

Towards more resilient cities:
European public and private sector actions to
respond to the market trends and to the social
and environmental challenges .

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Spanish adaptation overview: public and private sectors

UFD Challenges

Public Sector

SUMP

Regulations

Measures

Private Sector

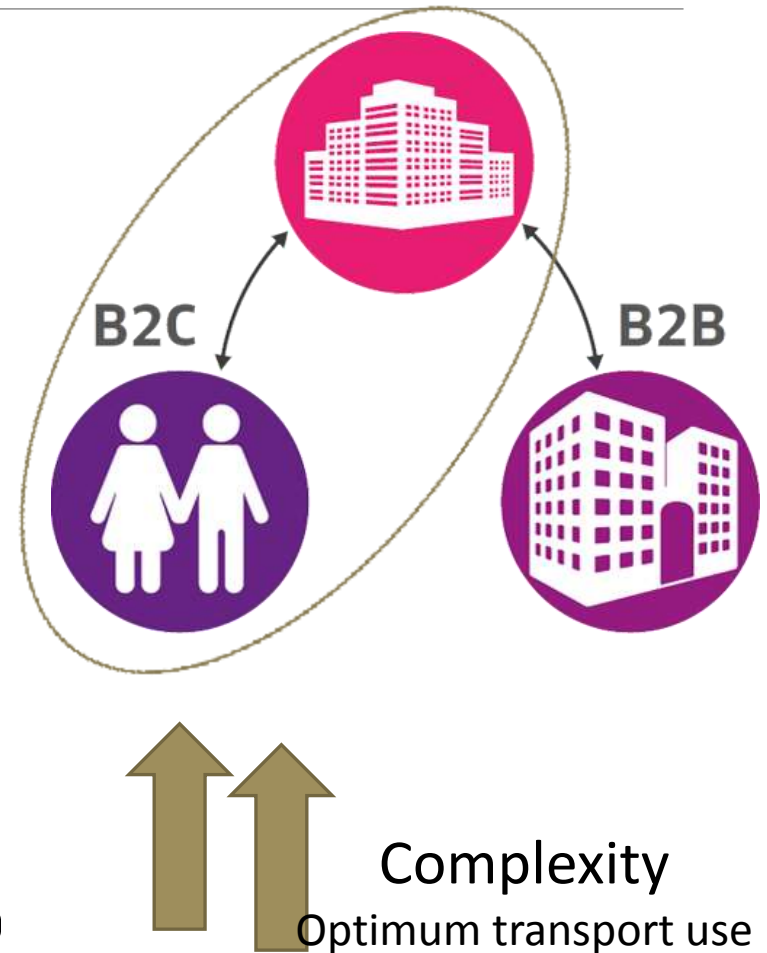
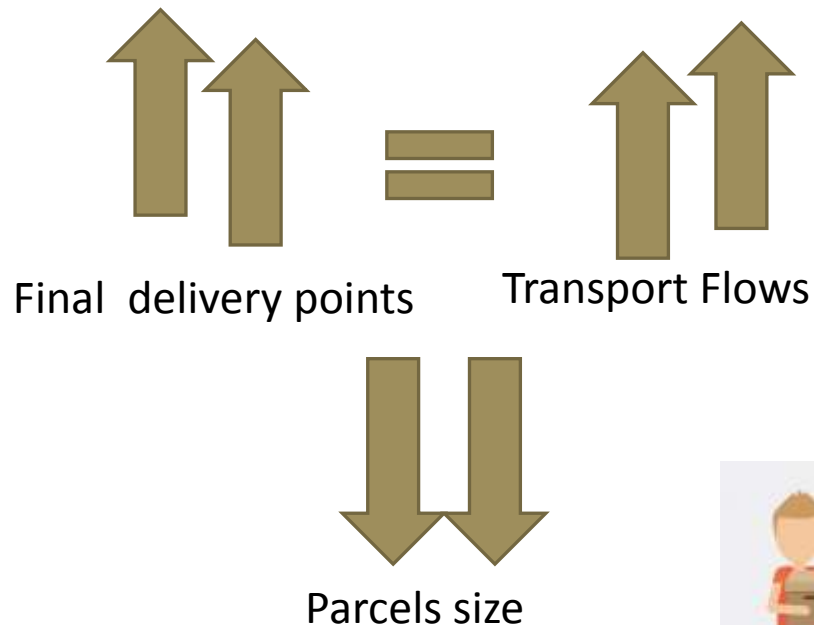
Night deliveries

