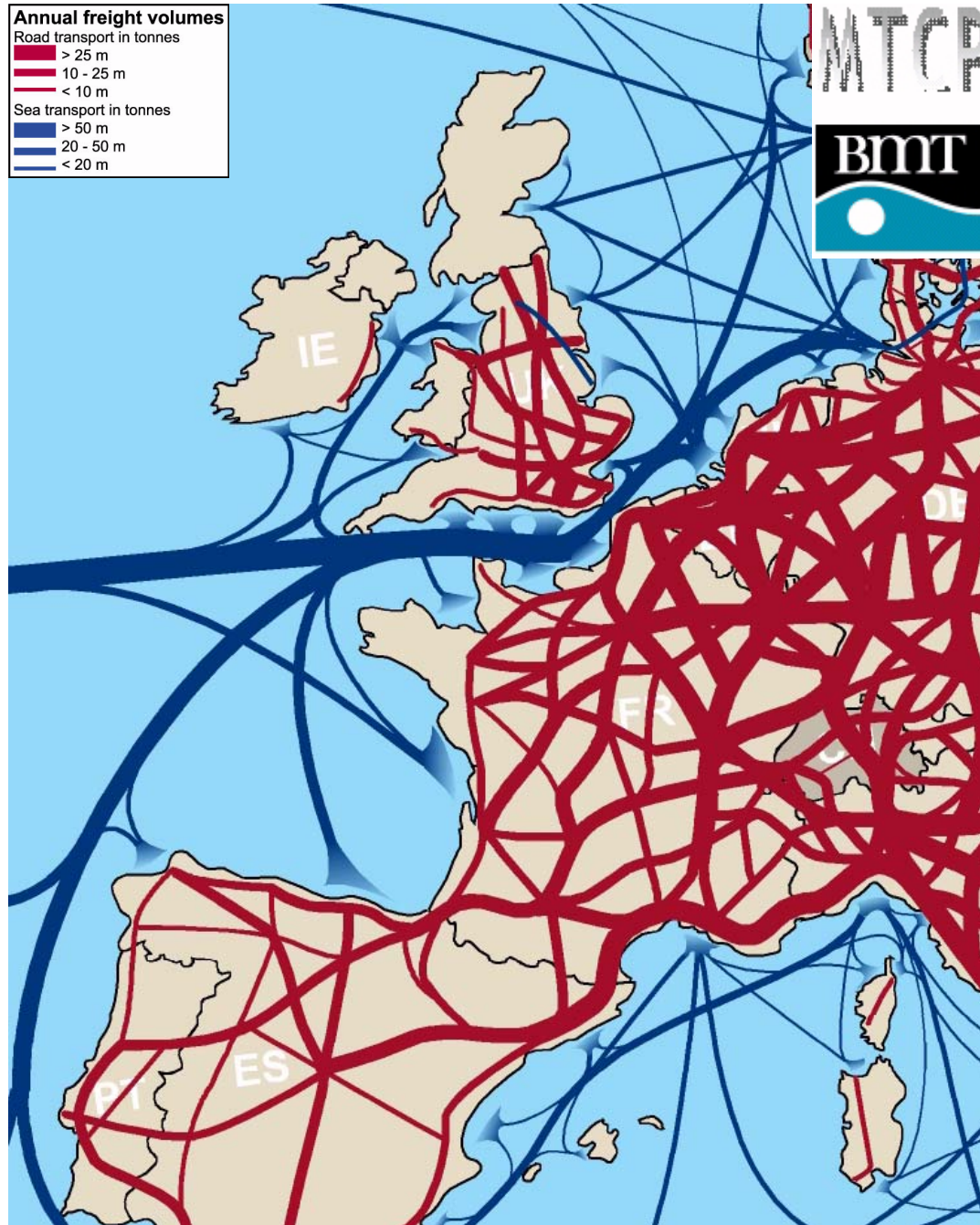
