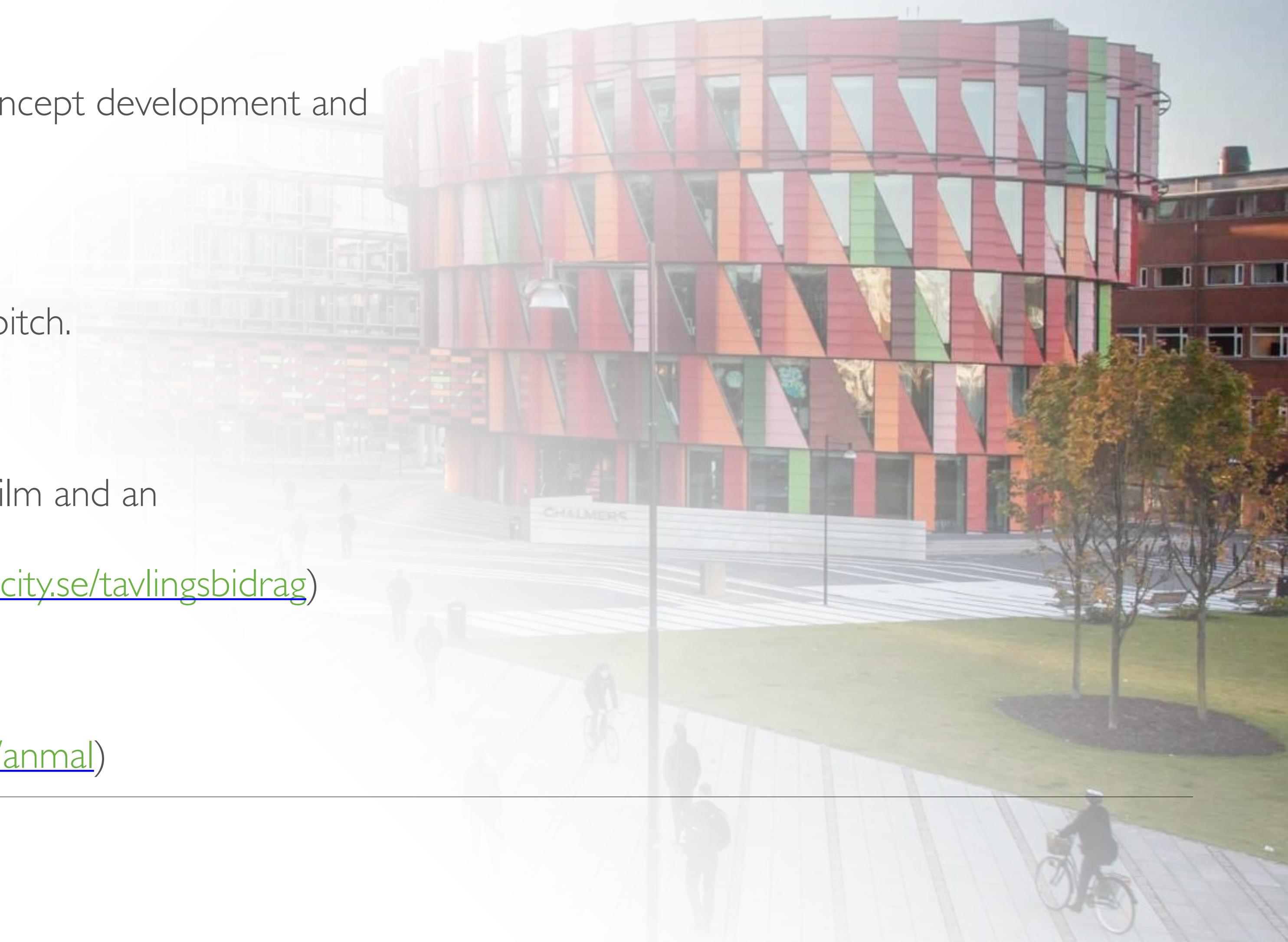
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Process