New Distribution Business
Models

UFD Challenges:

Market increasing trends: e-commerce

- Two business models
- E-commerce increases the B2C



UFD Challenges: Social and environmental needs

Global Warming:

- Climate Change
- Water level



Traffic congestion

- Global warming
- Air quality
- Stress

03/07/2019

Air quality in cities:

- Respiratory diseases
- Life Quality



Noise levels

- Increase stress
- Quality of life

Policies→

prevent the worst scenario
and create liveable cities



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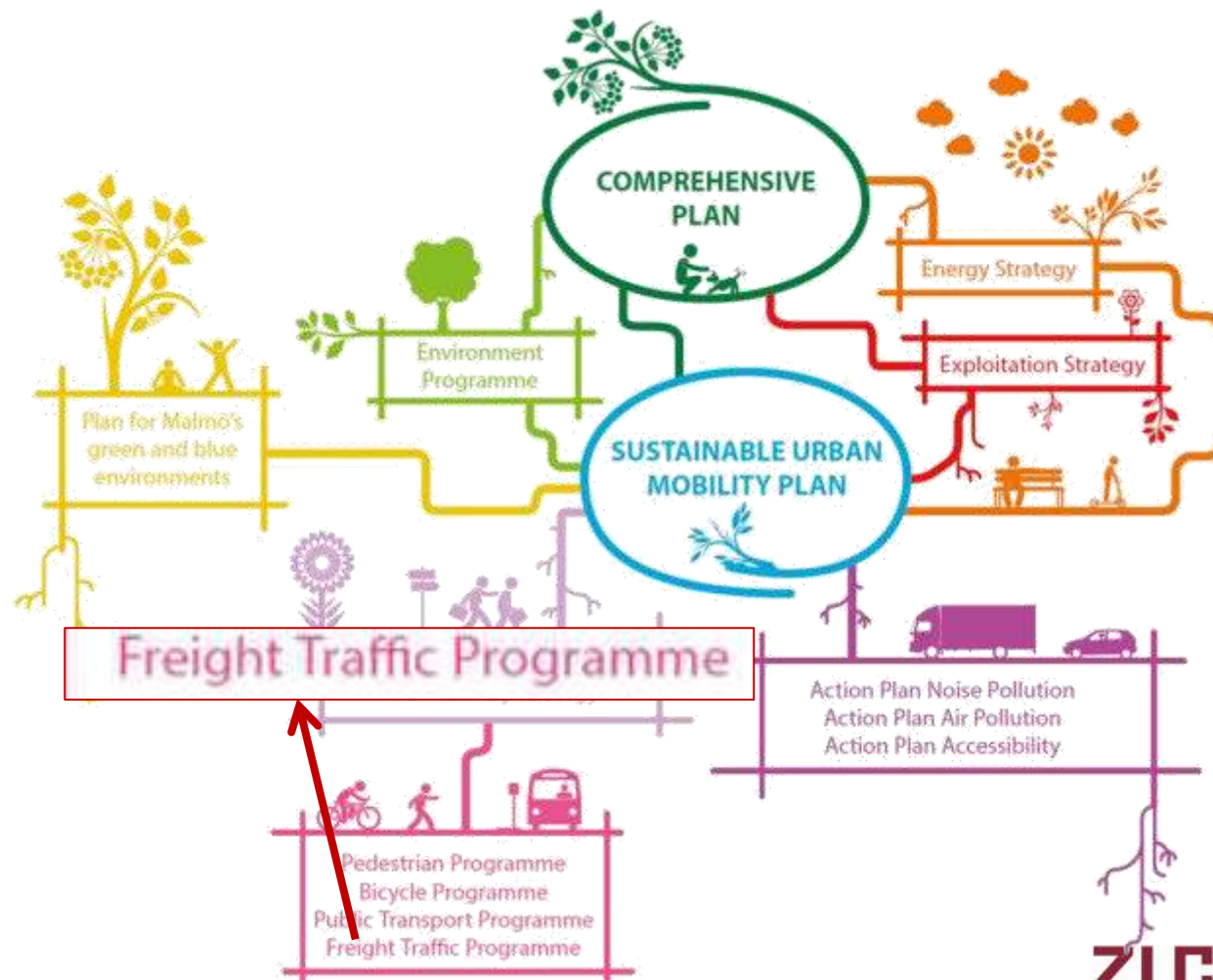
Measures

