# Application Form 2014 Guangzhou International Award for Urban Innovation

Please complete the following application form and return it to the Guangzhou Award Secretariat at <u>info@guangzhouaward.org</u> by June 30, 2014.

## A.Profile of the Initiative

Name of City/Community:	The City of Vilnius	
Name of Province/State:		
Name of Country/Region:	Republic of Lithuania	
Geographic Region (Please select and tick one):	Africa (Sub-Saharan)	
	Asia and Pacific	
	East and Central Europe	x
	Western Europe	
	North Africa and Middle East	
	North America	
	Latin America & Caribbean	
Title, name and position of person(s) submitting:		
1.		
2.		
3.		
Basic City Data:		
Population size: 540 000		
Surface Area: 401 sq. km.		
Population Density: 1,391.9/sq. km.		
GDP per capita: 54 300 LTL per capita in 2012		
GINI Index: n/d		

Other: (please specify) the city generated 38% of Lithuania's GDP FDI - 48 226 LTL per capita in 2012.

## **B.Title:**

Title or Slogan of the Initiative (25 words max.):

Implementing smarter mobility tools in the City of Vilnius: mobile applications for public transportation system

Start date of the initiative: 2011		
Tentative end date of the initiative: 2015		
Thematic areas (please tick as appropriate): <ul> <li>Social</li> <li>Economic</li> </ul> <li>XEnvironmental <ul> <li>Governance/Management</li> </ul> </li> <li>XTechnology <ul> <li>Other (please specify)</li> </ul> </li>		

# **C.Background Information**

Smart Vilnius projects aim at implementing solutions for more sustainable, effective and convenient living in the city.

The projects for smarter mobility are being implemented following the Strategic Plan of the City of Vilnius until the year 2020. The document was approved by the City Council of Vilnius and is being followed by the implementing bodies of the city. The city has also made a commitment to encourage citizens to make a switch from private cars to public transportation and by the year 2020 have 50 per cent of journeys made by public transportation (at the moment – 40 per cent). Therefore mobility, public transportation and smart systems for traffic management are stated as Vilnius' priorities to create a better living environment in the city.

Moreover, Smart Vilnius strategy is being created at the moment and will be presented to the City Council for approval by the end of year in order to unite and integrate most of the smart solutions and initiatives of the City of Vilnius.

# D.Summary of the origins of the initiative:

# Describe how the initiative came about and what challenges or issues of sustainable development it is meant to address using the following lead questions as your guide (350 words max).

For the past decade, the City of Vilnius has been taking an integrated public transportation management approach and seeking the best suitable IT solutions to improve it. The city aims at making its transportation system more efficient and, therefore, sustainable and convenient. One of the city's objectives is to get more people to use public transportation so that by 2020, the number of public transportation users compared to private car drivers would increase by 40 to 50 per cent.

Many different projects implemented in the transportation sector in recent years have improved the mobility of both residents and guests. These are examples of the most recent city innovative projects improving mobility:

- The traffic monitoring and regulation centre in Vilnius began by connecting all the traffic lights into a single management office. The traffic lights were programmed to collect data that allowed setting up programs for some main streets to have "green waves" in the main arteries of the city.
- The City of Vilnius introduced a card for all public transportation tickets "Vilniečio Kortelė" (Vilnius Citizen Card) that allowed better management of public transportation, to plan schedules and provide commuters with realtime information.
- Fast track buses commenced operations in the city in 2013. Dozens of new vehicles were acquired to make journeys more comfortable. Special lanes were dedicated for buses only to make journeys faster and more convenient.
- The most recent improvement was the development of a new Integrated Mobile Applications Package for Smart Vilnius which includes m.Ticket, m.Parking and m.Taxi apps. Over 5 per cent of all public transportation passengers used the new m.Ticket app for smartphones within a month of its introduction. The app allows commuters to buy mobile public transportation tickets, plan a journey and see timetables in real time.
- The m.Parking app has a start-stop function and allows users to pay only for the exact actual parking time
- The m.Taxi app will become an easy way to call for a taxi and pay for a journey.

All of these initiatives had a very positive impact on making mobility more sustainable and were a good foundation for the further development of Vilnius'

Intelligent Integrated Transportation system.

The initiatives are driven by the City Municipal Government and implemented by the e-City and Smart Vilnius Departments together with local tech partners from the private sector.

The initiatives are financed from the City budget and some of the projects were partly funded by European Union funds.

#### E. Summary of the innovative aspect(s) of the initiative:

Describe the innovation for the initiative using the following lead questions as a guide (350 words max).

The Smart Vilnius app family is a revolutionary tool for city commuters. Although there are some cities that use mobile applications for parking or public transportation tickets, the city of Vilnius has an integrated approach and introduced an entire family of applications that made payment for transportation services easier and more convenient. Moreover, this is a great foundation for the collection of data that can be further used to improve city services. After the integration of other systems in the city, these applications will be irreplaceable tools for even more convenient commuting.

More importantly, these applications will encourage more users to use public transportation, save time and money paying for parking and more completely integrate taxis into more flexible and convenient city transportation system.

The Smart Vilnius Apps' Family was inspired by the need to improve the city's transportation systems by making them more client and user friendly. The city saw this as an opportunity to provide convenient and user-friendly tools to commuters thus helping them to save time and money, as well as making them happier and encouraging them to use public transportation more often.

