

Living Lab approach for city logistics: experiences from CITYLAB's living labs

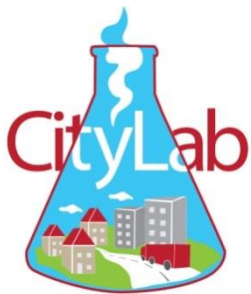
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TNO

2nd CITYLAB Inter-living lab transferability workshop

1 December 2016

Rotterdam





The CITYLAB project

City Logistics in Living Laboratories

HORIZON 2020 project, aiming to:

- Develop methodology for city logistics living labs
- Set up seven cities as living labs
- Perform implementation and evaluation of measures
- Provide facilitation of knowledge transfer

Cost-effective &
sustainable
solutions

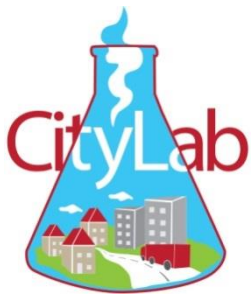
Upscaling

Replication

Transfer



Project partners



Meware



Posteitaliane



**TRANSPORT
FOR LONDON**



Vrije
Universiteit
Brussel



BRUSSELS MOBILITY

BRUSSELS REGIONAL PUBLIC SERVICE



IFSTAR



DLR



TNO



ROTTERDAM

MAIRIE DE PARIS



**UNIVERSITY OF
Southampton**

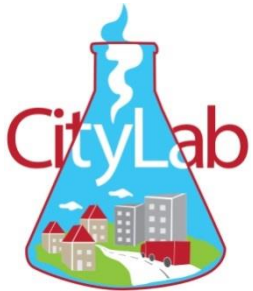


**SOUTHAMPTON
CITY COUNCIL**

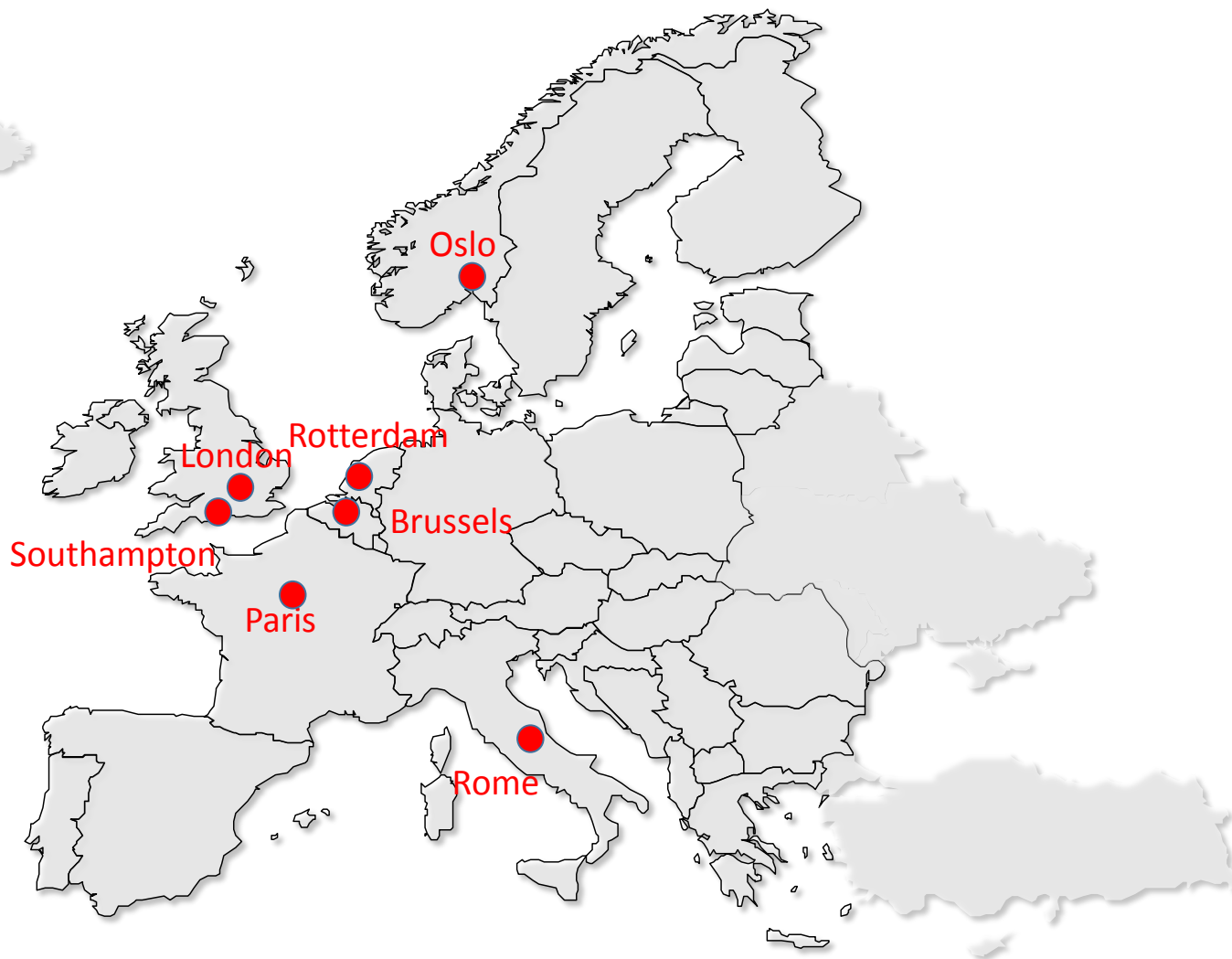


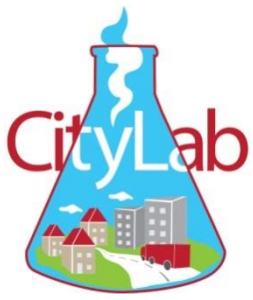
**MEACHERS
GLOBAL LOGISTICS**





CITYLAB cities





CITYLAB solutions

**Highly fragmented
last-mile deliveries**

**Large freight
attractors and
public
administrations**

**Urban waste,
returns and
recycling**

Logistics sprawl





Why Living LaBs (1)?

- No continuation in projects/initiatives once solution is tested
- Low adoption rate of initiatives/measures/innovation
- Need to accelerate an uptake of more sustainable and efficient solutions
- Need to enhance the stakeholder consultation processes and integrate it on the regular basis in a system
- Provide a structural approach to co-creation

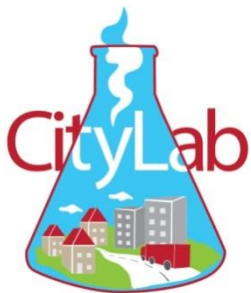




Why Living Labs (2)