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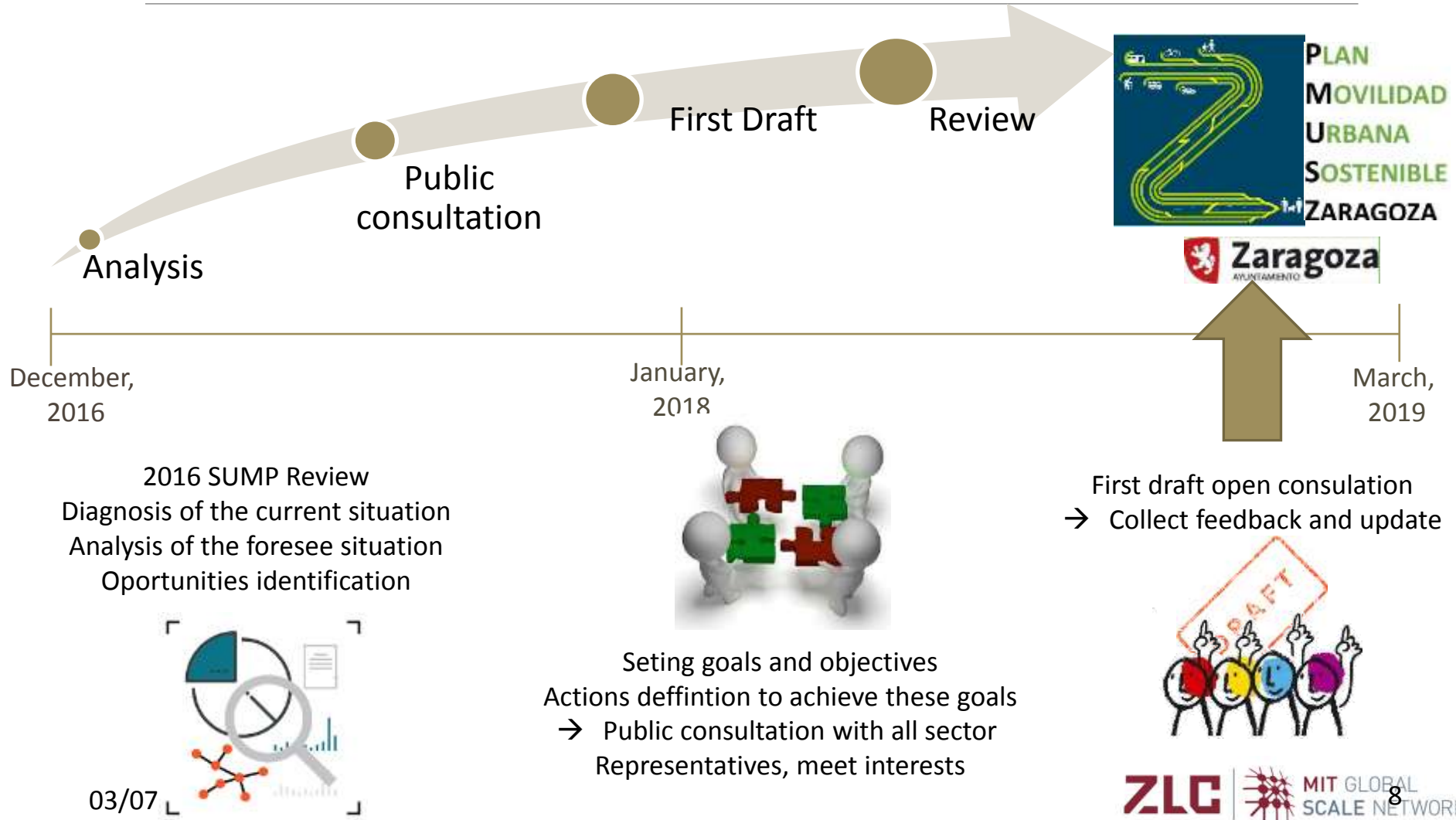
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Spanish adaptation overview: public SECTOR → SUMP



