



# London living lab

## Introduction Draft Implementation Plan

*CITYLAB meeting  
First meeting of the Living Lab Advisory Group  
London  
12 October 2015*





# London Living Lab Partners

- Jacques Leonardi, Julian Allen, UoW
- Sam Clarke, Gnewt Cargo
- Andrew Lowery, TNT UK
- Jacqueline Short, TfL





## **Objectives and general question** to be answered by the implementation

- What is the best possible management solution for clean inner city distribution, consolidation and clean vehicle use, from the point of view of a local authority, a large carrier, and a small carriers' carrier?
- The implementation involves an integrated or co-operative supply chain approach between carriers



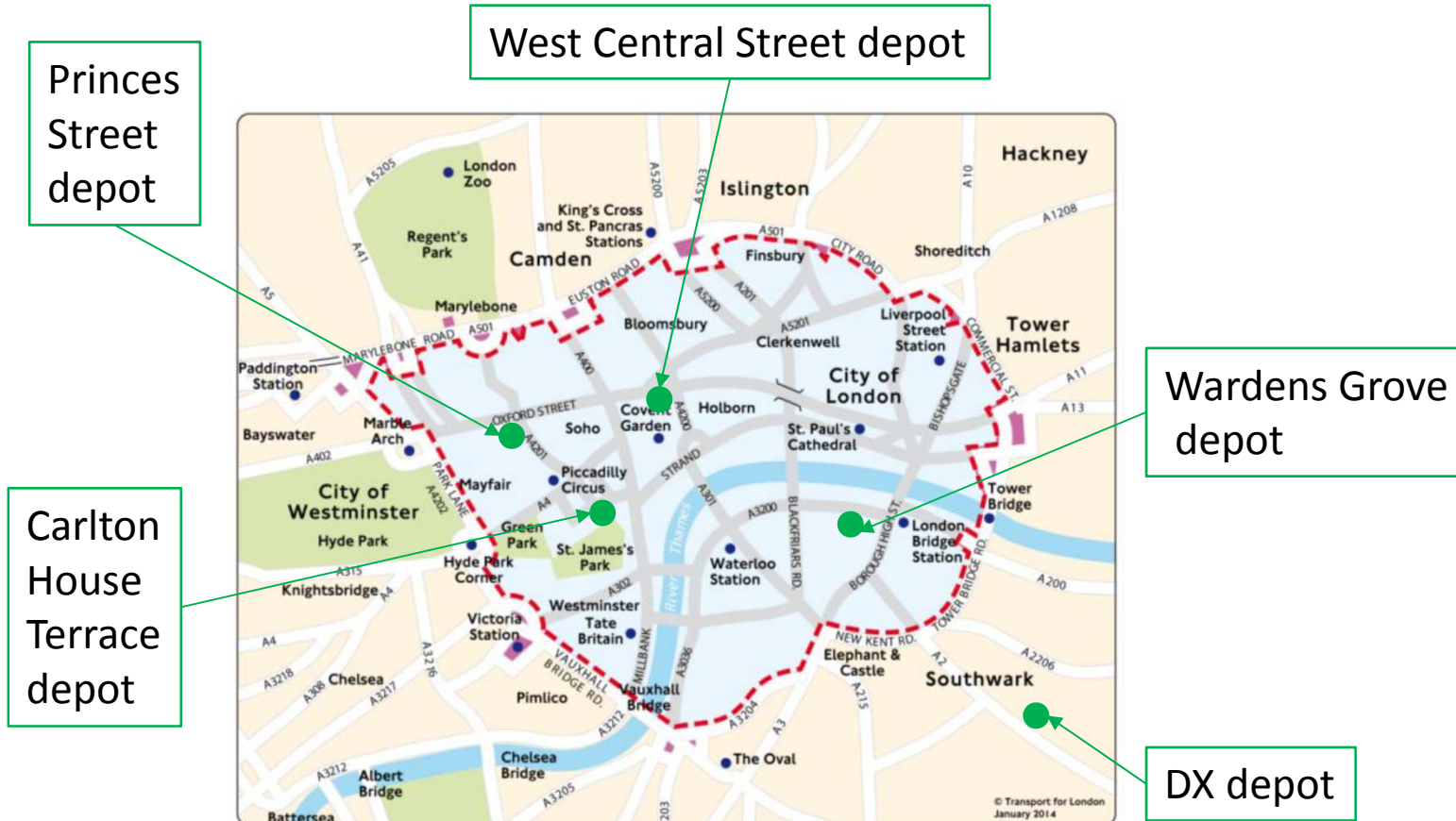


# Geographical characteristics

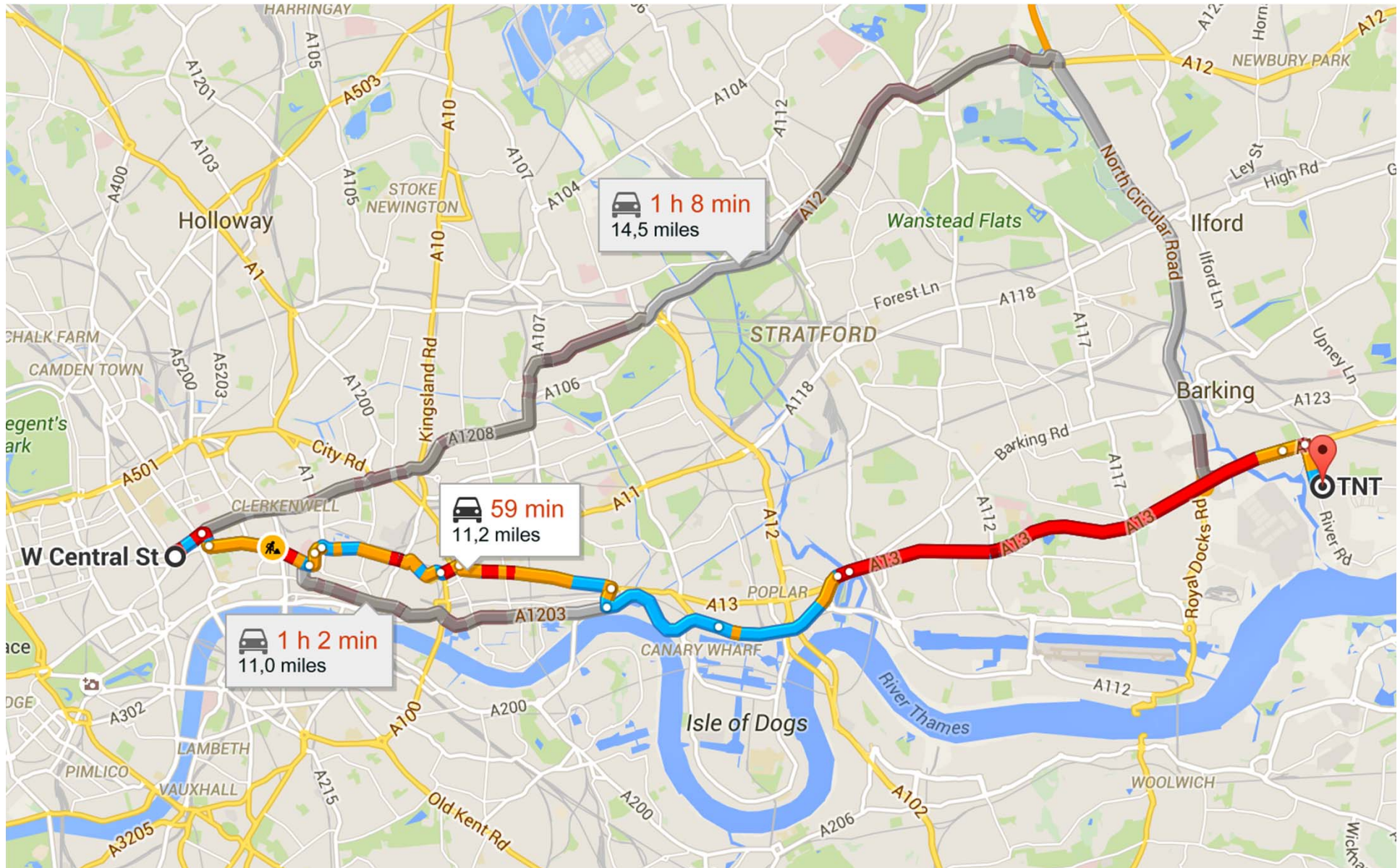
Gnewt Cargo depots and delivery area

Central London

Congestion Charge Zone







From TNT depot in Barking to Gnewt Cargo depot in Central London: 11 miles



## Major attractors of people & goods

- City Centre, West End
  - >2 mio commuters daily
  - About 100,000 trucks and 300,000 vans per day entering the outer ring
  - 40 mio foreign visitors a year
- Ring of Logistics facilities in London East, North London, & along the Thames
- Increase in e-commerce and home deliveries throughout London





