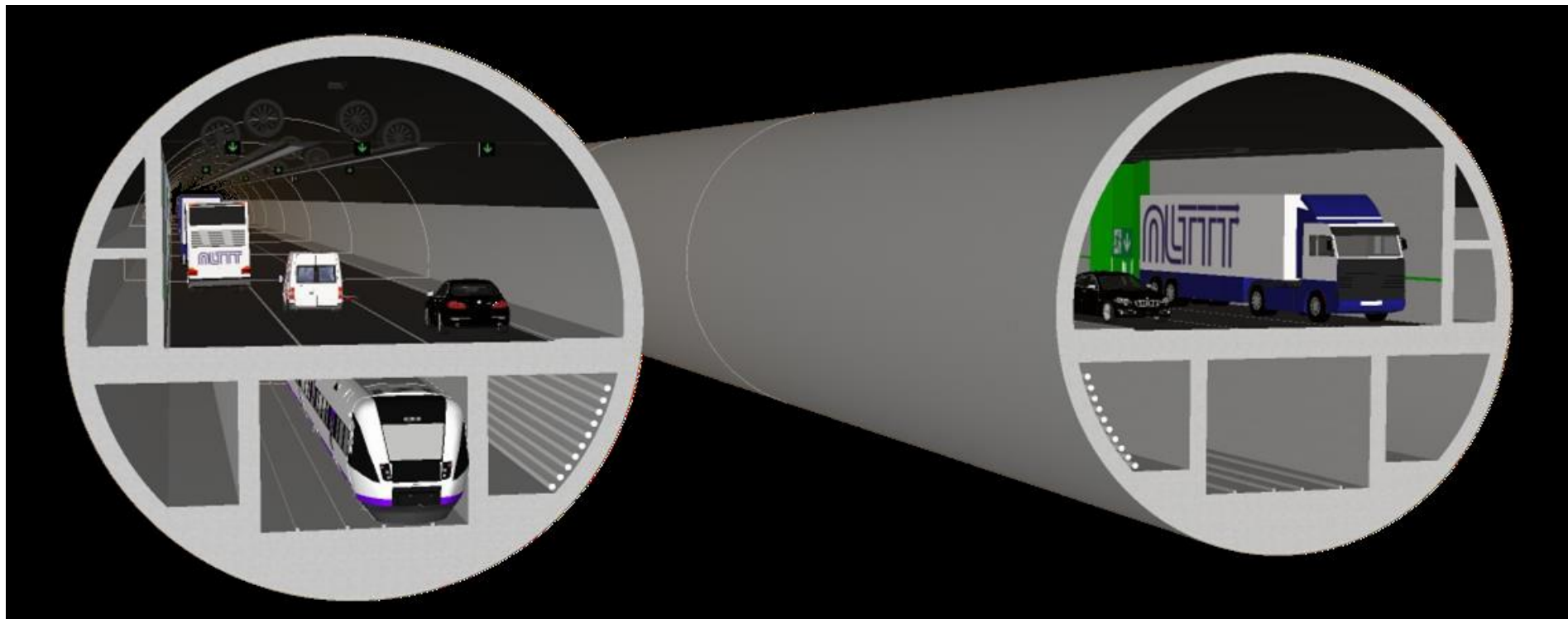


# New Lower Thames Transport Tunnel



5G Testbeds

Transport Meeting 21<sup>st</sup> Jun 2017

Rick Chandler

@wirelessroamer

# UK BUSINESS / WORLD ECONOMY OVERVIEW

- BREXIT
  - UK TRADE BALANCE IS CRITICAL
  - MUCH EUROPEAN FREIGHT WILL LAND IN UK
- WORLD TRADE
  - TPP New alignment?
  - USA change of viewpoint?
- Belt Road Initiative (\$1.3Tn)
  - NLTTT can provide Northernmost link
- UK INFRASTRUCTURE – IMMINENT UPGRADES
  - Northern Powerhouse
  - Infrastructure Upgrade HS2 etc.

