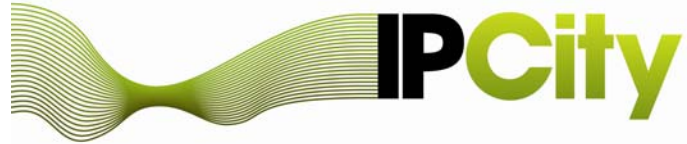# Competitive Call for an Additional Project Partner

IPCity (FP-2004-IST-4-27571) is an EU funded Sixth Framework program *Integrated Project on Interaction and Presence in Urban Environments*. The research aim of the IPCity project is to investigate analytical and technological approaches to presence in real life settings using mixed reality (MR).

After the first year of this project, the need for computer vision-based user interfaces was identified which should include technology for computer-based interaction with physical maps and map/model-based tracking. The project is looking for an additional partner with outstanding computer vision and augmented reality expertise who is able to develop core technology in these directions. The required technologies are summarized as follows:

1. *Augmenting paper maps*: for urban planning situations, paper maps are appropriate because they provide a high-resolution, yet large-scale view of the environment. However, these maps lack dynamical information such as locations of moving vehicles or simulation results. An augmented map should be developed which combines both static information on physical maps and dynamical information using projector-based augmentation information.

2. *Handheld map tracking*: similar to the augmented paper maps, a portable map tracking algorithm should be developed which allows augmentation on handheld devices rather than direct augmentation on physical maps.

3. *Model-based outdoor tracking*: we are looking for robust model-based outdoor tracking algorithms which are complementary to GPS and INS tracking. Based on rapid acquisition techniques of 3D models of the environment, robust tracking should be developed which runs on handheld devices (i.e. ultra-mobile PCs, smartphones).

These technologies require basic research and should at least be available for two different showcases in the project. The integration into showcases used for end-user evaluation requires solutions that perform at frame rate and with satisfying robustness.

Restrictions on participation: for the proposed tasks we search for excellent research partners with outstanding scientific reputation in the field of computer vision-based user interfaces and mixed reality.

Despite existing regulations and documents, the electronic proposal submission system (EPSS) currently does not allow for electronic submission of fp6 competitive call proposals. Thus please submit your proposal on paper to the contact given below.

We are available to answer any specific question related to elements of the consortium agreement. The consortium agreement will be given to the selected proposer in the negotiation phase.

Expected duration of participation: from July 2007 till December 2009 (30 months)

Maximum funding: € 200.000-, split in categories research-, demonstration-, training- and management costs.

Deadline: May 2, 2007 - 17h00 Brussels time

Language in which proposal should be submitted: English

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