

## Integrated Infrastructure & Processes Action Cluster

### The “Humble Lamppost”

#### What you need to know

There are 60-90 million lampposts across Europe; 75% of which are more than 25 years old. They consume between 20 and 50% of a city’s energy budget. A single digit percentage of them use high efficiently (LED) lamps. An upgrade to LED can save 50-70% of energy costs – that’s ~€2 billion; and 50% on city’s maintenance costs.

The EIP-SCC “Humble Lamppost” initiative has set a target to upgrade a modest 10 million of these (~14% of total). This will deliver energy and operational budget savings; more control over, and better, lighting – that means increased safety and less frustrated residents. In addition, the initiative seeks to exploit this city-wide infrastructure to deliver additional value-added services: i.e. multi-purpose this city asset to increase savings; deliver better services; and offer additional revenue potential for cities. This provides a compelling financial case to act, and opens the opportunity to multi-purpose the lamppost to provide smart services.

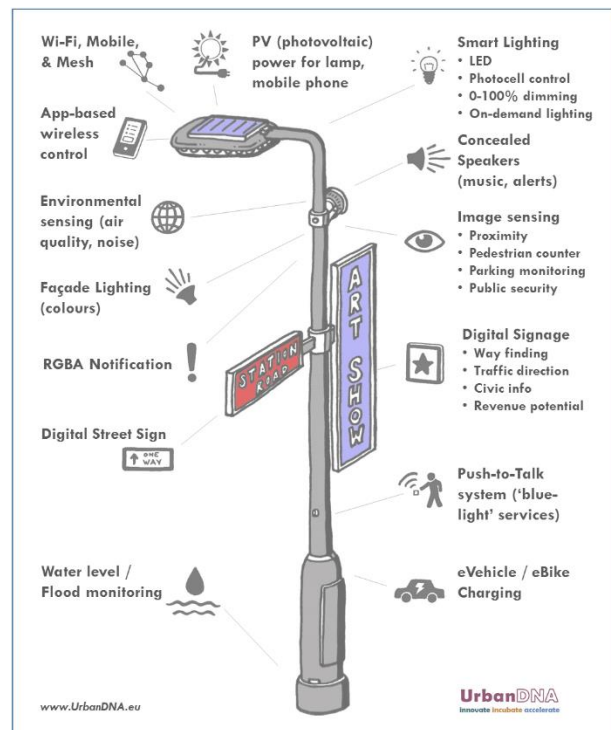
We are doing this by:

- (i) delivering a readiness **toolkit** to help guide cities through the analysis and decision making process, and accelerate them into action;
- (ii) publishing **technical standards** that align demand and supply around a common component-based design, for light and non-light features;
- (iii) engaging investors to develop **business models** that helps speed the transition, structure and provide access to finance;
- (iv) aligning **demand needs and aggregate demand** where appropriate around common ambitions, in order to reap scale advantage (very relevant for smaller cities);
- (v) **convening supply, demand, and investors** to help speed pre-procurement and build market confidence.

#### The opportunity awaits

“Cities are too small, too slow, and high risk” – the view of many investors. This initiative offers the opportunity to address that, by getting cities ready to act, by bringing *scale* to the market; and by building confidence notably within cities. It also serves as an excellent quick win for any city to include in their plans, with a sound RoI.

#### What is needed to stimulate market activities



Cities should ensure that ‘smart’ lighting is considered when evaluating smart action plans.

Industry should collaborate to form ecosystems that bring a coherent affordable proposition to the market.

Both can benefit from engaging with the EIP-SCC and joining one of our ‘Pavilion’ events, which bring cities, industry and investors together to get informed, address and resolve real issues, and get more prepared for action.

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## Integrated Infrastructure & Processes (II&P) Action Cluster

### Urban Platforms

#### Exploiting value from city data

City data holds vast untapped value. And it is growing exponentially! It can help streamline transport systems; reduce energy consumption and support use of local low-carbon energy; and deliver improved health and wellbeing outcomes. However very few cities have managed to access these benefits. An EIP survey revealed three reasons why: (i) challenges in working across the city silos (ii) justifying the investment (iii) capability gaps.

