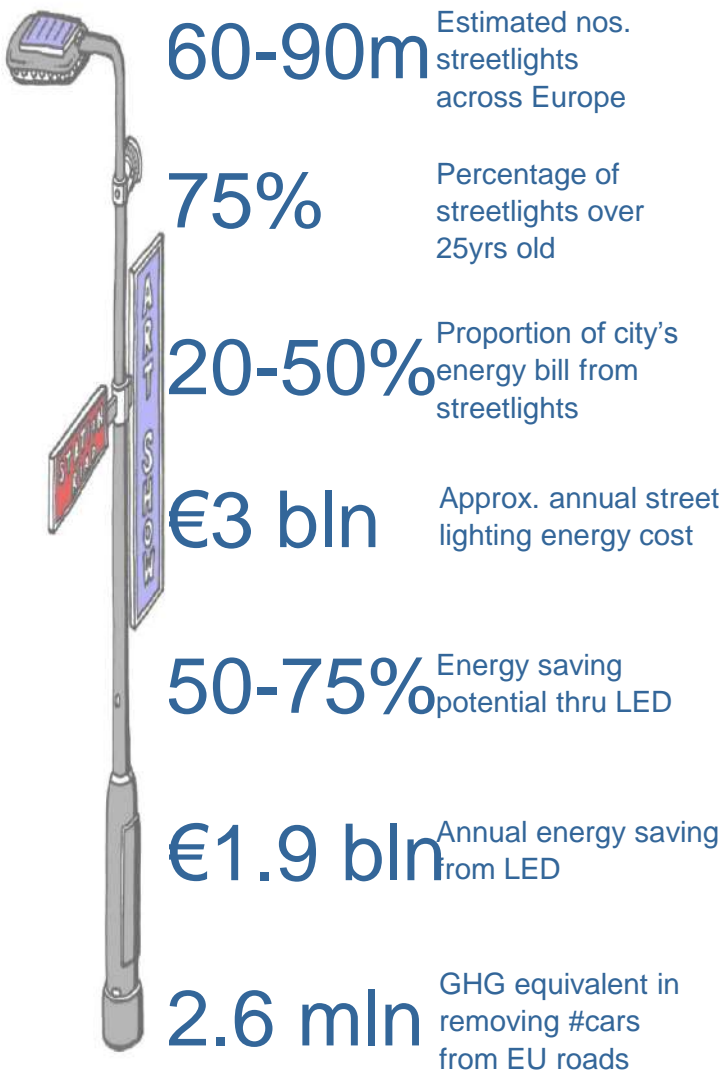


# The Humble Lamppost

# A Bold Ambition



## GOAL

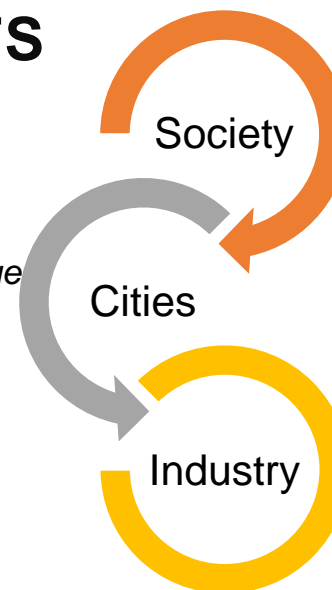
**10m Smart Lampposts across EU Cities**

## VISION *'Bootstrap the Smart City'*

*An open affordable component-based city lighting solution  
...that enables other smart city initiatives;  
delivered collaboratively between cities & Industry  
to speed integrated valuable delivery*

## & BENEFITS

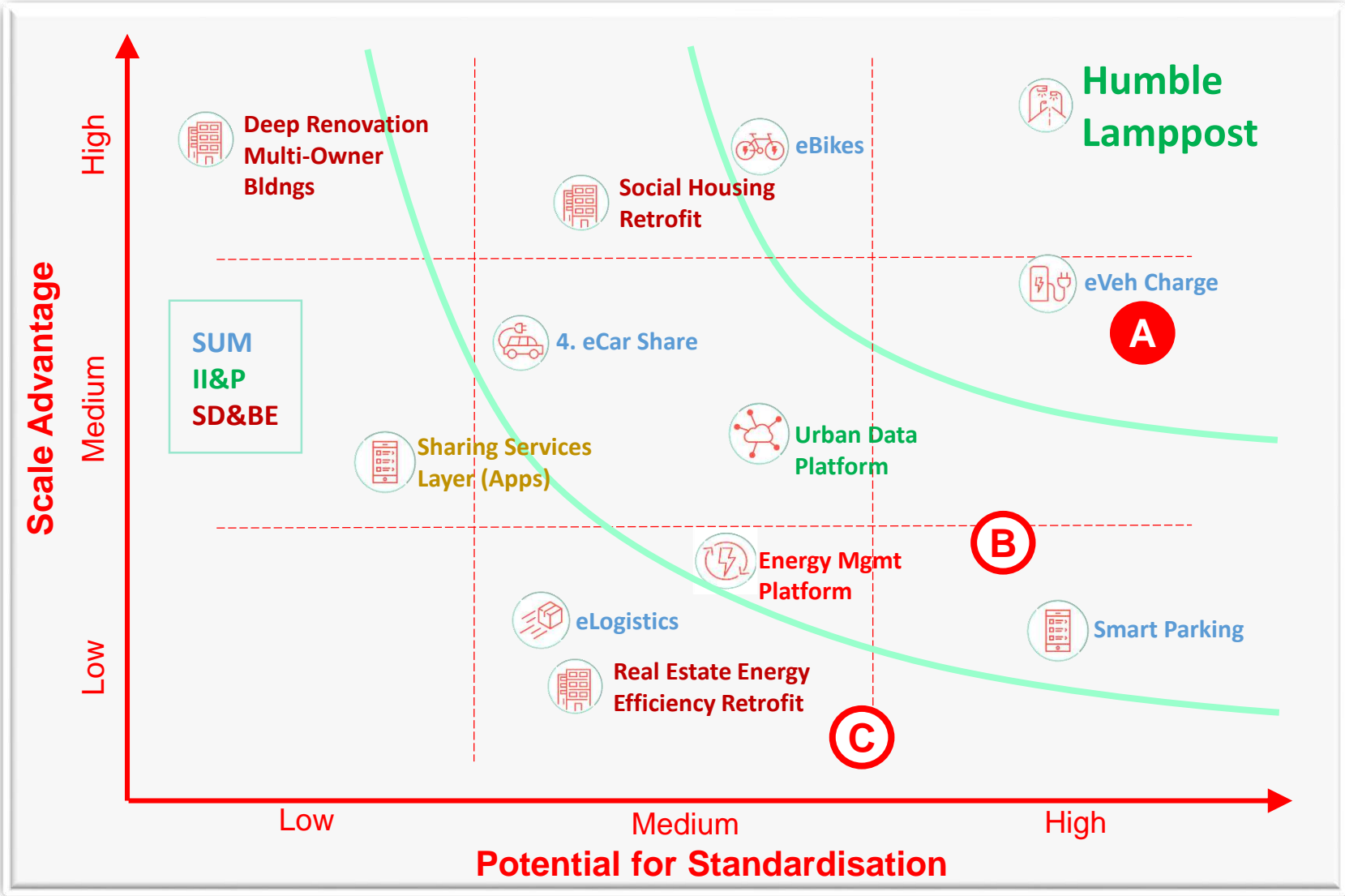
- Efficiencies
- Speed to value
- Image
- Confidence