# Provides Access to Global Sea-freight routes

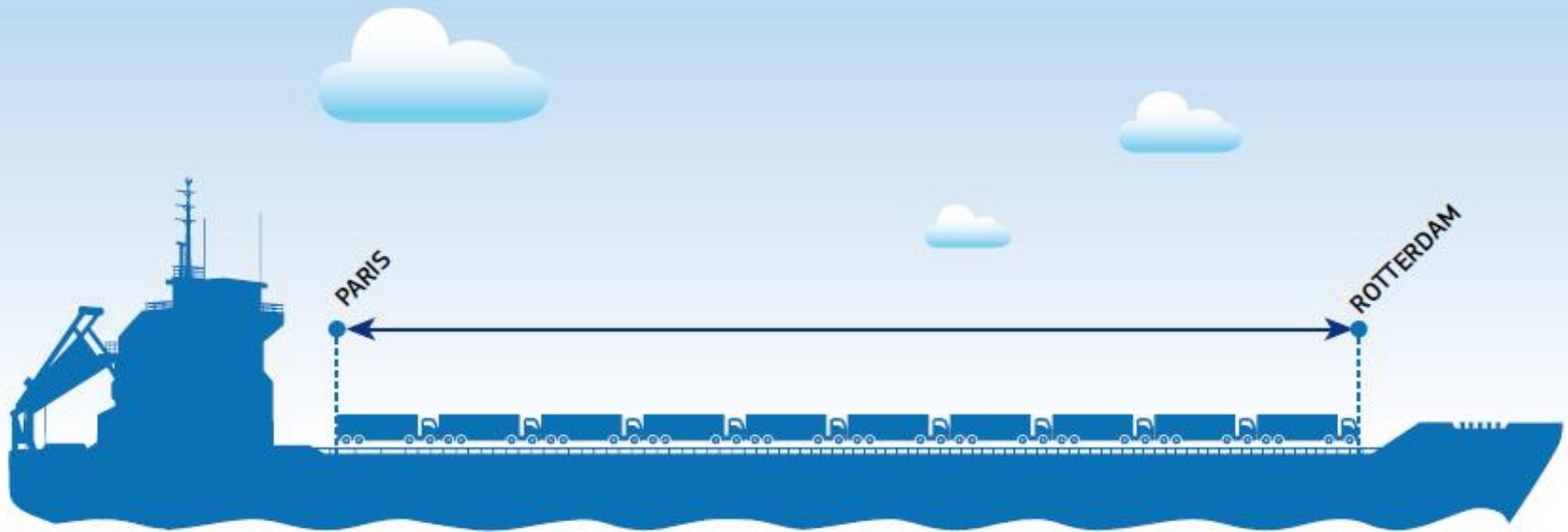


## + New Belt Road Initiatives



# HOW MUCH CAPACITY DO WE NEED?

**Some ships already have a capacity of 18 000 TEU.** This is the equivalent to a train more than 108 km long or a road full of heavy goods vehicles from Paris to Rotterdam.



(TEU = twenty-foot equivalent unit, a measure used for capacity in container transportation)



# Key Transport Hubs are in South East England so is the Congestion



ROUTES TO THE "NORTHERN POWERHOUSE"

CROSS LONDON



ROUTES FROM THE "NORTHERN POWERHOUSE"  
AND LONDON TO EUROPE

60% of UK Passenger and Freight is in SE England  
➤ Road, Rail, Passenger and Freight  
Constrained by need to pass through London's  
Heavily Congested residential Areas