# City Priorities

- Mayors transport policy includes logistics
- Transport for London Freight Plan in application
- TfL and GLA supportive of experimentations, freight consolidation and clean vehicles
- Rule in favour of clean deliveries: Exempt electric vans from Congestion Charge (*but not from penalties for too long unloading stop*)
- Reduce traffic and emissions
  - Lower Air Pollutants with LEZ
  - Less traffic with HGV>18t (LLCS)





# Steps of the Living Lab Implementation

- Sub-target: Develop a Central consolidation centre
- Sub-target: Develop a fleet of Electric Vehicles
- Key task: Transfer TNT domestic freight (100% diesel) to Gnewt Cargo (100% electric)
- First stage: start with 9-14 routes
- Intermediate Evaluation
- Second stage: Upscaling and transfer to other depots and other business types







## Steps and process

- Gnewt Cargo to monitor before and after small scale and large scale trials
- TNT to monitor previous parcels deliveries
- TNT and Gnewt Cargo implement the trial
- UoW to process data & compare business situations before and after trial
- UoW deliver intermediate impact assessment
- Living Lab takes decision on upscaling





# Perceived issues

(being tackled in London living lab)

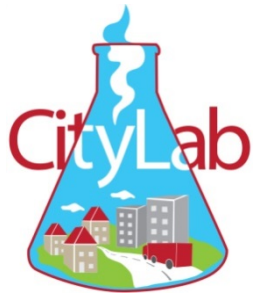
- Find and Develop a New Consolidation Centre or Depot in Central London
- Towards a zero risk trial in London: only focus on well known tests and design the trial in a way that brings for sure the expected results
- Long-term Growth for Electric Freight Vehicles and City Logistics Business