- Better experience
- Safer society
- Pride in community
- Lower taxes?

- Reduced sales cost
- New market
- Revenue / Profit
- Brand
- Export potential

# An obvious “Quick Win”



# Focus & Deliverables...

## Focus

- *Demand Side Readiness*
- *Mobilise 'city-clusters'*
- *Engagement of SCC01s*
- *Tangible deliverables*

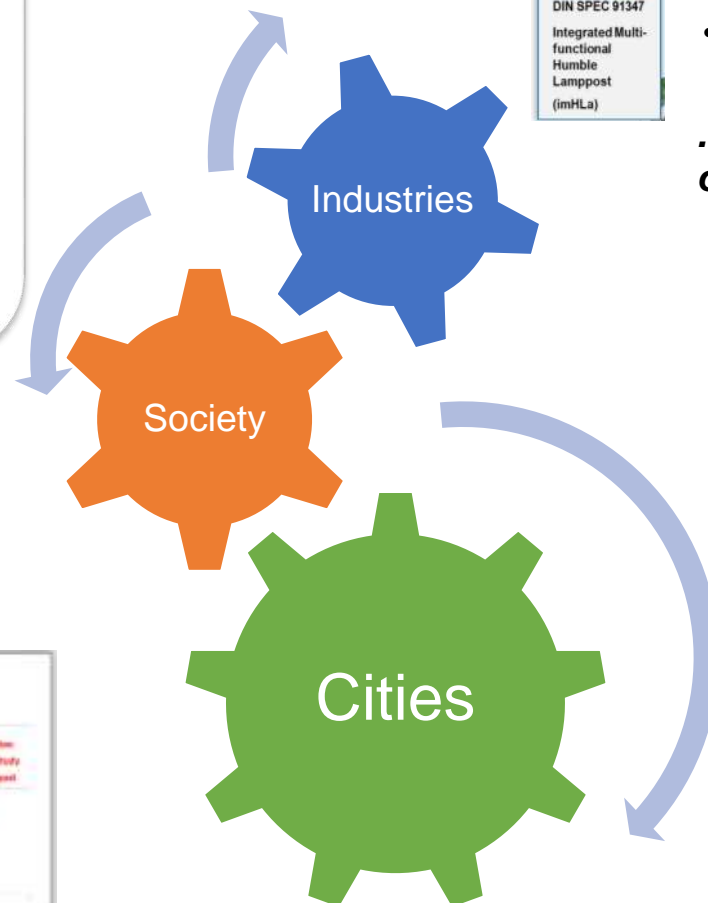


## For Supply Side

- DIN 91347: ImHLA Specification (Non-light Use Case focus)
- .. addressing non-light smart opportunities!***