Our goal is to speed the adoption, at scale, of common open urban data platforms, and ensure that by 2025, 300 million European citizens are served by cities with competent urban data platforms.

#### Much has already been done:

Three working groups are established (fig.) that are progressively integrating what will become a comprehensive toolkit to help achieve our goals.

Delivery to date includes:

- (i) materials to support cities in making their case, specifically: a **Leadership Guide** for political and professional city leaders; a **Management Framework** to help service owners collectively agree how best to move forward; and a **City Needs Spec** to support technical staff in capturing their requirements
- (ii) a **Reference Architecture** is published to assure cities that industry will adhere to an open standard, and provide more certainty for suppliers

And more is planned:

- (iii) communicate the Leadership Guide to engage and convince politicians to act
- (iv) deployment of the Management Framework through focused city workshops to help engage across the silos
- (v) capture the above guidance as formal (inter)national standards
- (vi) further documentation of support materials (templates; cost and business case models)

#### How you can engage in activities

Cities are invited to sign a letter of intent (LoI), and industry a memorandum of understanding (MoU) to access these materials and make visible their commitment to support the continued development of the initiative. To date we have 40 city LoI signees representing some 100 cities, and 45 industry MoU signees.



## Integrated Infrastructure & Processes

Initiative	Humble Lamppost			
		AC	Mplace	GAP
To Do	1. Survey implementation / analysis		Yes	
	2. OJEU contract and tender analysis		?	?
	3. Technical blockers resolutions	Pt		
	4. Develop Standards listing & Detailed Spec	Pt		
	5. Develop Value Cases for non-light use cases	Pt		
	6. Aggregate Demand across SCC01s & beyond	Pt	?	?
	7. Map/Engage Industry ecosystem			X
	8. Engagement of financial community	Yes		
	9. Set-up / Follow-up Pavilion event (Sept/Oct?)	Steer	?	X
	10. Develop templates (eg proc't) to speed action			X
	11. Webinars / Workshops on LG/Mgmt F'work			X
	12. Move materials to Standards Orgtns	Steer		X
	13. Upgrade of Decision Support Tool			X
	14. Ongoing comms activities to engage market	Pt	Yes	
	15. InnoSup SME Action			By Bidders
Issues	<ul style="list-style-type: none"> <li>• Getting over the 'chasm'</li> <li>• Who supports if/when this genuinely scales up?!</li> <li>• Need for a funded EU-Hub (failed idea in 2016)</li> <li>• Accessing funds to incentivise collaboration</li> </ul>			
Conclusion	<p>This has been held back by amongst others, financing. EC is pushing hard &amp; trying to access funds (late '17 @best). IF it gets over the hump (CSF is groups of city-clusters incentivised to collaborate) it is a PROJECT (needs EU-Hub to coordinate)</p>			

Initiative	Urban Platform	AC	Mplace	GAP
To Do	1. Re-mobilise Gov'ce Group	Y	Y	
	2. Test Ldrshp Guide in cities with politicians	pt		X
	3. Run Mgmt F'work workshops to ready citie	pt		X
	4. Improvement of MF			X
	5. Manage end June BXL Standards Workshop	Y		
	6. Mobilise across SCC01s	pt	pt	
	7. Cost, benefits, value case development	pt		X
	8. Develop further templates / tools			X
	9. Ready EC / Initiative for ISO Nov conference	pt		X
	10. Ongoing comms	pt	Y	
	11. Pavilion Event needed?		?	X
Issues	<ul style="list-style-type: none"> <li>• How to get LG/MF adopted / improved / in use</li> <li>• How to get grouped cities to convene industry</li> <li>• When to 'open up' beyond Lol &amp; MoU (when in standards process?)</li> <li>• Address item 7 – value case</li> </ul>			
Conclusion	<p>Built momentum; risk of losing it. Needs EC continued real engagement. Notably to influence SCC01s.</p> <p>Role of ESPRESSO to be clarified as potential resource input</p> <p>Standardisation will be a vitally important tool to manage market</p>			

## **IIP AC 20<sup>th</sup> June Breakout Workshop**

### ***Participants***

AM: 25 + ~25 from horizontals

PM: 25 (as of 1-June)

### ***Logistics***

AM: (100 mins)

PM: (120 mins) Two working areas – do we need 2 x facilities?

