

## SEVENTH FRAMEWORK PROGRAMME

FP7-ICT-2011-1.5 Networked Media and Search Systems  
b) End-to-end Immersive and Interactive Media Technologies

Specific Targeted Research Project

# VENTURI

(FP7-288238)

immersiVe ENhancemenT of User-woRld Interactions

**[MS9: First version of chain for geo-localization orientation estimation,  
based on non-audio non-video]**

Due date of milestone: [30-09-2012]

Actual achievement date: [30-09-2012]

### Description:

This Milestone has been achieved by implementing a localization framework based on the joint use of an indoor-outdoor-navigation network and MEMS sensors. Accelerometers are used to compute the distance and gyroscopes are used to compute the orientation. Drift is removed using some innovative heuristics and map-matching.

Algorithms were fully tested in public buildings and railways stations (Demonstrator videos viewable on YouTube: <http://youtu.be/F8kE3KTYbhg> , and, <http://youtu.be/nKG72yT8Dhw>)