



SMART CITIES PILOT CASE STUDY

www.bloTope-project.eu

bloTope Benefits

- Easy integration of data from multiple sources including from third-parties
- Support for near real-time collection and analysis of data for IoT applications
- Works with multiple mobile application platforms (iOS, Android)
- Protects privacy with authentication and identity management for accessing IoT data

“The bloTope technologies provide the tools to easily bring available data together from different sources to provide new services that improve public safety for schools in Brussels city.”

Lionel Van Dongen

Brussels Region Informatics Centre

“The ability to easily combine both open data available within smart cities while capturing real-time feedback of users to extend and make that data more valuable is a key objective of the bloTope project technologies.”

Prof Kary Främling

Aalto School of Science and Technology/bloTope Project Coordinator



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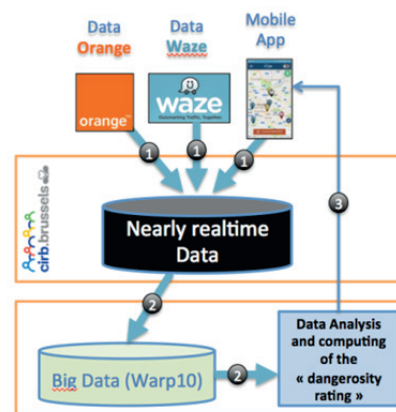
Improving Safety Around Schools

Challenge

The city of Brussels wants to improve the safety of students around the school and on their way to school by reducing the number of vehicles on the roads, informing children and parents about the dangers around the school, and by advising children and parents to select safer routes to school. Data from multiple sources could be used to provide needed guidance through a new mobile Internet of Things application.

Solution

Data coming from different third-party sources such as Waze and Orange Telecom is combined with open and near real-time data collected by Brussels City sensors and monitoring. The data is analysed and shaped in an intelligent way to be usable in a mobile application. Data is pushed into a bloTope supported database to compute a 'dangerosity rating' for each specific user's route, which is then displayed in the mobile application used by a particular parent or student with appropriate security and privacy protection.



bloTope Technologies

The solution uses bloTope technologies to bring together disparate data coming from multiple sources and provides the capabilities to wrap the data in a way that makes it easy to retrieve for analysis by creating a bloTope O-MI Node. The bloTope supported WARP10 database stores and manages the data retrieved from multiple sources.

The bloTope O-DF technologies provide the ability to easily identify road segments in Brussels and for each road segment key data can be accessed including the status and the cause of any events and measured speed in the street. The near real-time data and analysis is made accessible through the bloTope Marketplace so that at any time, the mobile application can access the values by using a bloTope O-MI request and be notified of traffic jams, or other events, provide local guidance and route recommendations to parents and students.