# Thames Eastern Crossing NLTTT Proposal

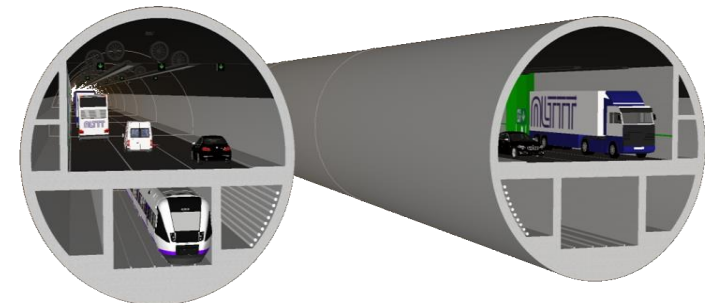
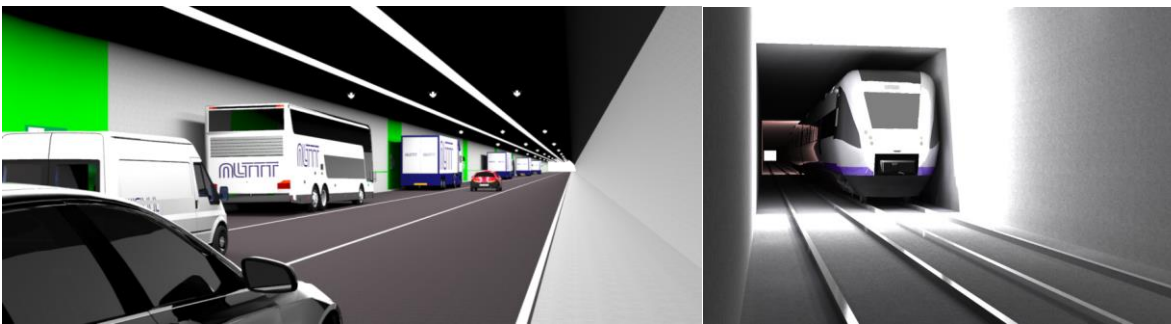
## Current Situation - IT IS ROAD ONLY

- Infrastructure is running over capacity
