



WP3- Young Researcher Competition 2018 on Innovative Transport Concepts for Waterborne

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Waterborne Water shortcut

FontRA5:
People Mobility – Systems and Services
Transport on demand

competitor

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Methodological approach

Noticing the local problem

Search where else this problem exists

Search data, facts and research on transport development

Study existing solutions
and ideas

Study existing technology and
developing technologies for the project.

Work on ideas and assumptions





Motivation

Many European cities are cut by rivers. This generates communication problems that can be resolved in many ways.

I live in the city through which many rivers flow, and that creates problems with the fast getting into some places in the city. Potentially nearby locations are available after taking long distances, because you have to reach the nearest bridge, which makes the road longer.

In my opinion, the best solution of the problem of transport across the river would be a creation of facility that should be some kind of extension of the pedestrian's or cyclist's route, which would allow make the time of journey shorter.

Objectives of project

Only for pedestrians and cyclists.

Autonomous boats will move on demand, that will eliminate waiting for transport.

The system is mobile. May be used in places where there is heavy traffic.

The project is to complement the city transport network.

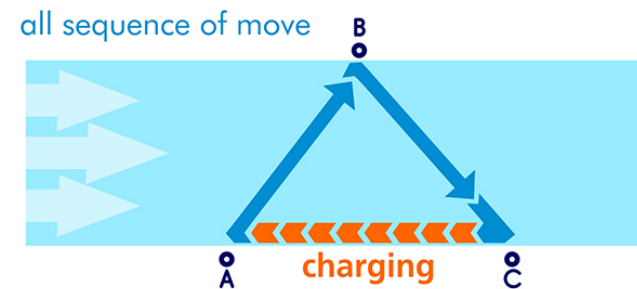
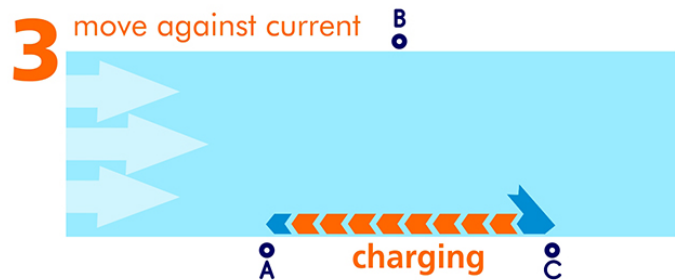
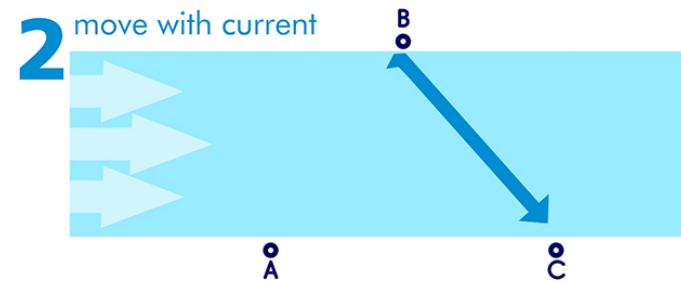
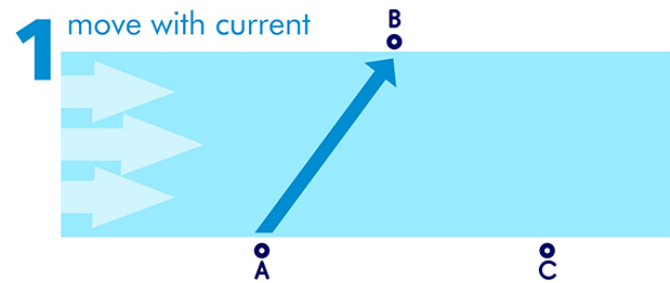
The size and numbers of units will be adapted to the city's needs.

Use of nature forces to reduce energy consumption.