Creation of Living Labs provides a new way to develop and address different realities (trends) and challenges and to develop and action driven form of freight partnerships, fostering innovation deployment and improving communication and cooperation between stakeholders in the urban freight transport system.





Living Lab: what's in a name

Living Lab: A test environment for cyclical development and evaluation of complex, innovative concepts and technology, as part of a real-world, operational system, in which multiple stakeholders with different background and interest work together towards a common goal, as part of medium to long-term study.



How that is different?

Past field tests, demonstrations (low SSA maturity level and hardly JKP)	Living labs (high SSA maturity level and JKP)
<i>Characteristics</i>	
<p>Simple Linear development Predetermined</p> <p>Isolated environment Individual values Mainly operational goals Single actor as driver and owner</p> <p>Little uncertainty Short to medium term orientation Re-active planning and steering</p>	<p>Complex Iterative, cyclical development Learning effects and improvements during activities</p> <p>System in system, real-life environment Shared values Grand challenges Multi-stakeholder and collaborative governance (incl. public-private partnerships)</p> <p>Deep uncertainty Medium to long term orientation Adaptive and pro-active planning and steering</p>
<i>Purpose</i>	
<p>Closed research & development Expert design Closed system evaluation Analysis for single department / actor</p>	<p>Open innovation and live analytics Co-creation of multi-stakeholders System in system evaluation Analysis for multi-department / multiple actors</p>

Why a Living Lab for city logistics?

- Complex multi-stakeholder environment
- Conflicting interests
- Highly dynamic sector in a heart of a change
- No “one solution fits it all”
- Etc.