Spanish adaptation overview: public SECTOR → SUMP



Spanish adaptation overview: public SECTOR → SUMP

City of Zaragoza (Spain)
Population ≈ 666000

Scenario for 2027

- Main Objective: Traffic calmed roads and low-carbon and polluted areas
- Access constraints (type, weight)
 - Private vehicle
 - Freight distribution vehicle



1. How will the public sector implement these constraints?

2. How will the public sector facilitate the UFD?

3. How will the private sector adapt to the new scenario?

Spanish adaptation overview: public SECTOR → SUMP

1. *How will the public sector implement these constraints?*

→ Definition of superblocks

Civitas Vitoria Gaseitz:

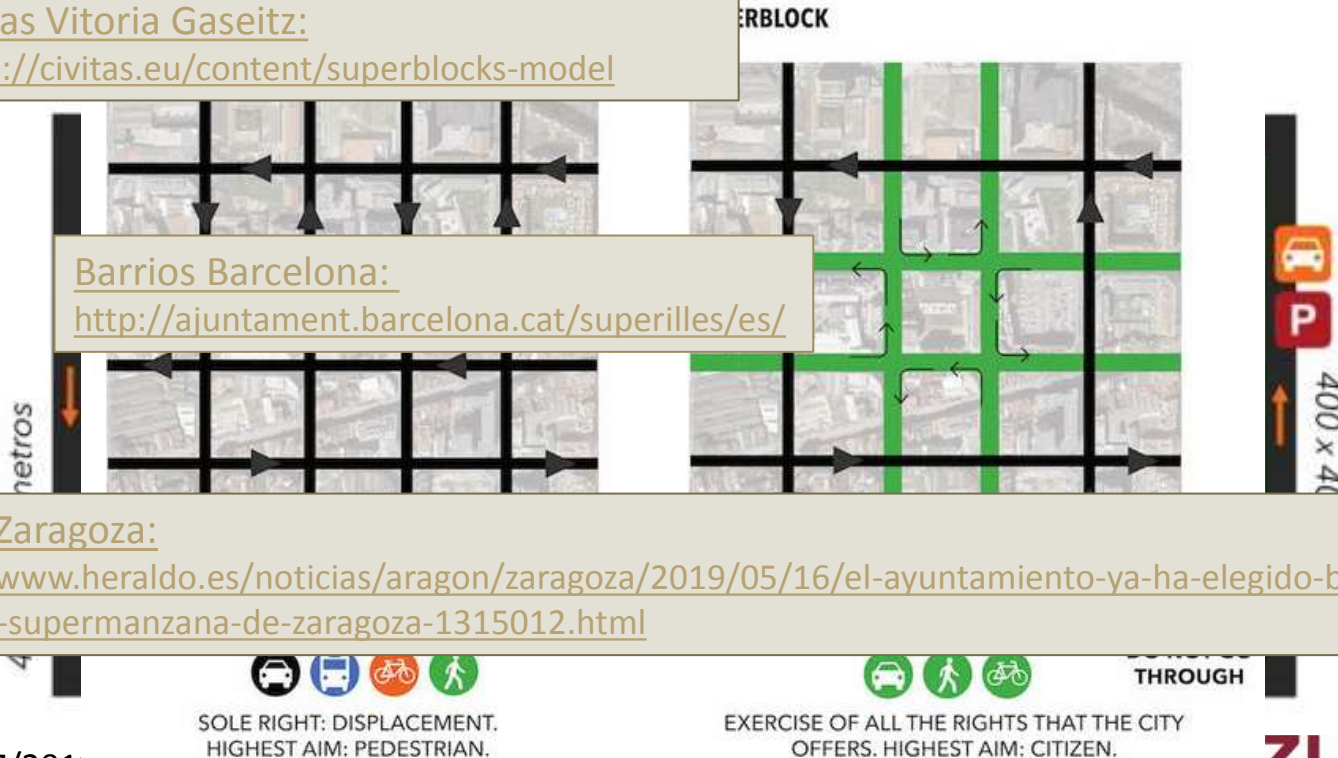
<https://civitas.eu/content/superblocks-model>