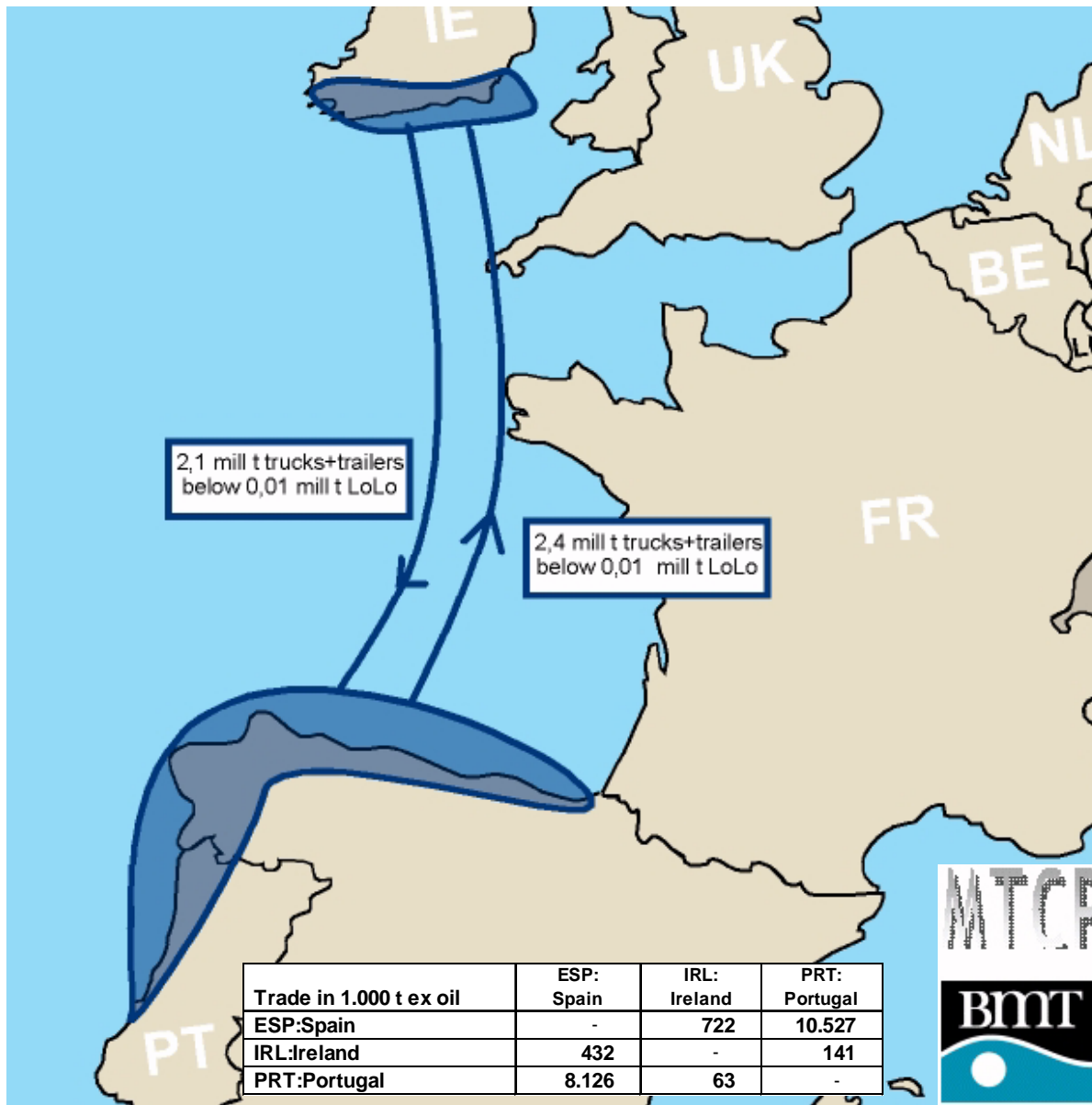