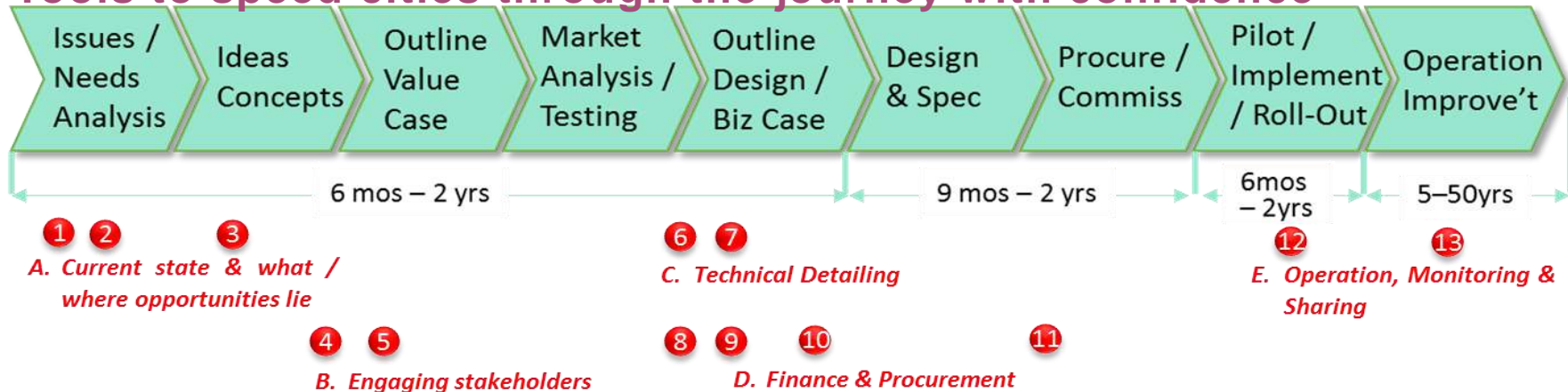
## For Demand Side

- Leadership Guide
  - Management Framework
  - HL Use Cases
  - Demand Aggregation Case Studies
- ....for a kick start to smart city!***

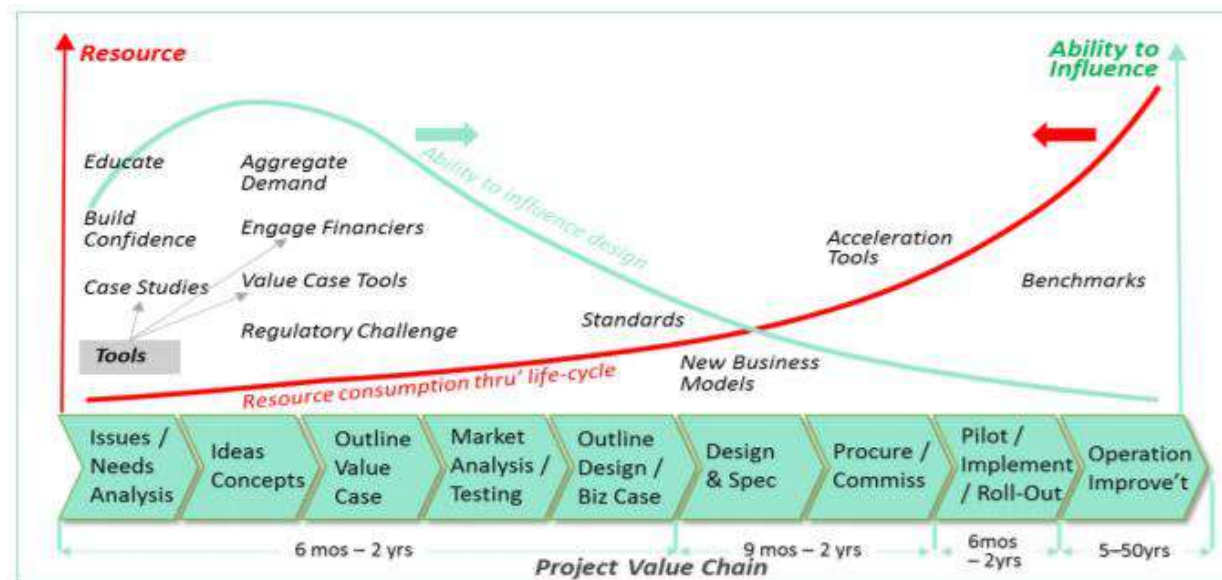


# Management Framework 'Toolkit'

## Tools to speed cities through the journey with confidence



- Engage across 'silos'
- Aggregate demand
- Accelerate delivery
- Increase confidence
- De-risk delivery
- Add new services
- Attract investment



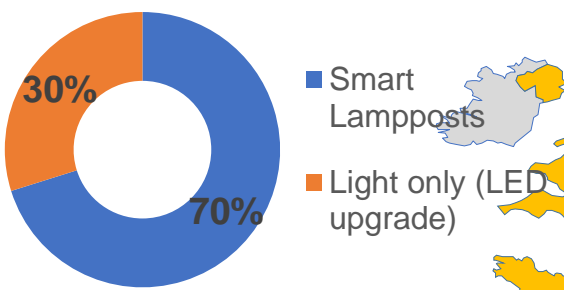
# Cities survey results

~100 responses from EU countries

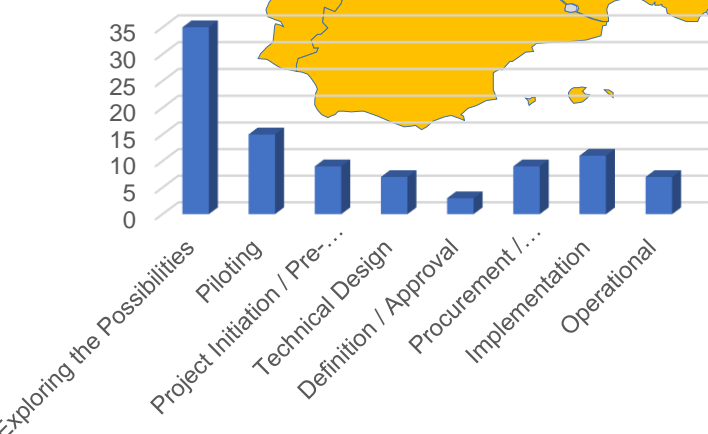
..Also:Iceland; 27 Australian ciities; India, Brazil



