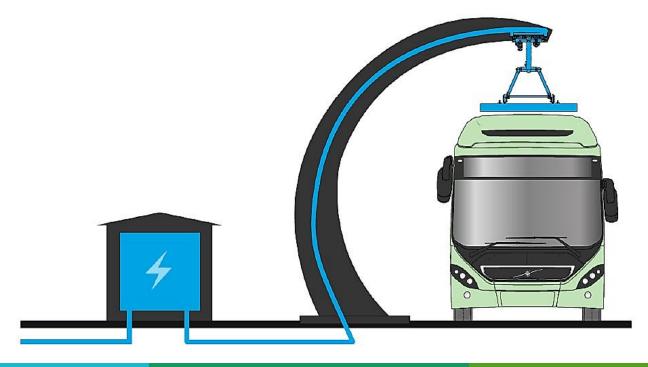
Procurer skills within prior marketing consulattion by developing environmentally friendly public transport infrastructure









Ventspils: City on the Move





Economic Development Core Directions:

- Manufacturing
- Port and transport
- ► ICT sector
- Tourism and health resorts

- Located in the Northwest of the Kurzeme region bordering the Baltic Sea
- Area of 58 sq. km
- Established in 1290
- Population of Ventspils City 38.6K







Ventspils:Public transport

- ▶ Public transport is provided by «Ventspils Reiss» Ltd.
- ▶ 18 public transport routes 32 buses
- ▶ 94% environmentally friendly Euro 5 and Euro 6 buses
- Average age of the busesyears
- Popular low-capacity buses up to 22 passengers
- Interval 3 up to 6 min

Ventspils: Passenger

- A short time on the way
- ► Get- off the bus on request outside bus stops
- ► The interval between trips must be short no daily traffic needs to be adjusted to the public transport schedule









- ▶ Buses available on the market
- Public transport and infrastructure in Ventspils city 2016
 - solution for Ventspils City = Electric buses
 - electric buses are mainly manufactured in high or medium capacity, with a total weight of 12.5-18 t
 - current public transport = peak load efficiency, zero-emisson ≠ cannot be provided by large or medium capacity buses
 - required driving rage 300-430 km per day ≠ no low capacity electric buses available
 - routes suitable for electrification and potential locations for bus charging stations were identified
 - environmentally friendly transport in Ventspils City:

New model of public transport system for Ventspils City



To develop an innovative bus with zero- emision electric engine





Ventspils municipality decision



- Support the comfortable model of public transport
- Find a solution to buy an innovative electric bus adapted for the needs of Ventspils City

Good practice



to develop environmentally friendly public transport infrastructure

OUR PROJECT = FLAGSHIP PROJECT

- We are implementing Cohesion fund co financed project «Develop environmentally friendly public transport infrastructure in Ventspils »:
 - ▶ 14 low-capacity electric buses (gross vechile weight ~5.5 tonnes) and construction works of charging stations
 - ► Full- charge in 3 minutes while passengers are boarding at destinations to boost capacity-building initiative
 - Driving range is not limited due to charges and exceeds 500 km per day





NOT YET AVAILABLE on the MARKE INVESTING IN

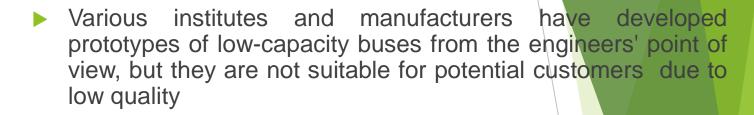
Opening up of public procurement ir planned on 24th October 2019







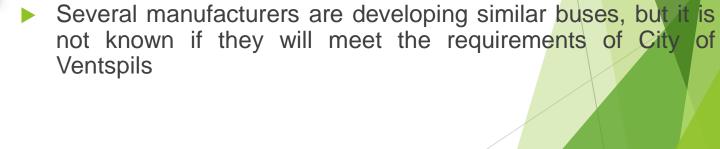








 Some products are available on the market, but their specifications are not relevant to needs of City of Ventspils and their quality ir low







Innovative product development

- In order to solve the shortage of supply, potential manufacturers were interested in developing innovative product suitable for customer:
 - A free space is defined where there is demand but not supply
 - Many cities already have restrictions on diesel-powered engines – (especially in old towns)
 - Ventspils present itself as a potential customer
 - European Union policy on climate change









- the technologies used are relatively new and are still under development
- manufacturers's marketing does not always correspond to the actual situation (advertised products are still under development)
- costly certification process for vechiles used in public transport
- there are no common standards for electric buses (standards are under development) - technology is incompatible
- should take into account customer's specific requirements (e.g low-noise charging stations)
- customer's limited experience in operating and maintaining such buses

The first prototype was made in Latvia -2018





necessary tests

The bus is undergoing refinement and all the

<u>Drive eO</u> CEO Andris Dambis had the pleasure of meeting <u>FIA</u> President Jean Todt, ITF Secretary-General Young Tae Kim to demonstrate electric drive minibus





The advantages

- carried out without financial participation of the client
- the client has the opportunity to monitor the progress of the project and to make his own suggestions
- Prototype is being developed by engineers with significant experience in electric vehicle development
- To ensure fair competition between the producers of products
- opportunity for other manufacturers to customize their production according to requirements of client

Condition for tender



- A prototype must be in place by the time the offer is submitted
- Lag of the protuct is allowed in such cases:
 - Supplier is able to eliminate all noncompliance by the time the first bus is delivered
 - must include documents providing the supplier's capabilities (projects, contracts)
- Supplier is able to customize the product and deliver the first 4 buses within the time of 12 months
- right to test prototype in real environment



real Previous consultations indicate that we will be glad to receive at least 2 offers 100% compliance with our needs





The mitigating measures

- The manufacturer provides a warranty for the lifetime of the bus
- After- sales service and training for employee
- ► Each bus will be tested in full operating conditions for 30 days



Project implementing team and its competence

- Project implementer «Ventspils reiss» Ltd.
- Project partner Ventspils City Council
- Public procurement procedure is organzied by commision of Ventspils City Council under the rule of Public procurement

Projekt coodinator – director

Mr. Arvis Bernics

- author of the idea
- definition of functionality and required specifications
- calculations
- prior market consultation
- coordination of the co-project implementation



Thank you for your attention!