The realisation of Motorways of the Sea

Atlantic / North Sea cases



Major European road and sea transport corridors



MOS Linking Port regions: South coast Ireland and Spanish north coast and Portugal

Potential:

Northbound

2,4 mill tonnes RoRo
below 0,01 mill. t.

containers and other SSS

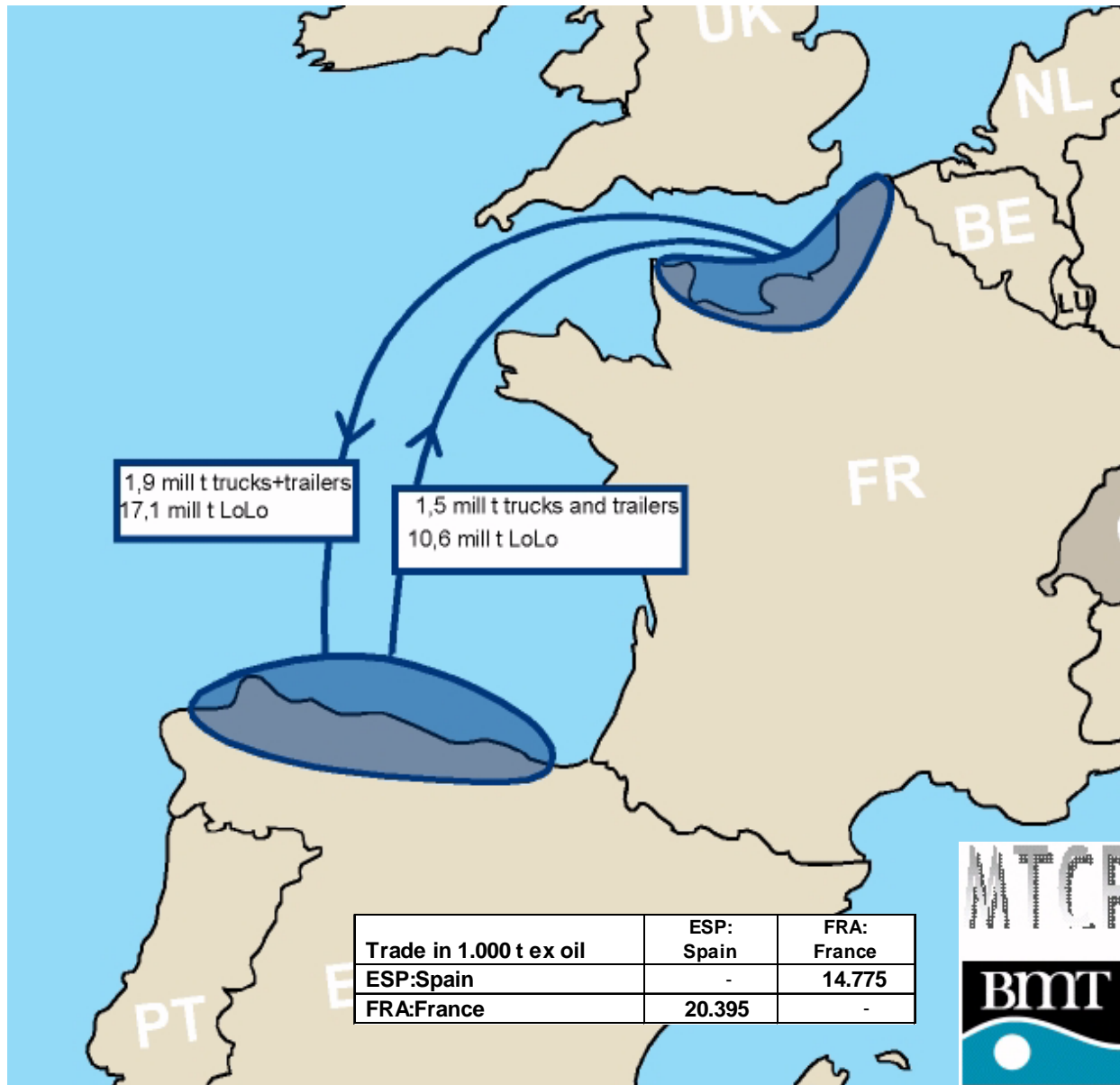
Southbound:

2,1 mill tonnes RoRo
below 0,01 mill t.

containers and other SSS

1 dep. per day per port per
mode (two modes; RoRo
and LoLo) within the port
regions

Simulated transport volumes originate from all relevant trade relations including also transit through the displayed countries.



