These projects receive grant finance from the European Union’s Horizon 2020 research and innovation programme.

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Ambition of the SCC01 Lighthouses

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SHARING CITIES

3 Lighthouse cities
London - Lisbon - Milan
demonstration areas

3 Fellow cities
Bordeaux - Burgas - Warsaw
co-design, validate, implement

+100 cities
scale-up

and your city?

Global link cities
support

BORDEAUX
LONDON
WARSAW
MILAN
BURGAS
LISBON
OUR MEASURES...

- Citizen engagement
- Building retrofit
- Sustainable energy management services
- Shared eMobility
  - EV car sharing
  - EV charging
  - eBike sharing
  - Smart parking
  - eLogistics
  - Urban sharing platform
- Smart lamp posts
DIFFERENT STAGES

Year 1  **SHARING**  Year 2  **REPLICATION**  Year 3  **SCALE UP**  Year 4-5

City Level

- Strategic Buy In
- Aggregate Demand
- Citizen Engagement

Technical Level (Ten Measures)

- Design Measures and Specify
- Innovate and Collaborate
- Industrialise
EV CAR SHARING

✔ To reduce traditional car ownership via MaaS by delivering a market take-up of eV Car Sharing schemes.
To deploy eBike sharing schemes as part of the sustainable and integrate mobility-as-a-service offer in our cities.
✓ To increase and ensure an appropriate network of charging stations in our cities, as a driver for e-Mobility.
To demonstrate new ways of urban logistics by incentivizing eLogistics and streamline the growing volume of light freight.
Automated bus pilot in Helsinki
mySMARTLife

- Navya AUTONOM SHUTTLE operating on open streets among mixed vehicle traffic during 3 years
- Investigating especially the long term usability of an automated minibus
- Operates over the summer and fall of 2018 improving the mobility service and reachability in Kivikko district of Helsinki
- Complements the network of Helsinki’s metropolitan public transit authority Helsinki Region Transport (HSL) with line number 94R
- Integrated to the journey planner app of HSL
- Follows fixed schedules and runs between 9 AM and 3 PM on weekdays carrying passengers from a stop of a regular Helsinki bus line to Kivikko Sports Park
- Route length to one direction ~ 1 km, top speed 18 km/h
- Operator onboard
Battery buses - Triangulum Stavanger

- Design competition involving 3 high schools (Feb./March 2016)
- Fall 2015: order of battery buses submitted
  - 12.02.2016: Kick-off
  - 22.02. – 18.03.2016: Design period
  - 14.03.2016: School visits (County mayor, NuArt, press)
  - 18.03.2016: Deadline design, (110 design solutions from 7 classes)
  - 05.04.2016: Jury’s statement, 1 design chosen from each class

- Technical details and specifications (examples): Range: 350km – 400km, Charging (0-100%): 4h, Biodiesel heater, USB charger, 37 seats; 56 standing
- Buses arrived in Stavanger December 2016 (M23) and were taken into operation in February 2017 (M27)
- Learn how these buses can best be used within public transport system. How today’s system must be adjusted to the use of electric buses including the installation of charging stations and maintenance.
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Smart deliveries by electric cargo bike to app-managed delivery room at Valla Torg, Stockholm

Residents avoid unnecessary journeys to collect parcels; cargo bike deliveries reduce use of trucks.
Valladolid: ev charging and e-Buses - Remourban
Smarter Together – Mobility Point, Simmeringer Platz, Vienna

• in the district Simmering, Wien, based on the objectives of the **urban mobility Plan Vienna**
• Mobility points give uncomplicated and fast access to low-emission mobility around the clock.
• Supports areas of the City which are undersupplied by new mobility services
• Linked with the city platform, gradually all services at Mobility Points will be integrated and available via WienMobil app, which will offer information & booking, routing, registration for services, ticketing, payment services etc.

**Our pilot mobility points offers**
Mobility Services: e-bikesharing, one e-cargo-bike to share, (e-)carsharing, public transport, taxis, e-charging infrastructure for private cars, bike storage boxes and bike maintenance gear
Other Services: information pylon (incl. digital screen), W-LAN, urban furniture and specific urban feature design.
The SCC01s are implementing fairly similar Measures

Packaging can strengthen SCC01 programmes’ success, and align with the broader European market. Create REAL scale in the market through working with Lead, Replication, Scale-Up Cities; & EIP-SCC

• Differing economies of scale and benefits
• Coordinated by the BM&F & Replication Task Groups
• Measures we agreed to work together on incl:
  - Smart Lampposts
  - eBikes
  - Urban Platform
  - Social Housing
  - …plus: eBuses; Data
• Phased approach to test / prove concept
• Offers a basis to attract scale investment

Bespoke
Not the answer for all; it’s about finding the right balance
1 Size Fits All
Packaging Framework

Market Factors
- Demand; Supply; Investor; Societal; Technical

City Context
- Need
  - As-Is setting
  - Volume, Value, Timing, Priorities

Regulatory / Policy
- Risk; Ownership; Market; Freedoms; ...

Business Justification
- Financial Case; Value Case; Econ. Of Scale; Risk & Value Mgmt; Precedents/Cases

Business Model
- Ownership; Life-cycle structuring; Gov’ce& Operating Model; SPV; ...

Societal Needs
- Tools; Insight; Use Cases; Participation; Data Privacy; Co-financing; ...

Technical Design
- Solution Framework; Design Components; Methods & Tools; Standards

Commission / Procure’t
- Templates

‘Bundling’
- Associated / adjacent / complementary measures

Financing & Funding
- Sources; Afordability; Aggregation; Terms; Phasing of investors

Implementation
- Mgmt
  - Schedule; Milestones; Resources; Risk; ...

Indicators & Monitoring
- Financial; Non-financial; benchmarks; learning

Draft Principles
1. City-needs-led approach
2. Component-based design
3. Support local tailoring
4. Adapt to city size & maturity
5. ‘Digital first’ approach
6. Integrated, open solutions
7. Early engagement
8. Multi-disciplinary perspective
9. Deployed at scale
10. Incorporate leading practices
11. Responsive to market change
Choices to make on Levels of Collaboration & ‘Demand Aggregation’

1. **Individual Municipality Solutions**
   - + No constraints to innovation
   - + Freedom to operate
   - - Time / cost to design and implement
   - - Limited access to good practice
   - - No/low scale advantage

2. **Common approaches to use cases, specifications, business models, or financing and funding**
   - + Access to & exploitation of good practices
   - + Confidence in decisions
   - + Common target for the market (notably SMEs)
   - - No economies of scale advantage
   - - Less opportunity for benchmarking
   - - Risk of operational individualism

3. **Framework conditions for call-off purchasing**
   - + Benefits as in 2; with ‘potential’ for scale advantage
   - - Traditionally, cities seen to use as a negotiating starting point, and frustrating suppliers
   - - Risk of creeping back to individualism

4. **Joint commissioning**
   - + Real scale advantage (price / long-term value)
   - + Access to Industry RD&I interest / budget
   - - Collaboration challenges
   - - Pain of learning (for 1st one)
   - - Potential operational constraints

*There is no ‘one right way’ – the important thing is to evaluate options with an open mind*
Opportunities – Collaboration between SUM and SCCO1s

• Exchange learning
• Identify and aggregate demand
• Identify potential funding sources to replicate and scale up
• SCCO1s contribute to the 5 urban mobility initiatives
• Join in our packaging conversation in Nordic Edge, Stavanger
• We can join in your conversations – World ITS, CIVITAS, POLIS