## STAR-CITY: Semantic Traffic Analytics and Reasoning for CITY<sup>1</sup>

## Reference:

F. Lecue, S. Tallevi-Diotallevi, J. Hayes, R. Tucker, V. Bicer, M. Sbodio, P. Tommasi, "STAR-CITY: Semantic Traffic Analytics and Reasoning for CITY", awarded the 3rd prize at the Semantic Web Challenge 2013, http://challenge.semanticweb.org/2013/winners.html .

## Abstract:

This paper presents STAR-CITY, a system supporting **S**emantic **T**raffic **A**nalytics and **R**easoning for **CITY**. STAR-CITY, which integrates (human and machine-based) sensor data using variety of formats, velocities and volumes, has been designed to provide insight on historical and real-time traffic conditions, all supporting efficient urban planning. Our system demonstrates how the severity of road traffic congestion can be smoothly analyzed, diagnosed, explored and predicted using semantic web technologies. Our prototype of semantics-aware traffic analytics and reasoning, experimented in Dublin City Ireland and Bologna City Italy, works and scales efficiently with real, historical together with live and heterogeneous stream data.

<sup>&</sup>lt;sup>1</sup> The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement ID 318201 (SIMPLI-CITY).