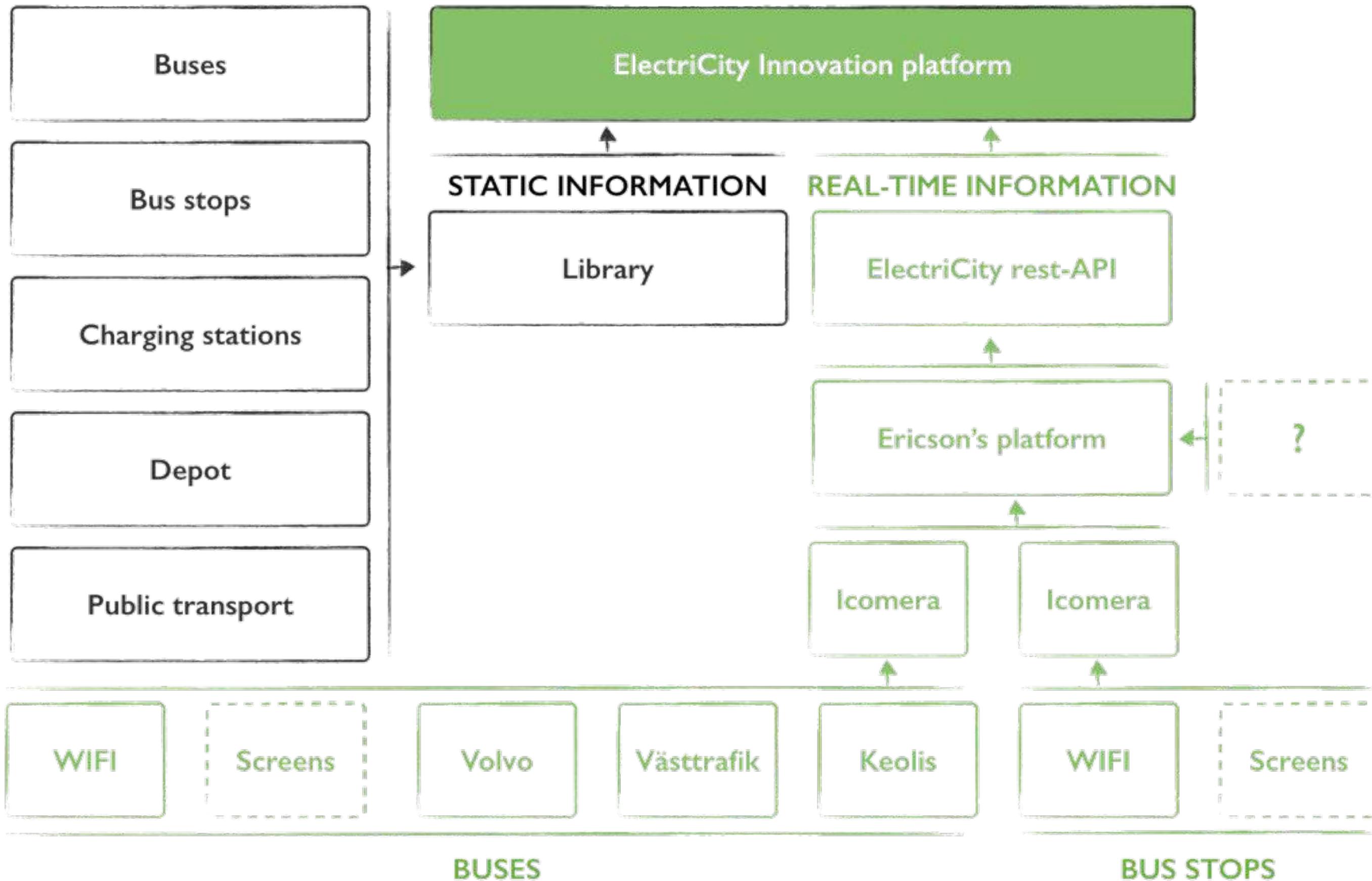


Concept generation factory

- **Day 1** (13-19 18 Sep.)
 - Introduction & inspiration, collaborative concept development and a social event.
- **Day 2** (9-16 19 Sep.)
 - Concept selection, feedback and concept pitch.
- **Output**
 - A written concept description, a youtube film and an development plan
(13.00 19 Sep. at challenge.goteborgelectricity.se/tavlingsbidrag)
- **Registration**
 - (11 Sep. at challenge.goteborgelectricity.se/anmal)



Development workshops



- **24h with the bus** (18-21 24 Sep.)
 - Topic: what happens behind the scenes of public transport and of how the bus functions.
- **Tomorrow's bus stops** (16-19 28 Sep.)
 - Topic: how bus services interact with the city and about thoughts on tomorrow's bus stops.
- **Innovation platform** (17-20 30 Sep.)
 - Topic: how the innovation platform works and how you can get the information you want.
- **From concept to business** (18-21 14 Oct.)
 - Topic: how your concept can be developed into a profitable business.

Final & award ceremony

- **Final** (9-16 21 Oct.)
 - Public exhibition of the final results at Lindholmen
 - Presentation of the prototype and plan for the jury.
- **Award ceremony** (16-17 22 Oct.)
 - Awards ceremony at Lindholmen in conjunction with software development day.
- **Output**
 - A written prototype description, a youtube film and a plan for how the project will be developed after the competition.

Assessment criteria

- **Theme winners**

- Clear connection to electricity.
- Contribute to attractive public transport.
- Meet the needs of the specific theme.
- Possess a high level of innovation.

- **Main winners**

- The above plus:
- Received a theme prize.
- Possible and interesting to realize
- Possible to organize realization as a collaborative project involving several collaborating ElectriCity parties in addition to the winning team.

Prize

- **Three theme winners**

- Diplomas
- Letters of recommendation
- Goodie bag
- Exposure on the arena

- **Main winners**

- Entrance to the EIC Advisory Board
- Organizational support
- Funding advice

To do

- **Register team of 5 people** (11 Sep.)
 - Also register participants for the concept generation factory
- **Submit concept description** (13.00 19 Sep.)
 - A written concept description, a youtube film and an development plan
- **Register for development workshops**
- **Submit prototype description** (13.00 20 Oct.)
 - A written prototype description, a youtube film and a plan for how the project will be developed after the competition.
- **Present prototype** (21 Oct.)
 - Exhibition
 - Pitch

More information

- **Information regarding ElectriCity**
 - goteborgelectricity.se
- **Information regarding EIC2015**
 - challenge.goteborgelectricity.se
- **Information regarding the innovation platform**
 - platform.goteborgelectricity.se
- **Questions regarding the challenge**
 - platform.goteborgelectricity.se/forum
- **Other communication channels**
 - Team leaders e-mail
 - #goteborgelectricity



Questions?

Thank you!

Göran Smith & Anders Hjalmarsson
Viktoria Swedish ICT