- Consecutive UK Governments have been seeking a satisfactory solution for the last 15 years - Consistently rejected a 'bridge' solution.



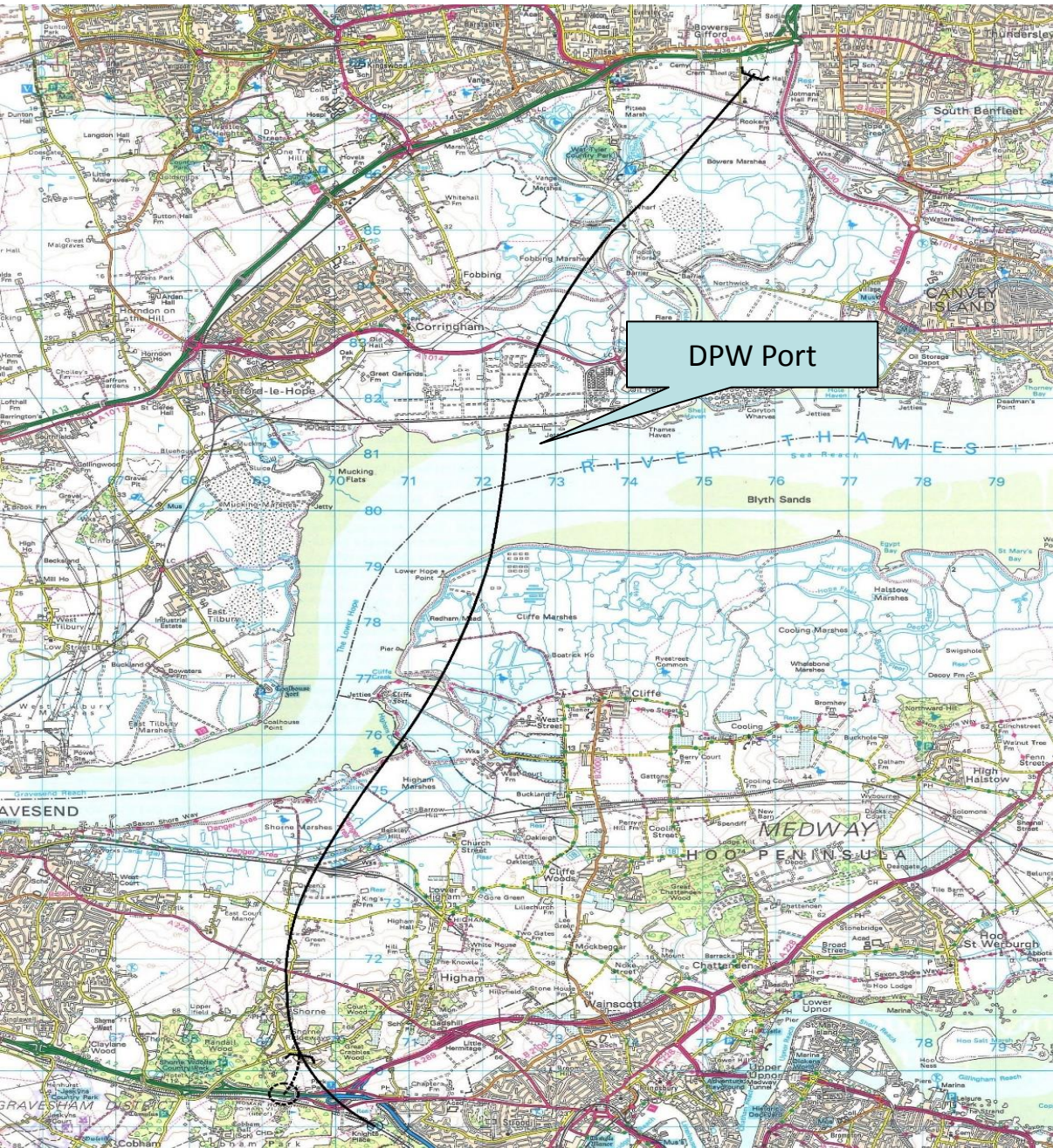
## The NLTTT Solution - ROAD AND RAIL – PLUS TECHNOLOGY