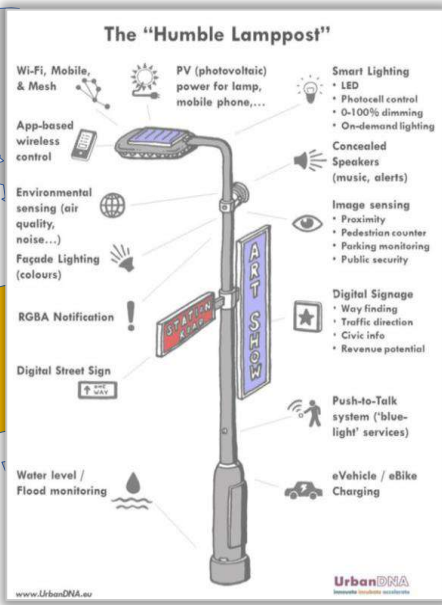
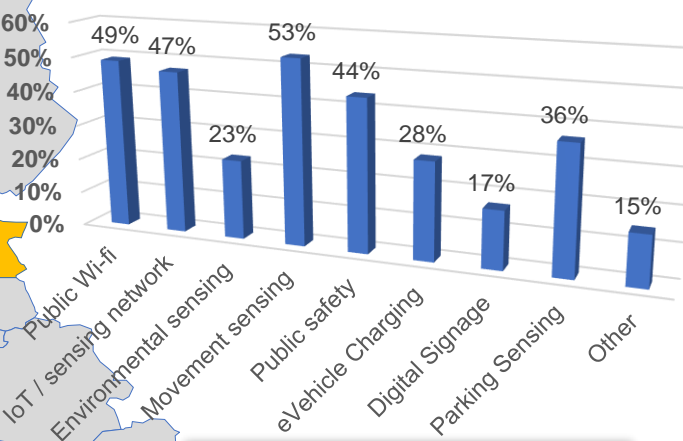
Most want smart Lampposts, not just smart light



60% still at early stages (i.e. scope to influence)



A wide range of use desired cases



Countries completing survey



# What next...

- Exploit the HL Survey
- Business Case / Decision Making tool
- Develop business cases for key (non-light) 'Use Cases'
- Deploy / exploit city Guidance to 'ready' the market
- Address Technical Blockers
- 'Pavilion' Event to focus on action

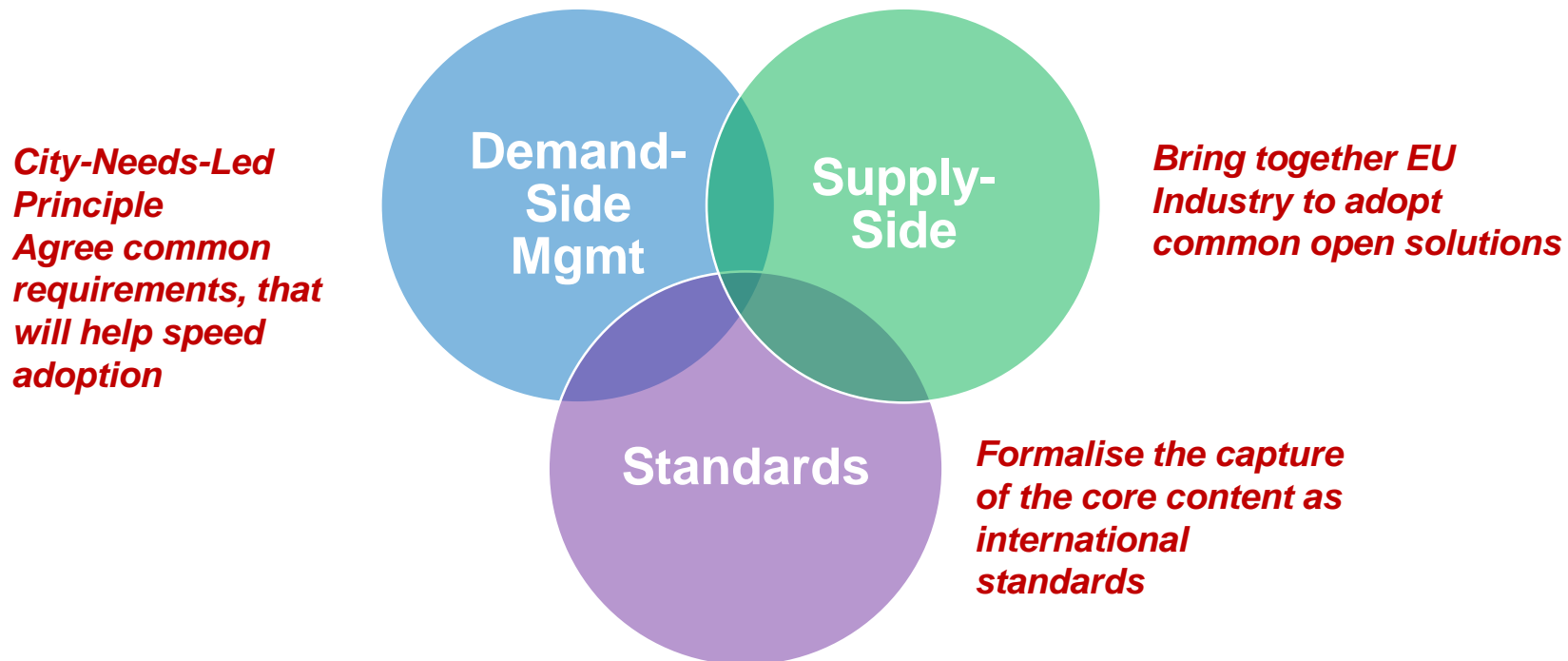
Action Headline	Description	Timeframe	Resource
1 HL City Survey	Broaden coverage via SCC01s/E-Cities/National city networks/personal contacts. Analyse, write article(s); exploit	June-July	In process (GC)
2 OJEU analysis	Analyse 6-12 most tenders & contracts (potential insight also for above article)	July	EC/M place?
3 Case Studies	Use survey & (industry/city) contacts to capture cases of (i) smart lighting (ii) lampposts (iii) demand aggregation	July-Aug	
4 Technical blockers	Capture options, insights, resolution for known tech challenges (backhaul, 24hr power,...)	Ongoing (in ShC)	ShCities / Industry
5 Standards & Req'ts Spec	Collect city examples; Map applicable stds; synthesise and develop outline city minimum req'ts spec. Determine if city, or city/industry collaborative initiative.	Q3	TALQ / SCC industry role
6 Use Cases as Stimulus	Identify uses cases that'll stimulate city action: Air Quality – check potential 'EC fines' as lever for change (link also to Inspire / Copernicus).	July	EC - WJ
7 Value Cases: Non-Light	eV/Bike charge – explore specification (e.g. via London, & German efforts)		London (GC)
8 High Level Champion	Develop value cases for target financial / revenue use cases (eV, Connectivity, Parking, Digi Signage,...)	Q3/4	
9 Demand Aggregation	Seek out candidates as HLG champion to help stimulate market action		EC support required
10 Investor engagement	Continue to target SCC01 cities as collaboration / aggregation candidates. Identify who holds mandate in cities.		
11 Map/Engage Industry	Approach investors to access TA grants as incentive for demand aggregation. Also poss resource for Req'ts Spec. Re-engage 2016 city-clusters as investment candidates.	Start June	
12 Pavilion Event	Map / categorise industry to HL logical architecture		
13 General Assembly	Plan, execute pavilion event (as designed with SCC in 2016)	Sept / Oct?	
14 'Package' HL solution	Showcase at GA in BXL	Oct 12 <sup>th</sup>	
15 Develop templates	Build on ShCities D3.9 deliverable as basis for 'packaging' of HL solution (tech/user/BM&F)	5 July ShC w/shop	
16 Workshop/Calls LG/MF	Identify priority A/B/C Templates and develop, to speed pre-proc's & implementation		ShC (E-cities) for webinars
17 Move materials to SDOs	Prove Leadership Guide / Mgmt Framework through city workshops. Run webinars (ShC/E-cities) to disseminate.		
18 Decision Support Tool	Engage NSBs / SDOs to adopt/adapt LG/MF etc to develop portfolio of guidance / standards		
19 Ongoing comms	Negotiate access to and upgrade/tailoring of SCC Decision Support Tool as basis to speed city decision making	Q3-4	SCC?
20 InnoSupp SME Action	Develop and execute comms plan to mobilise market actors		
	Progress EC call response innovation Support action to stimulate SMEs via Cluster Orgns	Bid Sept / Jan	