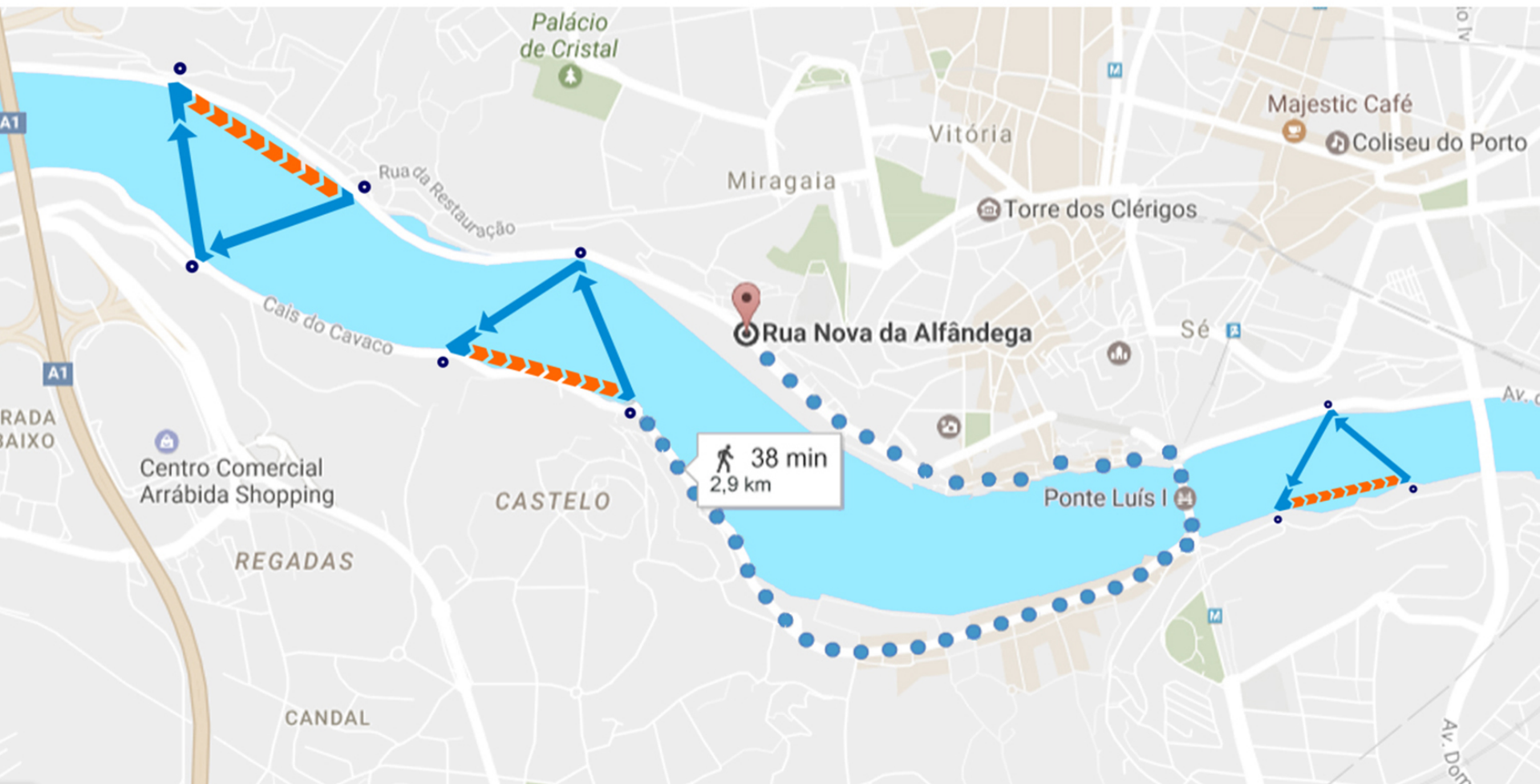
The object can be a recognizable element of cities.



Object movement



Example of application on the river in Portugal, Porto



Benefits from the project

Shortening of time travel.

Elimination of waiting for a transport.

This kind of transport mobilize to walking or cycling.

Reduction of energy consumption by partial use of natural propulsion sources.

Reducing the cost of new infrastructure, because building a boat is cheaper than building a bridge.

Increase the prestige of the city by having a unique object.



Conclusion

The proposed solution can significantly influence the way of thinking about moving around the city for pedestrians and cyclists.

Autonomous transport technology is still faulty, but is rapidly developing and probably in a few years will be completely safe.

It is necessary to test and choose the best solar panels, motors and accumulators. Also test and select the right solution for the best use of the river's power to drive the boats.

Of course, this transport should meet all legal security requirements.

Boat making should be carried out in the yards as close as possible to the destination also should be making of locally available products. This will create a unique object not only in appearance but also in performance.



Thank you for watching



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