- Two Multi-modal tunnels linking Essex and Kent
- 18m plus diameter tunnels providing a twin deck solution for each tunnel (supports 50 ton Hi-Load containers)
- Top deck three road lanes (motorway grade)
- Lower deck two rail lines for freight & passenger rail traffic





# Our Proposed Route (Geology Survey is completed)



- Connects Major Motorway routes  
Kent end is ready.....

- Adjacent to Container ports for direct Rail Transfer.

- Major road relief for North South Thames crossing .  
= 40% reduction of M25 Traffic

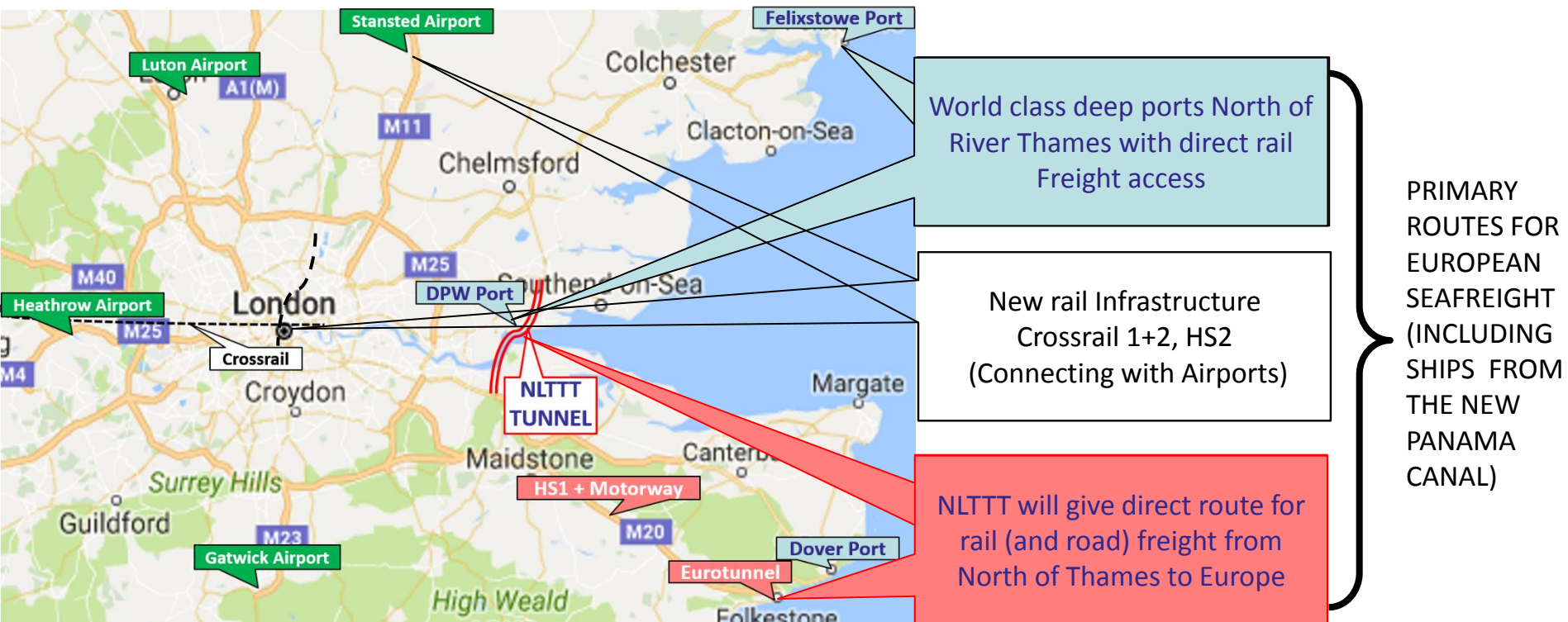
- Potential to connect with proposed N-S and E-W rail upgrades.  
(HS2 and Crossrail 2)

