

Passenger counting solutions #Ruter Vendor Conference 2016-01



- History from ticketing since 2004 at Estonian
   Certification Center, spin-off company in 2009.
- Head quartered in Tallinn, Estonia
- Operating and focus areas in Baltic States,
   Scandinavia and Poland.
- Example of past and ongoing projects:
  - Estonia: Tallinn & Harju County, Tartu, GoGroup throughout Estonia, ATKO Group etc. Gotland (Sweden) 2013
  - Sweden: Västmanland, Transdev AirportCoaches, Södermanland County, Mälab trains





# REAL-TIME PASSENGER INFORMATION (RTPI) AND INFOTAINMENT

TICKETING AND LABA MANAGEMENT

- Real-time Journey Overview

- Wayside Information Screens
- Infotainment Screens On-board
- Automatic Passenger Counting

CHANNEL MANAGEMENT

LIPE PART HOURS SHOWN PERT.

**ONE-STOP SHOP** 

**FOR TRANSIT AGENCY** 

. Customer CRAN Database REPORTING AND ACCOUNTING . Analysis and Intelligence

Thansled Majection Device · Tablet POS WITH HTP1 Ticker Validator

- Pament Terminal

RIDANGO **ONLINE ACCOUNT BASED SYSTEM** 



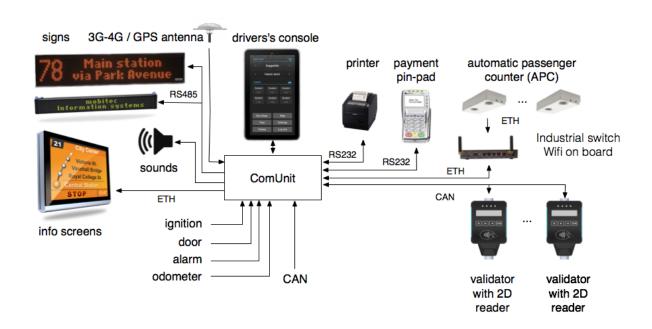




- Taffic Light Signaling - Real-Time Information Exchange - Vehicle Monitoring and Device Management SUPPORT

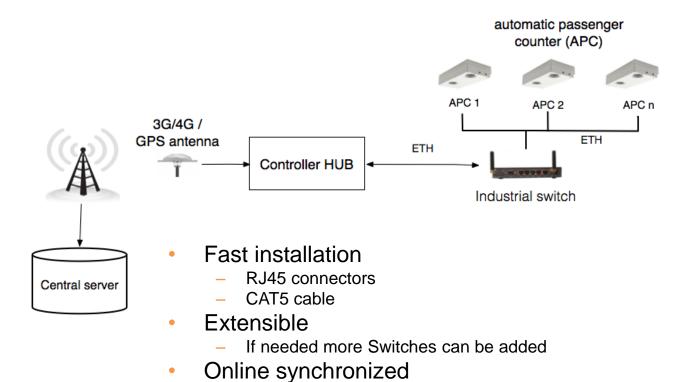
TRAFFIC AND FLEET MANAGEMENT

## SYSTEM OVERVIEW - MODULAR AND EXTENDAB





### **AUTOMATIC PASSENGER COUNTIN**



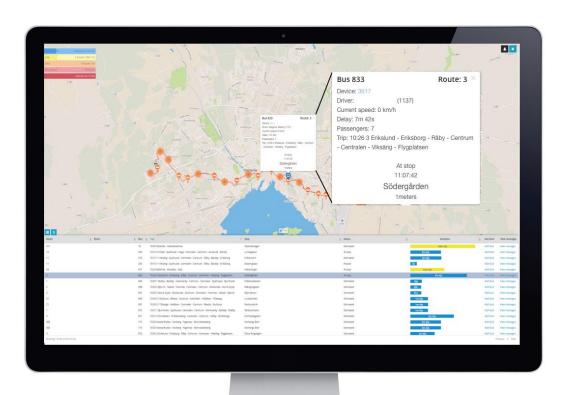
Standard and widely used 3G/4G connection



## APC DATA - online

#### Real time view

- Passenger count from dispatch view – current count of passengers on board
- Data is synchronized in online mode





## APC DATA – historic reports

#### **Analytics:**

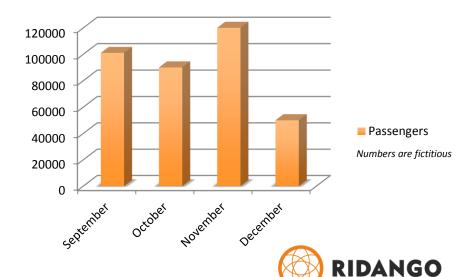
- Stop
- Line / trip
- Area / Zone
- Etc.



APC Data from Ridango system in Västmanland www.ridango.com

#### Statistics:

- Line profitability
- Trip capacity
- Validations versus boarding
- Etc.



## **Questions and Answers**

- How should Ruter move forward in order to achieve a future model where potential on board systems and equipment (passenger counting included) are based on an open, service oriented architecture, open interfaces and shared functionality, in accordance with common European standards?
- What considerations are important to make regarding the acquisition of a future-oriented solution for passenger counting?
- What different solutions and delivery models for passenger counting should be considered, and which are preferred?
- How can Ruter utilize counting data as a customer information element?
- What do you consider important that Ruter do, and how, in order to make it possible/interesting for you to participate in a tender?

## APC data as a customer information element

## Real Time vehicle capacity

#### Mobile applications



#### Bus stop screens

W	Sjukhuset		10:16:51
LINJE	DESTINATION	FÖRSTA	ANDRA
551	Arboga via Valskog	10:37	12:37
550	Skinnskatteberg via Kolsva	11:02	13:02
515	Västerås	11:05	12:05
550	Eskilstuna via Kungsör	12:04	14:04
550	Eskilstuna via Köping - Kungsör	13:04	15:04
550	Skinnskatteberg via Kungsör-Köping	15:02	16:02
	Linje 515 Västeras departu full	re 11:05 is	80%





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