Barrios Barcelona:

<http://ajuntament.barcelona.cat/superilles/es/>

Barrio Zaragoza:

<https://www.heraldo.es/noticias/aragon/zaragoza/2019/05/16/el-ayuntamiento-ya-ha-elegido-barrio-para-crear-la-primera-supermanzana-de-zaragoza-1315012.html>



Spanish adaptation overview: public SECTOR → SUMP

2. *How will the public sector facilitate the UFD?*

UFD Issues

- Increasing e-commerce is increasing last mile transport intensity, but calmed and low carbon scenario hinders the conventional UFD



- Loading/Unloading zones available do not meet the zones needs → irregular practices



HORARIO DE
CARGA Y DESCARGA
9:00 A 14:00 H
16:00 A 20:00 H

- Time access constraints to specific areas are incompatible with the timetables for the UFD



Spanish adaptation overview: public SECTOR → SUMP

2. *How will the public sector facilitate the UFD?*

UFD measures

- Multifunctional loading/unloading zones (Bilbao, Barcelona)
- Revise the vehicles size and allow night deliveries
- Allow the access to pedestrian areas with specific clean vehicles (bikes)
- Implementation of micro distribution centres
- Subsidies/ fiscal benefits to renew the fleet with clean vehicles

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Spanish adaptation overview: private SECTOR



3. *How will the private sector adapt to the new scenario?*

Revise the vehicles size and **allow night deliveries**

What does company need for night deliveries?

- *Use of clean vehicles (CNG, electric)*
- *Soundproofing : Vehicles, Facilities, loading/ unloading equipment*



<https://mercadona2016.wordpress.com/>

Succesful stories in the food and consumer sector.

Retailers/ PoS



<https://www.alimarket.es/alimentacion/noticia/284664/consum-lleva-la-distribucion-nocturna-a-40-tiendas>



<https://www.clusterforlogistics.lu/members/members-list/member-detail/service/sumy>