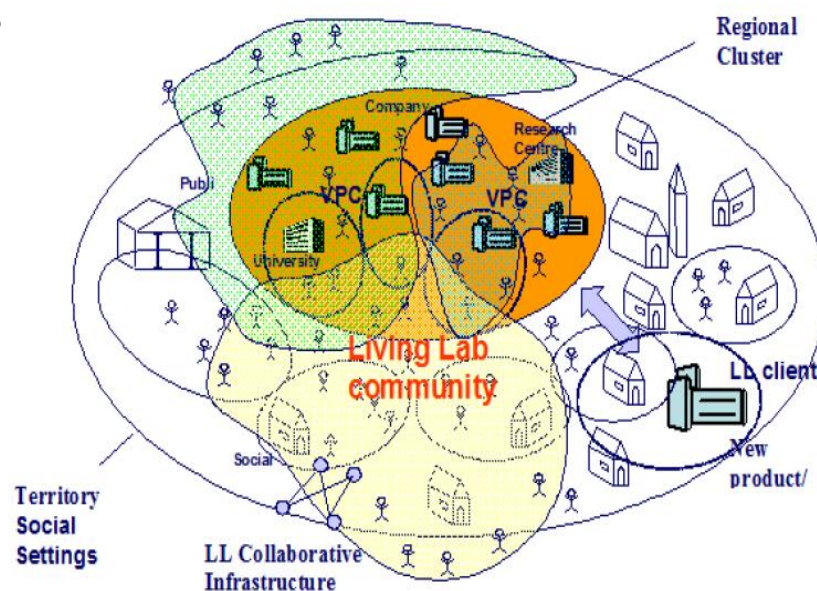
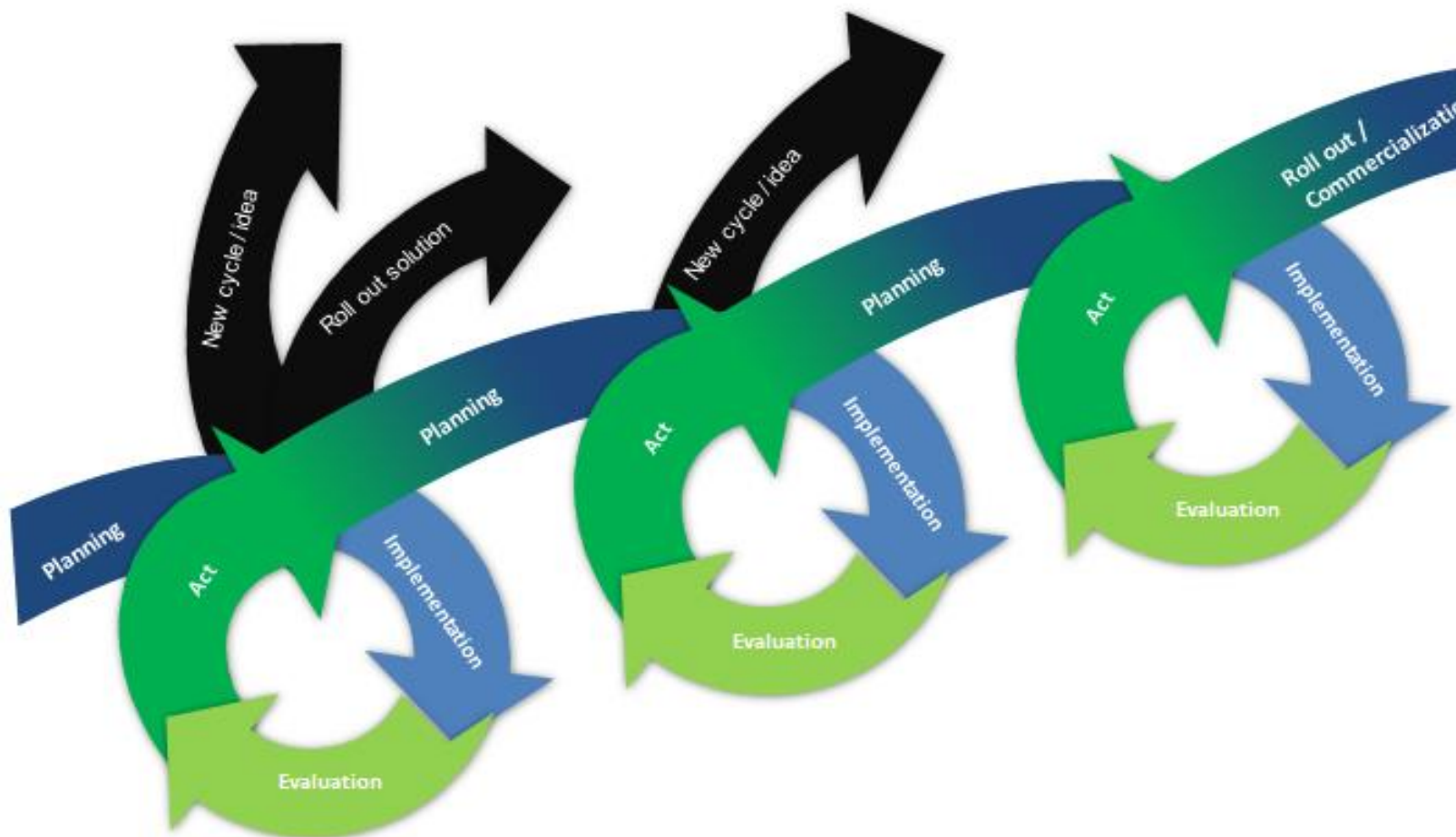