# Urban Platforms



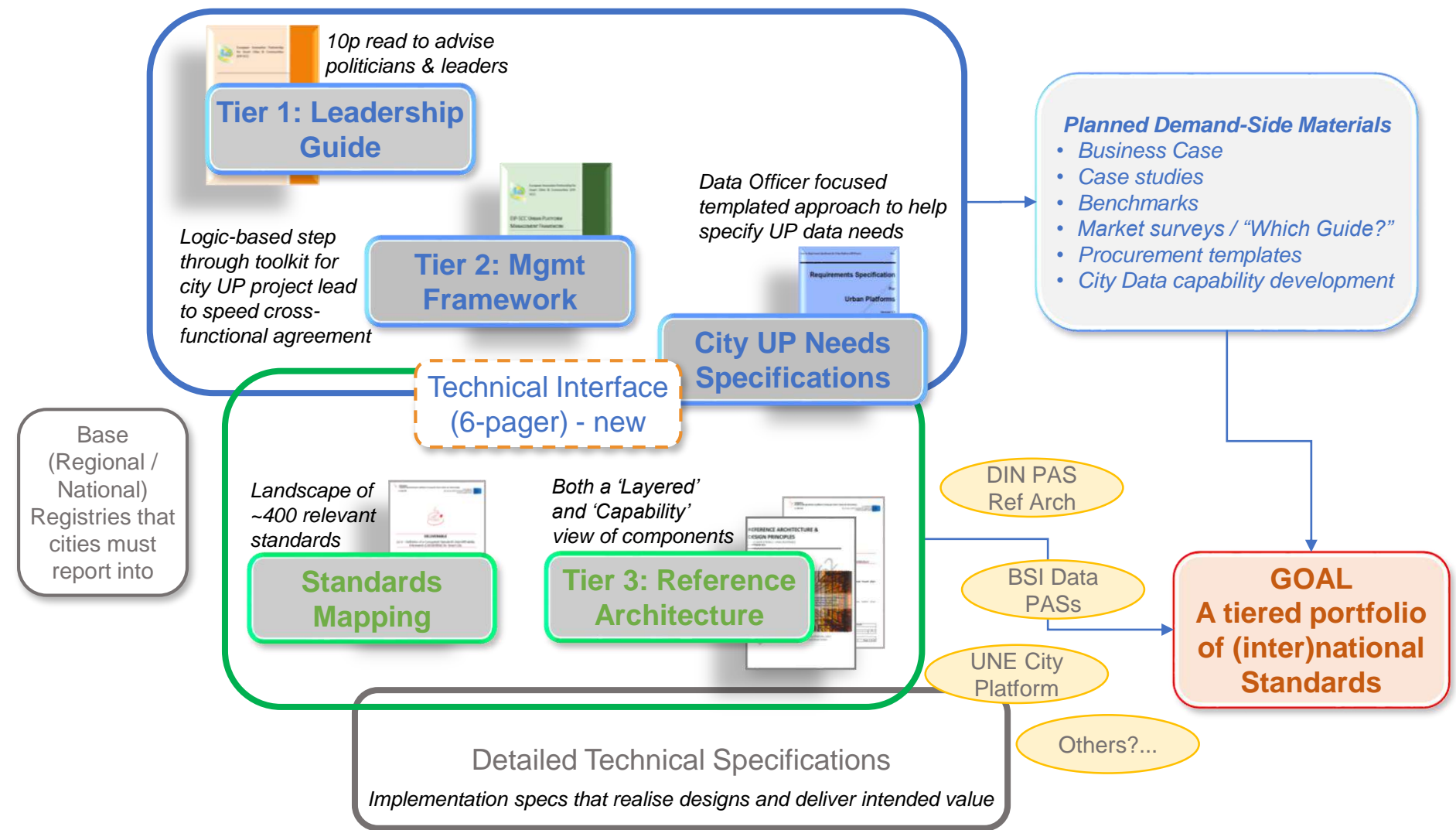


# Urban Platform Initiative: Goals



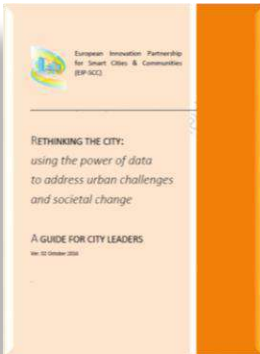
- By **2016** have **reference templates** for tenders in place to allow cities to plan in an integrated way
- By **2018**, create a **strong EU city market** for Urban Platforms
- By **2025**, ensure that **300m residents of EU cities** are supported by Urban Platform(s) to manage their business with a city and that the city in turn drives efficiencies, insight and local innovation through the platform(s)