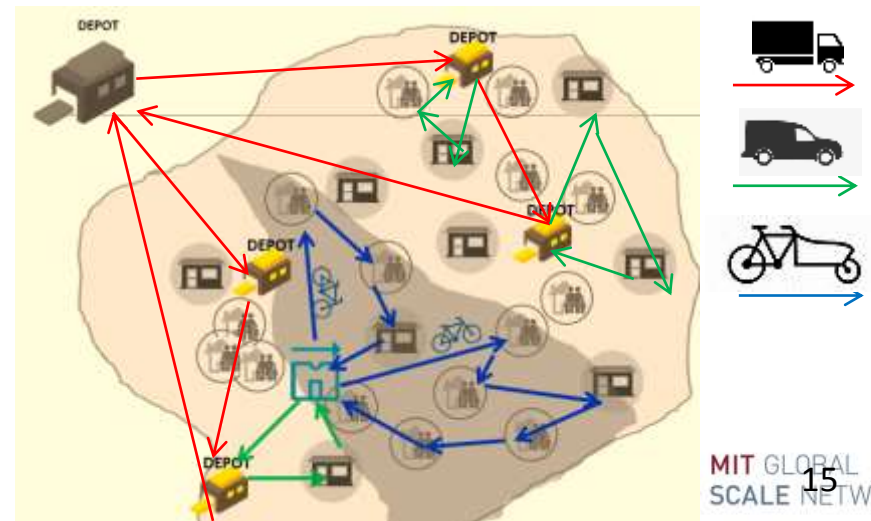
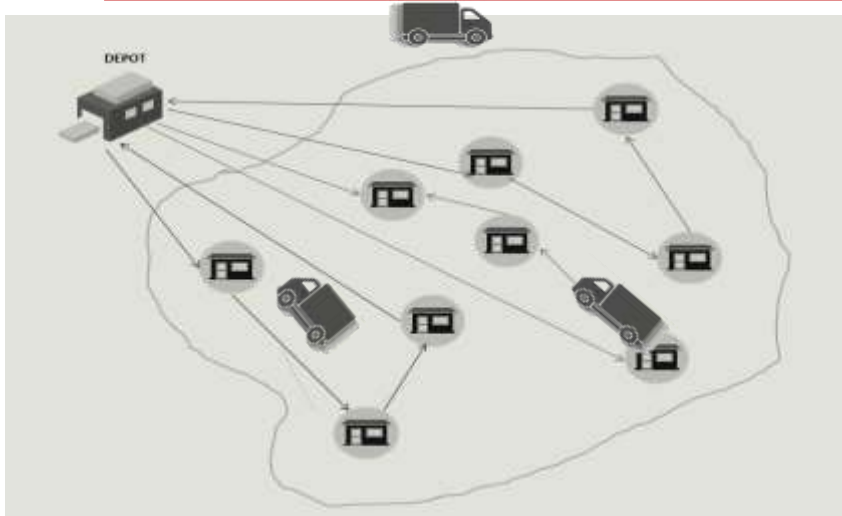
Spanish adaptation overview: private SECTOR

3. *How will the private sector adapt to the new scenario?*

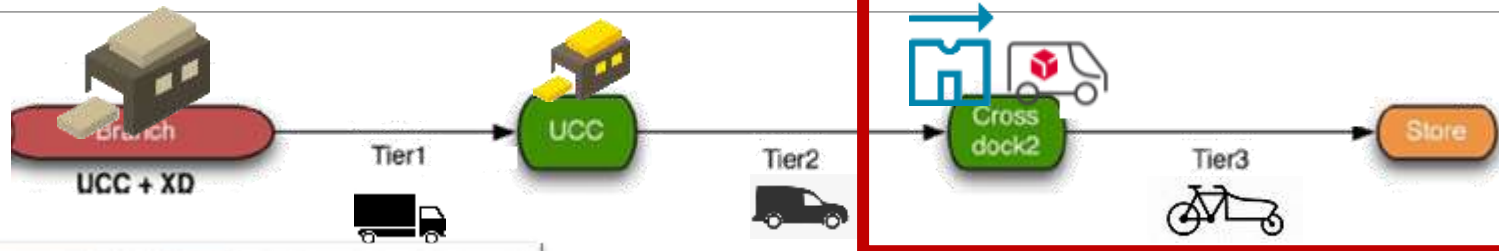
Allow the access to pedestrian areas with specific clean vehicles (bikes)
Implementation of micro distribution centres

What does company need ?

*Incoporate new Urban freight distribution models:
multiechelon distribution models*



Spanish adaptation overview: private SECTOR



<http://elvigia.com/correos-simulara-su-reparto-de-ultima-milla-con-bicicletas-y-triciclos-electricos/>



<https://trans.info/en/last-mile-delivery-according-to-ford-the-company-is-testing-a-new-system-wheeled-warehouses-129172>



<https://postandparcel.info/100363/news/parcel/dhl-trial-thames-delivery-barges-in-bid-to-go-green>

Conclusions

- E-commerce trends, environmental and social challenges require cities become more resilient and get adapted to different scenarios
- Public administration plays a crucial role in designing the urban mobility city models with the definition of the SUMP
 - This process requires the participation of the whole community to build a successful engagement
 - Urban freight transport is one of the key sectors to meet the forecast market trends and urban sustainable challenges
- Public administration must facilitate private sector with the knowledge and resources to adapt to the new city models
- Private sector has to face new challenges and opportunities to innovate
 - New Business distribution models
 - Night deliveries
 - Eco driving training

Thank you for your attention



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