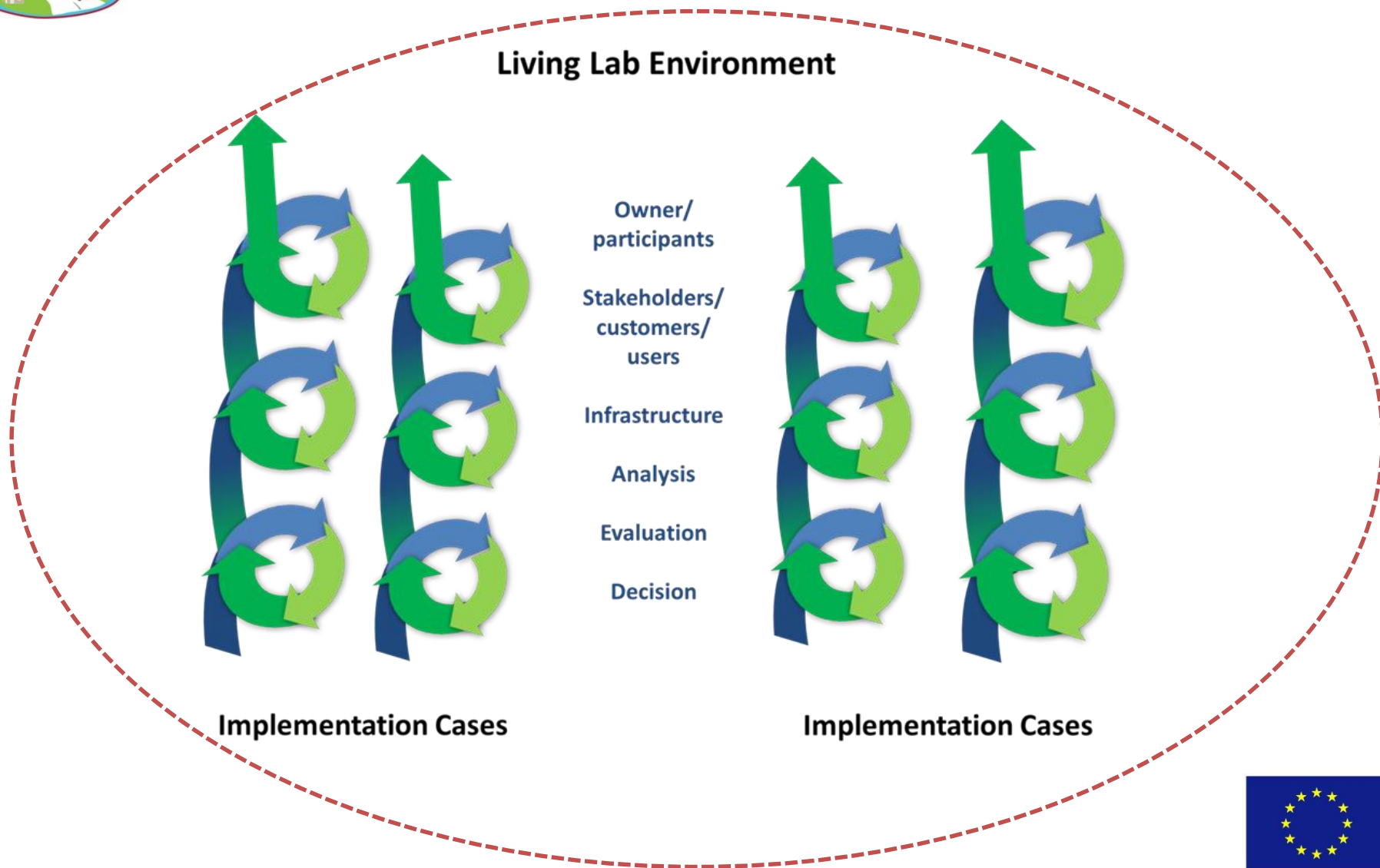