### ***OBJECTIVES***

- General
  - to build wherewithal to leap and **stay over the chasm**
  - **align SCC01** and EIP activities
  - maintain / re-build **faith**
  - openly identify and **resolve challenges**
- AM – get Horiz sight of IIP initiatives; insights & feed issues & opportunities to Horiz ACs for PM sessions
- PM – make **specific plans** for each initiative; identify and address challenges; mobilise all sectors

### ***DESIRED OUTCOMES***

1. Sense of something very practical and tangible
2. Increased alignment amongst the SCC01s
3. Clear Forward Plans and sense of how to resource?!
4. Support for HL Pavilion event; and poss UP one also?

### ***INPUT***

- i. AM Session
  - a. AC overview prestn
  - b. 2 Posters; Copies of Summaries; PPT for each / one initiative
  - c. Sense of scale for each measure
- ii. PM Session Humble Lamppost
  - a. Survey Analysis
  - b. Copies of LG draft; D3.9; DIN standard
  - c. Slides of LG / D3.9 & DIN standard
  - d. OJEU Analysis
  - e. SCC01 HL Measures Analysis --- build on it interactively?
  - f. Pavilion Event Design --- sign up from participants
  - g. Draft outline list of actions (roadmap)
- iii. PM Session Urban Platform
  - a. Copies of LG / MF
  - b. Input Experience Presntn from Ghent (GC requested)
  - c. ShCities Plan & Cross-SCC01 opportunity
  - d. Standards
  - e. Draft outline list of actions (roadmap)

### ***PROCESS***

#### ***AM Session (105mins)***

- a) 20 mins overall orientation AC & on both Initiatives (Andrew/Graham/Wim) (5+5+10 QNs)
- b) 60 mins
- c) 20 mins debrief and agreed sum-up (flip chart?)

#### ***PM Session (120 mins)***

### Humble Lamppost (Graham & Wim? lead)

Straight into Initiative Breakout

a) Orientation 30 (ppt or A3 prints on flips?)

- a. Survey
- b. OJEU
- c. Docs delivered
- d. Forward plan list of items (& who/gaps)

Clarification discussion --- Id key needs, opportunities and challenges

b) Working Issues & Needs 60

- a. Discussion on identified key needs
- b. Key challenges (cities/industry); Key Opportunities (revenue etc) ---use D3.9 pictures
- c. Pavilion Event Design (slides / sketch)
- d. Review draft list of actions
- e. Key comms and events calendar
- f. Sign-up resource sheet for more actions?

c) Action Plan / Sum-Up

- a. Validate / build on draft 'list'
- b. Key points of take away for closing Plenary

### Urban Platform (Andrew & Svet? lead)

Straight into Initiative Breakout

a) Orientation Presentation(s) 30 (ppt or A3 prints on flips?)

- a. Demand Side – Andrew (ShCities) / Thimo (MF W'shop)
- b. Supply Side – Alliander? (Ref Arch)
- c. Standards – Bart

Clarification discussion --- Id key needs, opportunities and challenges

b) Working Issues & Needs 60

- a. Discussion on identified key needs
- b. Use input materials to
- c. Opp'ty for Cross-SCC01 / Pavilion Market Mobilisation
- d. Comms and events calendar
- e. Review draft list of actions

c) Action Plan / Sum-Up 30

- a. Validate / build on draft 'list'
- b. Key points of take away for closing Plenary