BUSINESS PLAN

CYCLING MONITOR

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South Baltic PROGRAMME

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Content

Author: Steffen Nozon
(Mobility Coordinator)

Hansestadt Rostock
c/o Senator für Bau und Umwelt
- Mobilitätskoordinator -
Holbeinplatz
D-18069 Rostock

Phone/Fax: 0049 - 381 381 6002 / 6900
E-mail: steffen.nozon@rostock.de

1. BASICS & BACKGROUNDS

The business plan is based on the experiences of the 3 abc-partner cities Gdansk, Kalmar and Rostock and a CHECKLIST CONCERING BICYCLE MONITORS from Kalmar Municipality.

The checklist includes practical suggestions for the investment.

See: http://www.abcmultimodal.eu/cycling-monitor.html

In the frame of the abc.multimodal project the project partners made the following investments:

- Gdansk: 1 counter with display and 4 counters without display
- Kalmar: 1 counter with display
- Rostock: 7 counters, 2 with display.

In preparation of the call for tender the project partners agreed early in a common list of minimum requirements for the cycling counters. The counter / sensor should at least have the following requirements:

- Robust maintenance-free sensor
- High precision in measurement
- Weather resistant / accurate counting of cycles (not pedestrians/ cars)
- Waterproof and dustproof (IP 68-Standard referred to EN 60529)
- Mobile transmission of data (GPRS, ADSL, 3G, GSM or similar)
- Hourly statistics via data transmission (for website etc.)
- Including web interface (data directly available on municipality's and abc project website), in minimum to produce a "widget")
- Including software tool or software access for data analysis and reporting

These requirements led to the decision to exclude the purchase of radar-based counting sensors because they don't fulfill most of the requirements

and decide for induction loop counting sensors even though investment costs are higher but in the long-term the most cost effective purchase.

2. OBJECTIVES OF INVESTMENT

Investing into cycling monitors has two primary objectives:

- Collecting cycling traffic data for evaluation purposes and further development of the cycling infrastructure in all partner cities.
- Promotion of cycling as a daily transport mode among the citizens - to give feedback to the cyclists:
    1. showing citizens that they are seen, considered and involved
    2. showing citizens that the municipality appreciates them and their decision to use their bike as mode of transportation
    3. giving cyclists an inspiration to continue cycling and provide them with information which could be an inspiring topic at the coffee table at work or at home to have multiplier interaction/ effect

3. TARGET GROUPS

- Cyclists crossing an important cycling route
- Car drivers and other people in public space (→ importance of visible monitors / displays that will be noticed by this target group as well)
- Traffic planners but also stakeholders working with OSM, Open data using monitor data as an important source

4. PLANNING COSTS

- Between 5 – 10 % of investment costs

5. INVESTMENT COSTS

The abc project partners chose a very precise and reliable counting system.

- Costs for cycling counting unit (without display):
  - app. 5.000 € (incl. construction works, data management etc.)
- Costs for cycling counting unit + monitor / display:
  - app. 10.000 € (small display " iSight" produced in UK)
    or
  - app. 17.000 – 20.000 € (big display “Eco-Totem” or “Cycling Barometer”)
- the costs include the purchase, installation and data management / service.

6. BENEFITS

- Provide positive feedback for cyclists and generate great interest in public and media
- Safe data with high quality for evaluation
- Valuable data on the extent of cycling will be provided 24hrs on 365 days of the year, which is currently only once a year available
- Regarding the results of data collection, prognostics, and traffic planning cyclist will be increasingly considered as fully-fledged road users, equal to motorists
- High access to counting data for public (example: www.open.data-hro.de http://www.eco-public.com/ParcPublic/?id=888# www.open.data-hro.de
- Special conditions in Rostock:
  - 2 displays will be installed at streets with lots of cycling but also car traffic – so car drivers also have a good perception of the Cycling Barometer.
- Special conditions in Gdansk:
  - Promotional effect shall highlight Gdansk’s commitment in development of solutions for cyclists

- Special conditions in Kalmar:
    - Most visible spot which shall gain the attention of the public supporting the aim of the municipality to show their appreciation of cyclists and the increasing priority of cyclists in traffic planning procedures.
    - The display will be part of a new built pedestrian and cycling bridge to the business park Hansa City.
    - It will provide statistics how frequent the bridge is used by cyclists.
    - The bridge and the monitor will help to interact in a project with people working in the Hansa City to make them cycle more and use the car less.

7. CHALLENGES TO BE CONSIDERED

- Cycling monitors are an unusual investment therefore time consuming and many obstacles may occur during the implementation process
    - planning and procurement will take a long time
    - the staff from the road construction unit needs to be involved at an early stage
- Choose a spot for the monitor were many cyclist pass by and with a high perception in public space
- Connect the installation with an opening ceremony
- The display showing the data from the counting unit requires an electrical connector which might cause further bureaucratic requirements
- Involve public media as early as possible since it is highly appreciated and a perfect tool for communication with citizens

8. MAINTENANCE

- The chosen product from eco-counter with induction loops and data transfer via GSM and www supplies most precise and reliable data.
- The support from EcoCounter is most professional and full service - but the costs for maintenance of app. 500 € for each cycling counting unit per year (data management, GSM-transfer, data evaluation, changing the batteries, presenting the data on a special website) needs to be considered in the cost planning
- An alternative could be the solution used in the German city of Oldenburg:
    - counting units were purchased from eco-counter and installed
    - but operated by the city itself
    - the data is transferred via a municipality data network to a traffic computer
    - this way the data analysis is made by the city itself to reduce costs
- Additional money could be needed for the maintenance of the Cycling Barometer in case of damage

More questions? Please ask us!

- Mr. Steffen Nozon, Rostock, ☎ 0049 381 381 60 02, steffen.nozon@rostock.de
- Mr. Krzysztof Perycz-Szczepanski, Gdansk, ☎ 0048 585 268083, krzysztof.perycz-szczepanski@gdansk.gda.pl
- Mr. Thomas Eidrup , Kalmar, ☎ 0046 480 45 04 66, thomas.eidrup@kalmar.se