After the apps were introduced, feedback from the residents of Vilnius was very positive with appreciation for making an everyday routine easier. Half year results show that more and more drivers use m.Parking for parking payments (30+ per cent of all parking payments are made via m.Parking at the moment) and find this to be very convenient. The number of m.Ticket app users is growing rapidly (more than 5 per cent of all users in the first month after launch) and these users use the app not only for buying tickets but for more accurate route planning, timetable checking and evaluating the quality of public transportation.

This application package can be used as a best practice model that can be adapted elsewhere in the world. Since the development of a new system for many other cities would definitely be too expensive and time-consuming, they can make use of Vilnius' already-made solution which is easy to adapt to different needs. The New Economy Magazine has lauded the initiative. It has also been highly evaluated by experts from various areas who comprise the IBM's Smarter Cities Challenge team.

# F. Summary of the desired change or outcome and how it is being measured

Describe how the initiative, and in particular the innovation, is or will be making a qualitative and/or quantitative change and how that change or outcome is being measured (350 words max)

There are three key metrics that we are going to use to measure the outcome:

- Percentage of increase in public transport users (compared to private car drivers, goal to reach the public transportation vs. private vehicles split of 50/50 in year 2020)
- Increase in amount of revenue collected (in total and via applications)
- Number of users of the applications.

The m.Parking app has nearly 40,000 downloads and generates around 30 per cent of total revenue collected for parking. The goal is to increase this share to 50 percent by the end of this year.

The m.Ticket app was introduced at the end of June, 2014. During the first month of operation, it has been used by more than 12,000 people, i.e. more than 5 per cent of all commuters who use public transportation daily. An advertising campaign planned for Autumn, 2014 to introduce the m.Ticket app more widely will be strongly targeted at non-users of public transportation to encourage them to use the app for using public transportation in the city.

The growing number of public transportation users means that Vilnius has begun to implement an important policy objective of the City of Vilnius i.e. sustainable urban transport system development. The mobility of the population using public and non-motor transport has increased, thus reducing congestion and CO2 emissions which also leads to a better preservation of the Old Town of Vilnius which is a UNESCO World Heritage site. Productivity has increased, time is being saved and the quality of life in Vilnius overall for its residents has improved as a result. The latest study by Eurostat shows 93 percent of inhabitants are satisfied with life in Vilnius.

The mobile applications will also be used as a tool for better data analysis in choosing optimal transportation systems and the management of them. They will allow the city to collect useful information about the general transportation patterns of its residents and make more informed decisions on how to manage the public transportation system as a whole.

Finally, Vilnius aims at becoming a Best Practice Model for other cities in Lithuania and the Baltic sea region on how the proper management of Big Data can create successful solutions for truly intelligent traffic management.

#### G. Detailed description of the initiative and innovation

The family of smartphone applications created by Smart Vilnius is a Best Practice Model of how a city can start integrating its differing solutions to achieve its goals for sustainable development. These applications were Vilnius' first steps towards integrating transportation systems in order to better use collected data for making informed decisions and urban planning. They also provided modern and convenient tools for residents to use for city transportation services. The apps are a great tool not only for everyday use for the payment of tickets or route-planning, but are beneficial for data collection and community engagement (e.g. evaluation of driver quality in the m.Ticket application).

It is very important for the city of Vilnius to share our knowledge, extensive experience and know-how about how we are developing these tools and are integrating the entire public transportation system, thereby creating the Vilnius Intelligent Integrated Transport System. This will allow the city to achieve its goals of increasing public transportation users and decreasing the use of private cars, reducing CO2 emissions and making our city a more convenient place to work and live.

Sharing the experience that we have gained can help other cities take a leap forward for smarter mobility and more sustainable transportation. The Smart City applications have been highly rated and well accepted by the residents of Vilnius and have been positively noted by the media and smart city experts.

Vilnius believes that the introduction of Smart City applications is inspiring because they not only make it easier to improve public transportation systems but also make them more client and user oriented. The city has provided convenient and user-friendly tools to commuters thus helping them to save time and money, as well as making them happier and encouraging them to use public transportation more often.

Finally, Vilnius aims at becoming a good example to other cities in Lithuania and the region as to how properly managed data can create a successful solution for a truly intelligent management of traffic.

#### H. Descriptive material in annex to the document

These are materials destined to allow members of the Technical Committee and the Jury to have a better understanding of the <u>context</u> of your initiative which is a very important consideration. Additional material can be submitted in DVD or CD formats. Please do not exceed the specifications below; anything that exceeds these specifications may not be availed to the Technical Committee or the Jury. Please provide, where possible and relevant, the following:

- Up to 5 press clippings or copies of covers and tables of content of reports published on the initiative. Please embed this material on A4 pages.
- Up to 5 photos that best illustrate the initiative (.jpeg at 72. dpi, 500 x 700 px maximum). Please embed this material in two (2) A4 pages with titles.
- Up to 5 graphics that best illustrate the initiative (.pdf format, 72 dpi, A4 size max). These graphics could illustrate for example, trends, ratios or percentages; tools or technologies; etc. Please embed them on A4 pages.
- 1 map that best illustrates the physical context of the initiative (.pdf format, 72 dpi, A4 max)
- 1 chart that best illustrates the initiative (.pdf format, 72 dpi, A4 max)
- 1 technical drawing reduced to fit A4 format

#### I. Additional material

Any additional material such as videos should be submitted on a DVD/CD or by email to the Secretariat at info@guangzhouaward.org. :