- 18% reduction across London Rail Freight.  
(frees infrastructure for Passengers)

- ENVIRONMENTALLY SENSITIVE
- AVOIDS POPULATED AREAS
- GEOLOGY HAS BEEN CHECKED



# A SUMMARY OF TRANSPORT BENEFITS



PRIMARY  
ROUTES FOR  
EUROPEAN  
SEAFREIGHT  
(INCLUDING  
SHIPS FROM  
THE NEW  
PANAMA  
CANAL)

- Major **road relief** for North-South Thames crossing and bypassing London = 40% reduction of M25 road Traffic
- Connects Major Motorway routes For Road Freight E-W and N-S

FELIXSTOWE AND DPW PORTS WILL TAKE THE LARGEST CHINESE CONTAINER SHIPS OFFERING “ONE STOP SHOP”  
**UNLOADING DIRECT TO RAIL** NO OTHER PORTS IN NORTHERN EUROPE PRIORITISE THIS.

**With Freeports and bonded containers NLTTT WILL GET THIS FREIGHT INTO EUROPE IN HOURS**

**REVERSES TRADE BALANCE WITH EUROPE IN UK FAVOUR**

**REDUCED ROAD FREIGHT LOWERS THE ILLEGAL IMMIGRATION RISK**

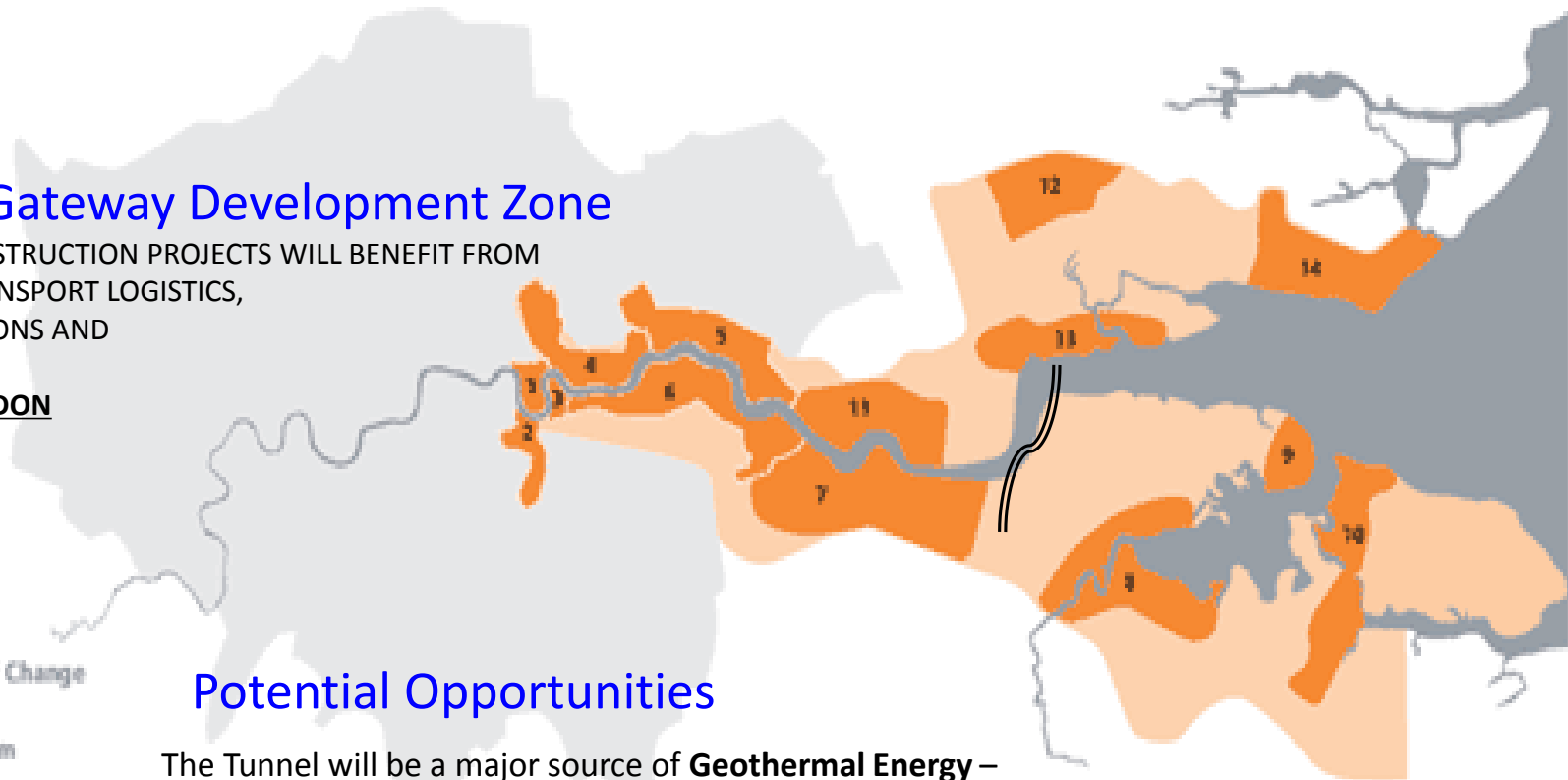


# OTHER REGIONAL DEVELOPMENT OPPORTUNITIES



## Thames Gateway Development Zone

47 MAJOR CONSTRUCTION PROJECTS WILL BENEFIT FROM  
ADVANCED TRANSPORT LOGISTICS,  
COMMUNICATIONS AND  
GREEN ENERGY  
AVOIDING LONDON



## Potential Opportunities

The Tunnel will be a major source of **Geothermal Energy** –

This Energy is planned to

- Power the internal lighting and fans
- Provide charging for Electric vehicles
- Power a Digital exchange at each end.

The Tunnel will provide a major new route for Data fibre trunking avoiding London and connecting to new gateway developments.

“Smart City” and 5G infrastructure will be incorporated throughout.

