LiveCity Project
*(Live Video-to-Video supporting Interactive City Infrastructure)*

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LiveCity Project profile

• **Wider scope of the proposed approach**
  - LiveCity addresses a number of communities where the citizens of a city can have specific challenges and can derive benefits from the use of live interactive high definition video-to-video (v2v).

• **Current state of related applications**
  - Today, live interactive high definition video-to-video can becoming possible with a range of devices and applications.

• **Vision & Expectations**
  - For a mass market in the cities, however, quality of services is actually missing in the public Internet!
  - LiveCity implements a range of selected pilots actions for city communities across the public Internet.
  - We build a wireline and 4G wireless network initially of 4 cities (Dublin, Athens, Luxemburg, Valladolid) with the aim to “add” one more city (Greifswald), and include a right of way without interference from unwanted traffic, so that each user involved can experience live high definition video-to-video.
  - LiveCity combines a beta version of a Virtual Path Slice (VPS) controller -derived from a previous FP6 Project- with off-the-shelf video components to build a novel v2v Platform.
HD v2v in European Cities

LiveCity proposes one significant forthcoming Internet service (v2v), and applies it in a number of domains, to maximize social and economic potential by employing ICT, according to the Digital Agenda Europe and the Policy Support Programme (PSP), Objective 5.1.

We envisage that the Future Internet includes a Right of Way for a user’s traffic without interference from unwanted traffic.

Such RoWs are actually not widely available! Inelastic traffic sources (e.g.: HD video) are not well supported by the present Internet.

LiveCity is a pure technology integration trial aiming to offer advanced services to over 3,000 users (approx.) initially in four European Cities!
Implementing selected pilots
- with diverse user communities, and
- by sharing common service platforms

Effort for a common interoperable “standard”:
• to reduce costs and
• to have high reachability.

LiveCity is user community driven!
LiveCity Target Users & Needs - Analysis per proposed pilot case

- **Pilot service where an ambulance uplinks a live video to the hospital**, so that the emergency doctor can improve the treatment outcome for the patient in the crucial “golden hour”.

- **Use of video-to-video between the patient and hospital support group (patient tele-monitoring)** to enable medical personnel to deliver enhanced patient support at lower cost and higher utility.

- **Services to eliminate citizens’ travels to the City Hall that are necessary to realize some administrative processes.** This also intends to decrease transport costs of citizens and reduce time that is spent on administrative processes.

- **Enhancement of city experiences by using live interactive video, through a joint pilot between cultural institutes/museums in Luxembourg (city) and in Athens.** The interested group will have the opportunity to be virtually present at the cultural institute/museum and enjoy a real time guided tour through some permanent collections or temporary exhibitions over video.

- **Enhancement of teaching facilities and support of learning experiences, via the use of v2v.**
LiveCity Essential Objectives

- Create a city-based Living Lab and an associated ecosystem.

- Implement public service use cases, with over 3,000 users in several selected thematic areas of interest.

- Pilot innovative v2v services and/or related applications and conduct user-centric evaluation experiments.

- Collect KPIs from embedded users and evaluate services in conjunction with key stakeholders and public service operators.

- Disseminate results to public service network operators and city authorities in Europe.

- Help accelerate live interactive high definition v2v mass market take-up across Europe, by several potential means.
LiveCity Project: Actual Progress and Achievements

- **Completion of a first set of Project Deliverables**, covering various thematic contents, fully conformant to the DoW scope.

- **Actual Progress in the Network Deployment effort within involved cities to “serve” the “Living Lab”-like infrastructure**, in parallel with the international interconnection.

- **Gradual development of the identified use cases** (patients’ telemonitoring, municipal services, educational support and enhancement of city experiences). **Work is in actual progress.**

- **Start of effort to identify, depict and evaluate KPIs**, being in good progress.

- **Efficient and gradual start of effort to disseminate primary results** (AIAI-2012 International Conference, IIVC-2012 Workshop with two LiveCity-based dedicated Sessions).

- **Establishment & operational functioning of a LiveCity Website.**
LiveCity: Contribution to the Connected Smart Cities Collaboration

The LiveCity Project intends to “identify” channels and/or other diverse means for a potential interaction with related innovative and extended ecosystems, such as Living Labs.

LiveCity aims to create a fully “cooperative and interactive” framework with other European projects and/or related initiatives, in order to:

- Define and exploit “synergies” at various levels (covering exploitation and dissemination);
- Evaluate & assess proposed methodologies and results of work;
- Exchange best practices (and/or derived tools);
- Extract benefits from previous (similar/alike) contexts;
- Promote European concepts & disseminate experiences;
- Examine opportunities for real market implementation at an EU-level.
LiveCity: Contribution to the Connected Smart Cities Collaboration

- Identification of potential options to establish several explicit -or implicit- scenarios for cooperation and/or interworking with other European projects, conformant to the intended strategic dissemination & the exploitation plan of the LiveCity total effort, while satisfying EU policy requirements.

- Collaborative actions to serve a more efficient dissemination effort (support of commonly organised workshops, common publications in journals/fora, exchange of website material, common newsletters & press releases, etc.)

- Collaborative actions to support exchange of best practices and/or information and knowledge gained and/or any other kind of experiences.

- Collaborative synergies to support initiatives and events promoted by the European Commission, e.g., the scheduled EU concertation meetings.

- Interworking to support “validation” of the intended LiveCity pilots in the participating European cities as well as for the exploitation procedures that are to be performed by the involved LiveCity partners-beneficiaries.

- Based on the dynamic progress of pilot applications to evaluate social utility and to demonstrate real and immediate value to city citizen and with the aim of assessing LiveCity-based use cases as “active and indispensable parts” of the local cities ecosystems, priority should be given in order to check any kind of interactivity with European projects of similar orientation or “interest(s)”, in particular during the planned showcases.

- LiveCity intends to identify potential “candidates” for cooperation among “similar” EU-funded projects by emphasizing on those within the scope of the existing CIP “Smart Cities” Pilots. Other potential candidates from wider EU-funded collaborative frameworks of research and development activities, will also be examined.
**LiveCity: Key Project persons to facilitate collaboration**

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