Figure 10: Living Labs as Functional Regions (from: [3])

Living Lab conceptual architecture (1)



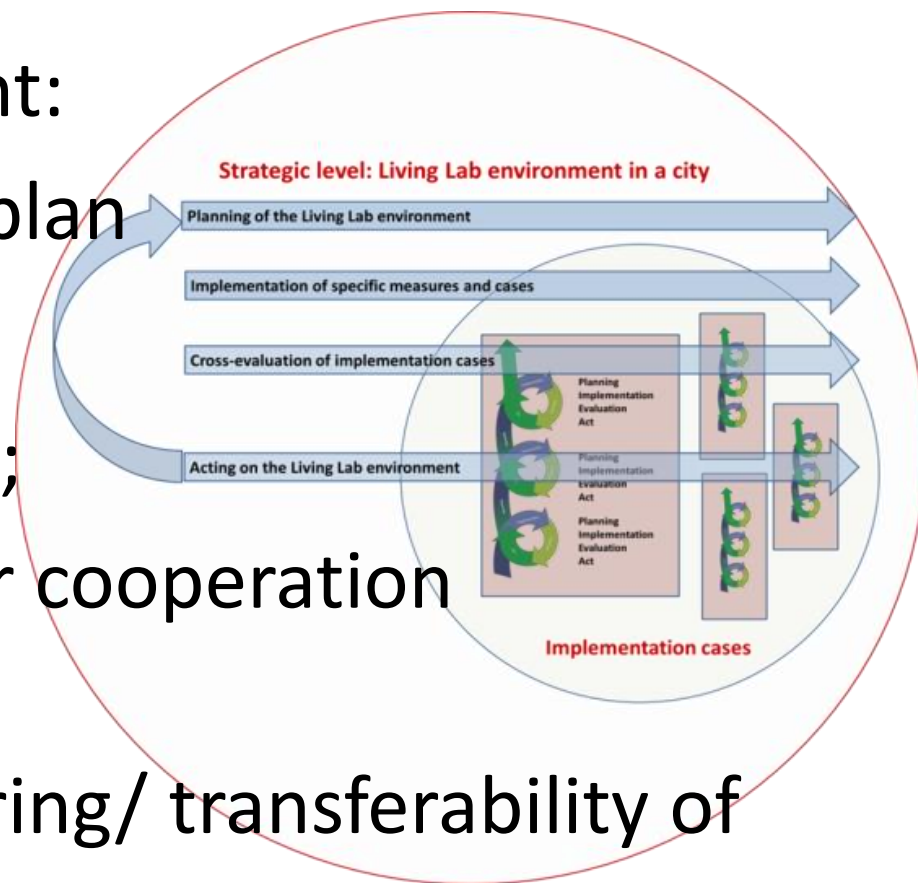
Living Lab conceptual architecture (2)

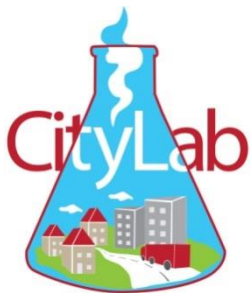


Living Lab conceptual architecture (3)

Dynamic test environment:

- Urban freight strategy plan (SUMP/SULP);
- Measures supporting it;
- Established stakeholder cooperation mechanisms
- Evaluation and monitoring/ transferability of knowledge between measures





CITYLAB learning pass (1)

	London	Southampton	Oslo	Paris	Rotterdam	Brussels	Rome
Pre-requisites for the LL environment							
Urban freight strategy/plan	x	x		x	x	x	x
Established cooperation mechanisms	x		x	x	x	x	x
Existence of measures/ implementation cases	x	x	x	x	x	x	x
Monitoring process	x		x	x	x		x
Objectives within CITYLAB							
City level	x	x		x	x	x	x
Implementation case	x	x	x	x		x	x

Elements are not related into combined system; Stakeholder cooperation, monitoring processes, evaluation – scope differs a lot per city; There is monitoring but no evaluation; political cycles; etc.





CITYLAB learning pass (2)

- Setting up phase: very important, there were you discover things you did not expect
- Involving different parties is critical
- Evaluation: on going process, both on the level of LL environment and on the level of the implementations
- Learning between different solutions
- Cycles: not forcing into fixed cycles, but more attentively following the natural development of the process and guiding it
- Act phase: be able to recognize it and go to next circle
- Act phase: learning from the negative experiences