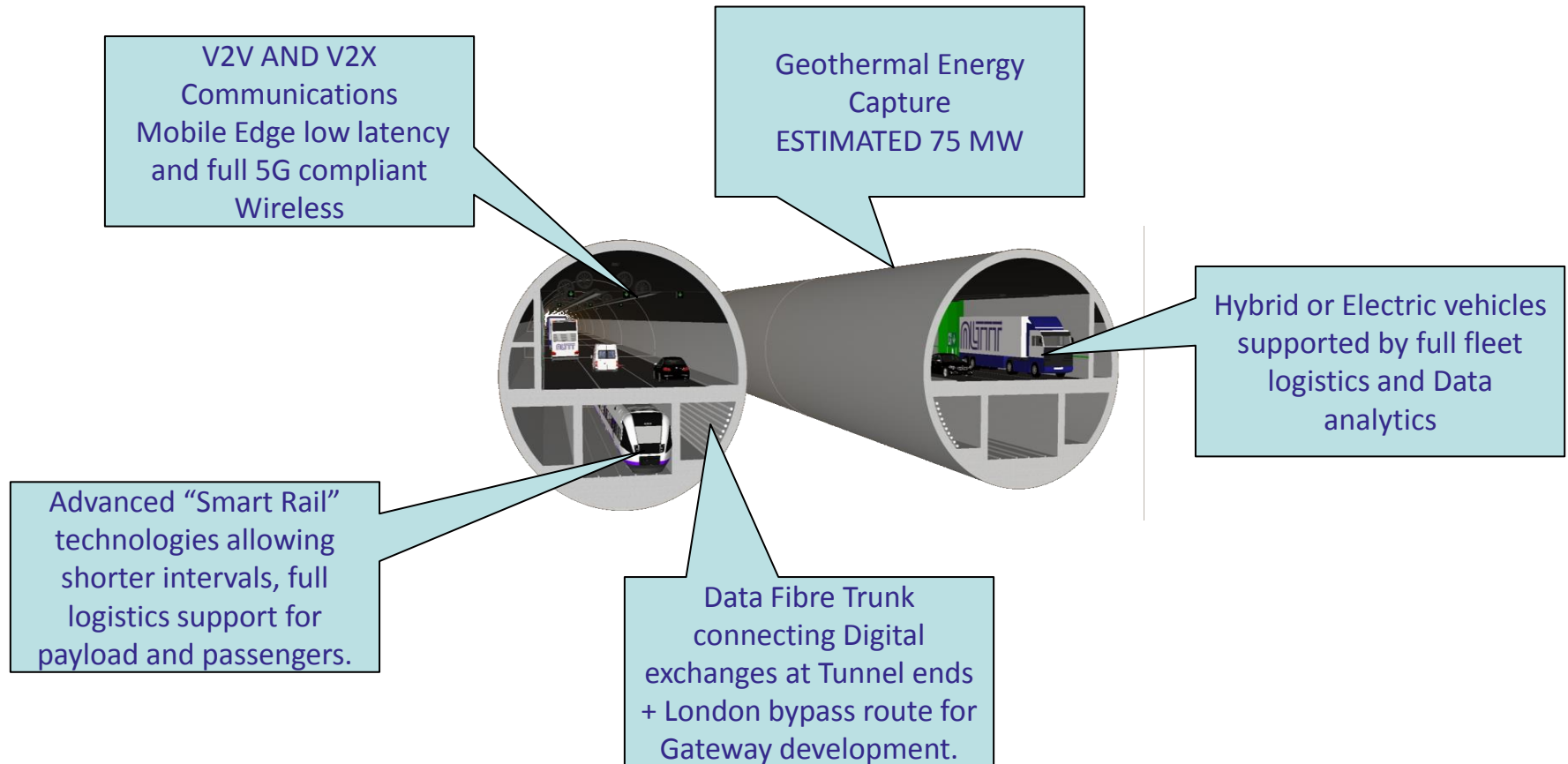
Smart Freight and Container Logistics will make UK a Global hub.