# Roadmap to a portfolio of open documents



# Two key city-facing deliverables

## Leadership Guide

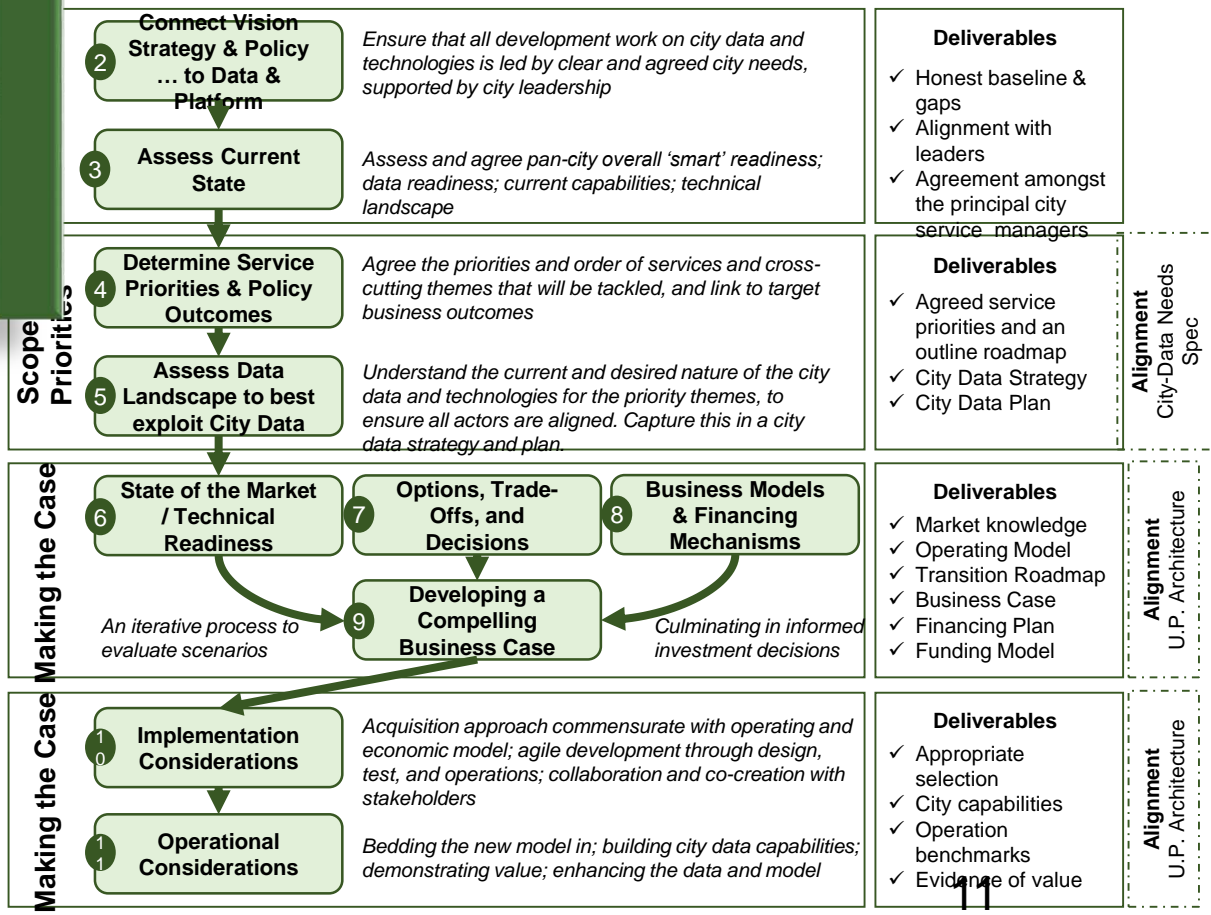


## Management Framework – a city toolkit



### Six Next Steps for City Leadership

1. Establish data priorities
2. Build clear value cases
3. Scenario plan the models for the broader city data operating environment
4. Set the foundations for good, proactive governance
5. Establish business models and financing
6. Exert personal influence across all of the above