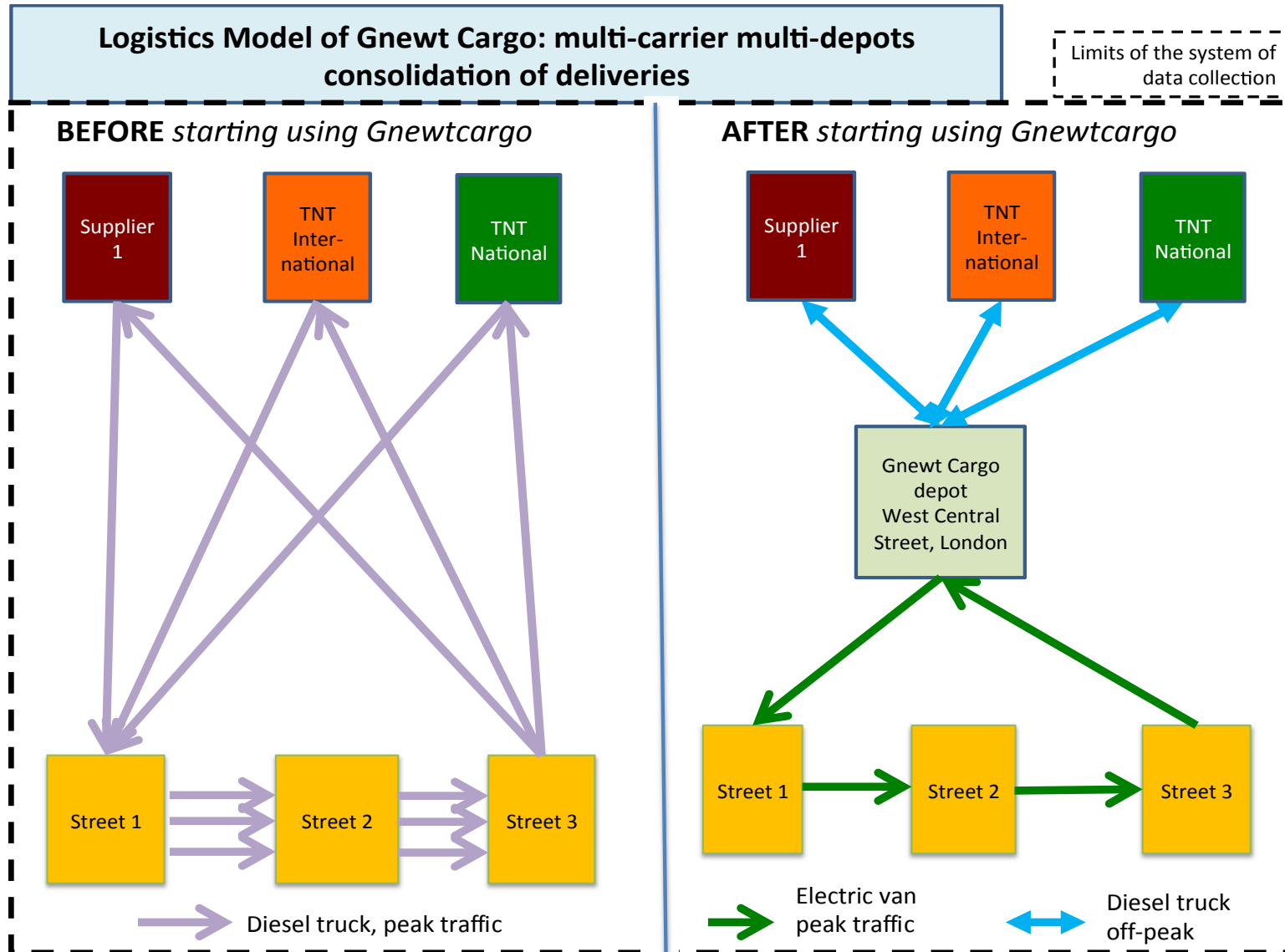
# Methods

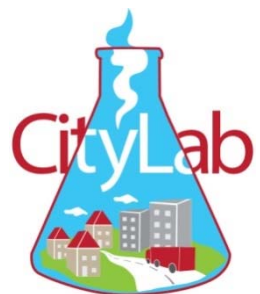
- Survey with quantitative before-after data collection, and data processing
- Meetings, qualitative story telling about the business contracting and cooperation
- Internal business impact evaluation, impact assessment for local authorities about traffic, emissions and road space occupancy and other criteria tbd





# Proposed approaches (1)





## Proposed approaches (2)











## Proposed approaches (4)

- The parcels delivery business of Gnewt Cargo focuses on London Congestion Charge Zone.
- The company is performing City centre distribution as carriers' carrier with a centrally located consolidation centre, and pure electric van fleet.
- Key task is to be taking over additional business from TNT.





## Proposed approaches (5)

- Switch from one carrier with standard fleet to Gnewt Cargo for goods coming from TNT National parcels network
- Instead of starting van deliveries from Barking, the goods will be transferred by truck to the Gnewt depot in Central London
- TNT will probably be giving to Gnewt about 9-14 van payload of each 60-80 parcels per day, out of national TNT network, for final distribution.



# Performance indicators

- KPI: Total distance per parcel
- KPI: Number of vehicle on main road axis during peak traffic
- KPI: Amount of air pollutant emissions and CO2 and noise
- KPI: Costs per parcel and work-time per parcel





# Timescales

## When?

- Aug-Dec 2015
- Jan-Jun 2016
- Jun 2016 – Mar 2017
- Continuous
- On request

## What?

Planning phase

First phase of trial:  
Small scale solution

Second phase:  
Extension of solution

Meetings; data collection;  
data processing; reporting

Meeting presentations





# Medium term steps

of the London implementation  
June 2016-March 2017

- TNT will be giving Gnewt Cargo more (additional) goods and parcels after positive evaluation of the most beneficial solution
- TNT will prepare the potential growth of the solution beyond London
- Exchange with other Living Labs of the CityLab project will possibly allow a replication in another city





# Outlook

- Intermediate evaluation is foreseen in June 2016, to prepare the extension and scale-up phase
- Scale-up analysis including assessment of impacts and growth potential are integral part of the implementation
- End of trial foreseen in March 2017