### Thames Gateway Zones of Change

- 1 Isle of Dogs
- 2 Deptford and Lewisham
- 3 Greenwich Peninsula
- 4 Stratford, Lower Lea, Royal Docks
- 5 London Riverside and Barking
- 6 Woolwich, Thamesmead, Erith
- 7 Kent Thameside
- 8 Medway
- 9 Grain
- 10 Sittingbourne, Sheerness
- 11 Thurrock Riverside
- 12 Basildon
- 13 Canvey, Shellhaven
- 14 Southend

# New technologies

## Investment Opportunities Underground





# New technologies

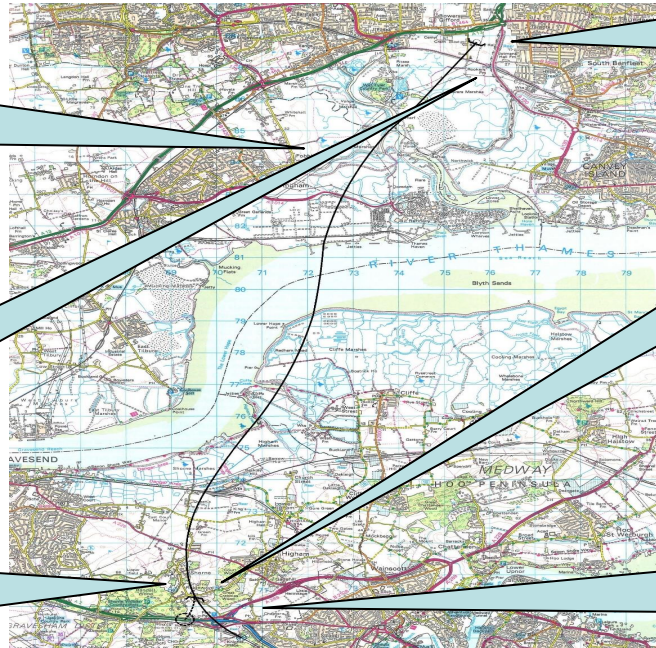
## Investment Opportunities Overground

Free Trade Area  
Global Freight logistics  
with container tracking to  
destination.

Community Digital  
exchanges providing full  
Internet facilities for local  
SME's and Businesses as  
the Gateway expands.

Vehicle charging area  
powered by Geothermal  
Energy captured from  
Tunnel.

Advanced "Smart Rail"  
marshalling with full  
logistics support for train  
scheduling.



# YIWU-LONDON OVERGROUND – IS IT A THREAT?



- TAKES 18 DAYS
- MULTIPLE GUAGE CHANGES
- PASSES THROUGH LONDON (TO NORTH THAMES LOCATION)
- DISCHARGES TO ROAD

OR AN OPPORTUNITY?

NLTTT TUNNEL WILL ENABLE IT TO BYPASS LONDON  
DISCHARGES TO RAIL  
LESS THAN A MINUTE BETWEEN TRAINS ON HS1



## RECENT PROGRESS

- FREIGHT CARRIERS GLOBALLY
  - 4 GREEK SHIPPING COMPANIES
  - DREWRIES
- CHINESE GOVERNMENT / UK EMBASSY
  - HAVE VALIDATED INVESTORS
  - MONITORING PROGRESS
- POTENTIAL STAKEHOLDERS
  - BT – GLOBAL TELECOMS
  - EUROPEAN BANKS –LONG TERM INVESTMENT
  - LEPs
- UK Government
  - INFORMED UP TO PM LEVEL
  - WOULD HAVE BEEN ON PM AGENDA FOR MAY VISIT

# The Process Going Forward?



- Government has announced its preference but the road only tunnel received adverse public response
- Pressure from stakeholders is likely to grow (especially from London and Kent, and from road users generally)
- Process towards planning consent –DCO rather than hybrid Bill?

WE ARE ALREADY DEVELOPING GLOBAL FREIGHT TRACKING WITH  
PORTS AND SHIPPING COMPANIES.

£6.7 Bn ALREADY COMMITTED AND FURTHER FUNDS AVAILABLE

OTHER PROJECTS NEEDED SO WE ARE TALKING TO LEP'S  
(MILDENHALL, RAF WOODBRIDGE ---)





British Chamber  
of Commerce in China

中国英国商会

Supporting

British Business

in China



China-Britain  
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