# Standards mapping and Reference Architecture(s)

## An inventory of standards initiatives..

### SDO Activities evaluated

1. IEC
2. ISO
3. ISO/IEC-JTC1
4. IEEE
5. ITU-T
6. OneM2M
7. Open Geospatial Consortium
8. CEN/CENELEC/ETSI

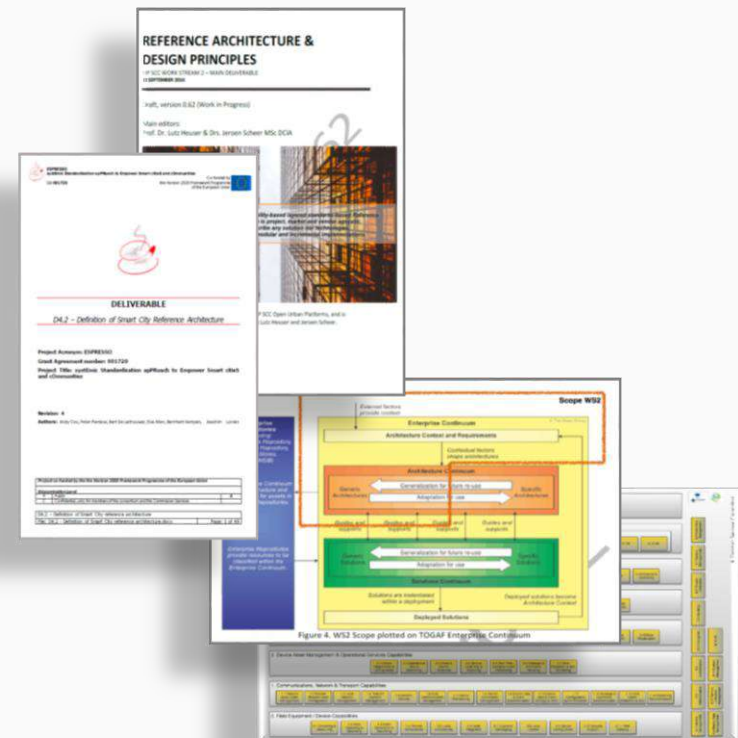
### Regional / NSOs

1. AENOR
2. DKE/DIN
3. OASC
4. World Smart City community

### Mapping Activities

1. Reference Architecture Urban Platform
2. Technical Infrastructure
3. Data Management
4. Data Access (API Connector to get access to Data)
5. Smart Data (Enriched Data)
6. Smart Services
7. Security and Privacy

## Reference Architecture(s)



# Forward Plans

## Urban Platform Roadmap

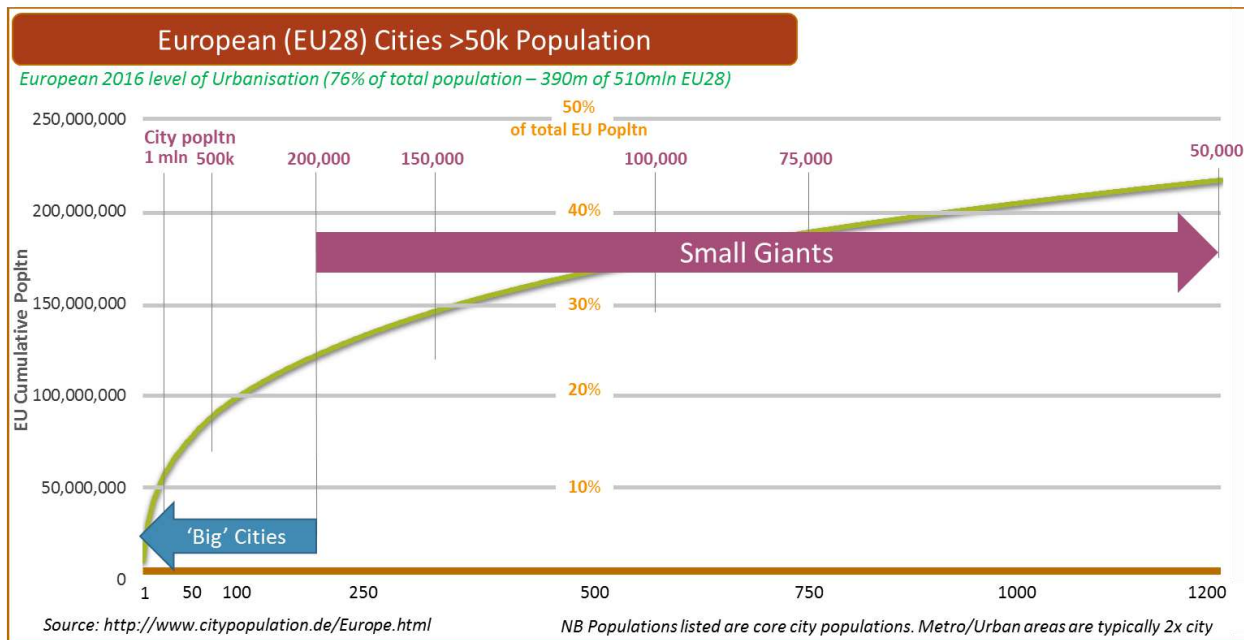
1. Test **Leadership Guide** in cities with politicians
2. Run **Mgmt F'work** workshops to ready cities (exploiting networks like DE SC Forum; E'cities; etc)
3. Improve **MF** – adding also 'operation and governance guide'
4. Improve **Ref Arch** and align with planned DIN PAS
5. **Manage end June BXL Standards Workshop**
6. Mobilise across SCC01s, and collect examples of success stories, and UP justifications
7. Cost, benefits, value case development
8. Develop further templates / tools
9. Apply for financial assistance under INTERREG Europe for capability creation
10. **Ready EC / Initiative for ISO Nov conference**
11. Ongoing comms
12. Pavilion Event

# Small Giants



# “Small Giants”

Most Europeans do **not** live in the big cities – they’re in the mid and smaller cities



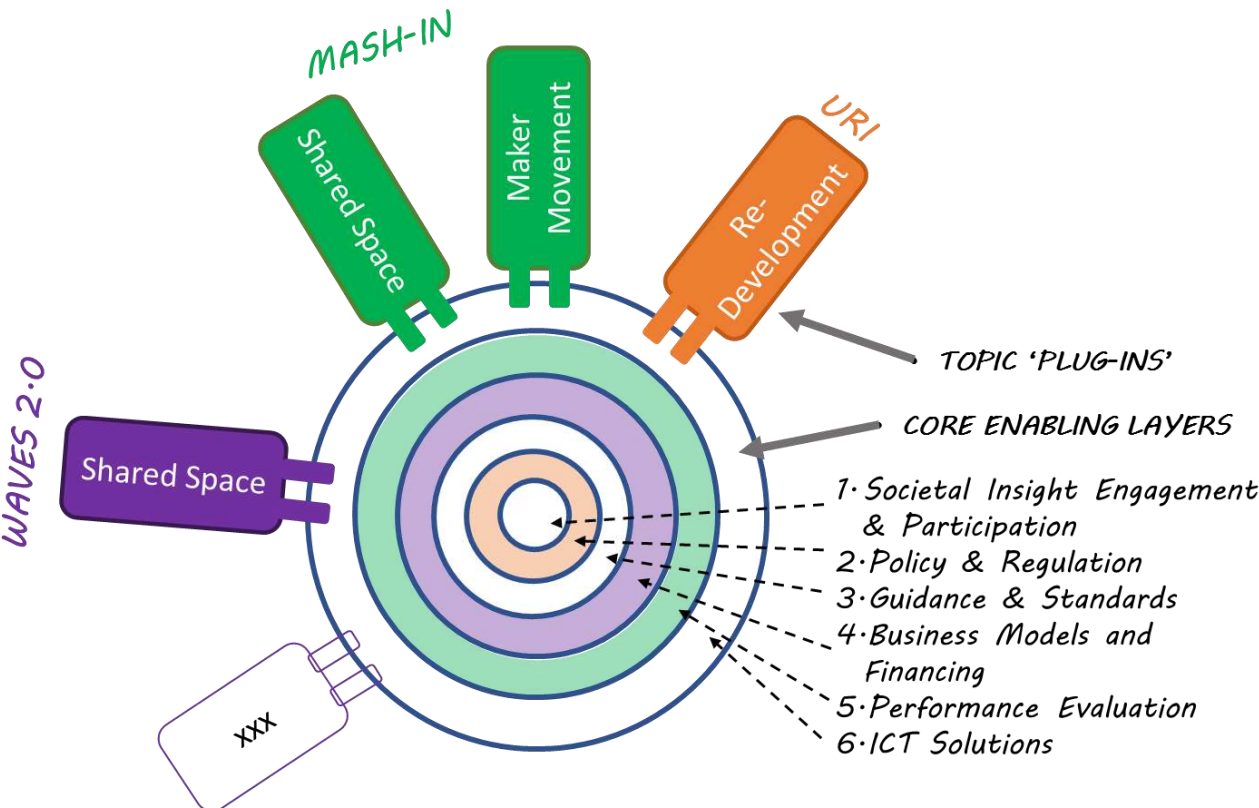
- Where are the progressive ‘Small Giants’ ?
- How can we design for small; share solutions; aggregate demand; and scale-up across the market?

- Design solutions based on **minimum requirements** that service these smaller cities – delivering more affordable solutions
- Innovate and test new business models
- Focus on “Toolkits”
- Focus on managed sharing of structured knowledge
- Focus on business models that support scale deployments

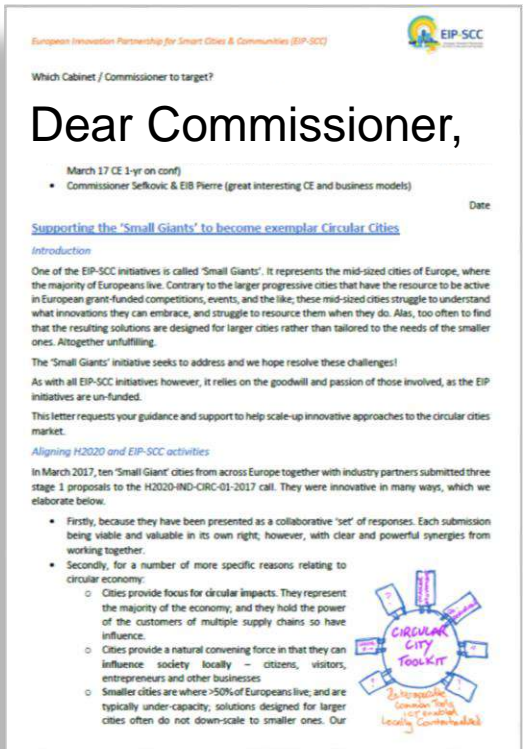


# Small Giants

1<sup>st</sup> Steps: Aligning 10 Cities engaged in ‘Circular City’ initiatives



A ‘Toolkit’ for Smart Circular Cities  
Focus on replicable ‘plug-in’ solutions, common cross-cutting topics with scale-up in big cities



Soliciting strategic EC support & funding