MOS Linking port regions: French North coast and Spanish north coast

Potential:

Northbound:

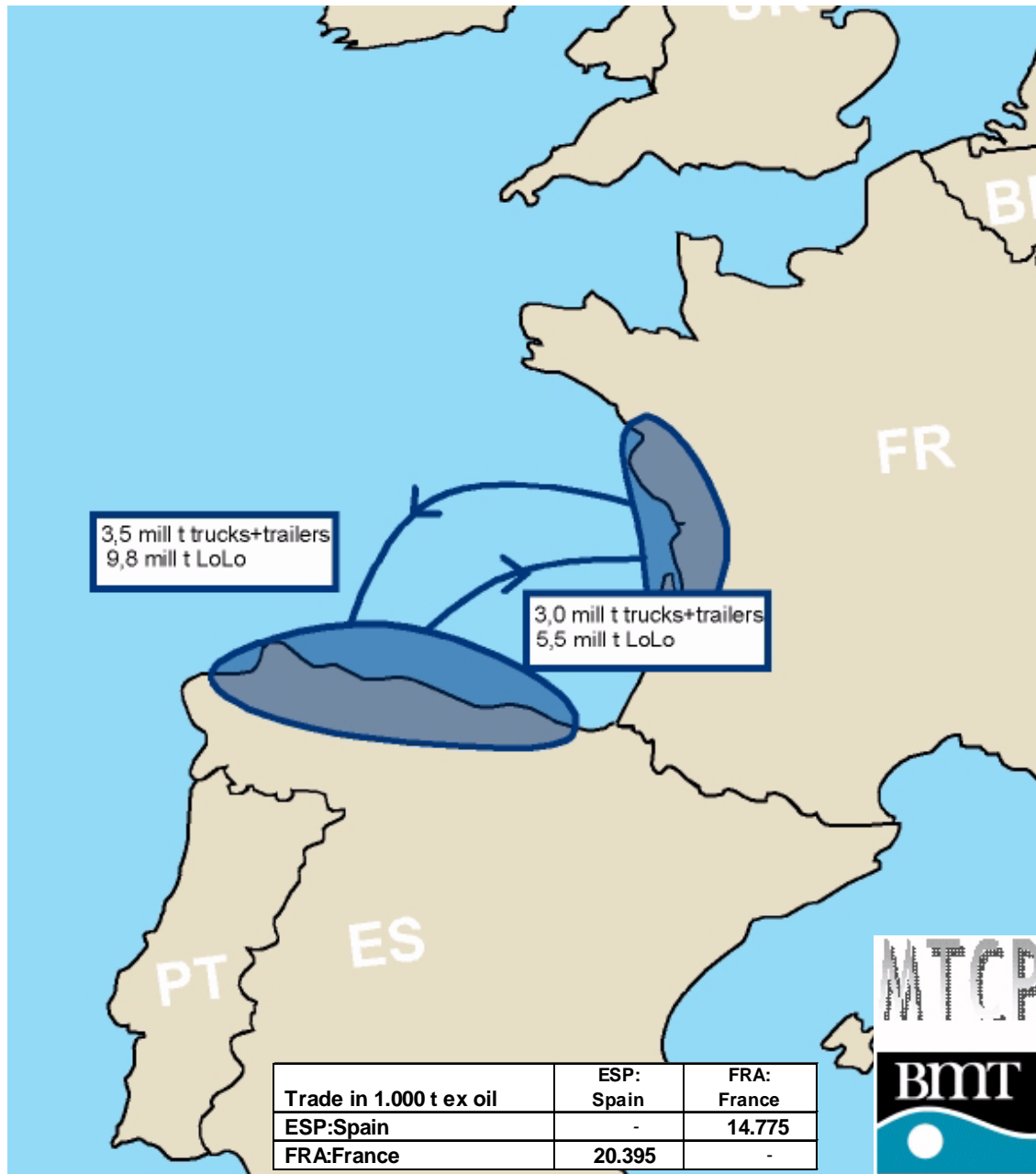
1,5 mill tonnes RoRo
10,6 mill tonnes containers
and other SSS

Southbound:

1,9 mill tonnes RoRo
17,1 mill tonnes containers
and other SSS

1 dep. per day per port per mode (two modes RoRo and LoLo) within the port regions

Simulated transport volumes originate from all relevant trade relations including also transit through the displayed countries.



MOS Linking port regions: French Atlantic coast and Spanish north coast

Potential

Northbound:

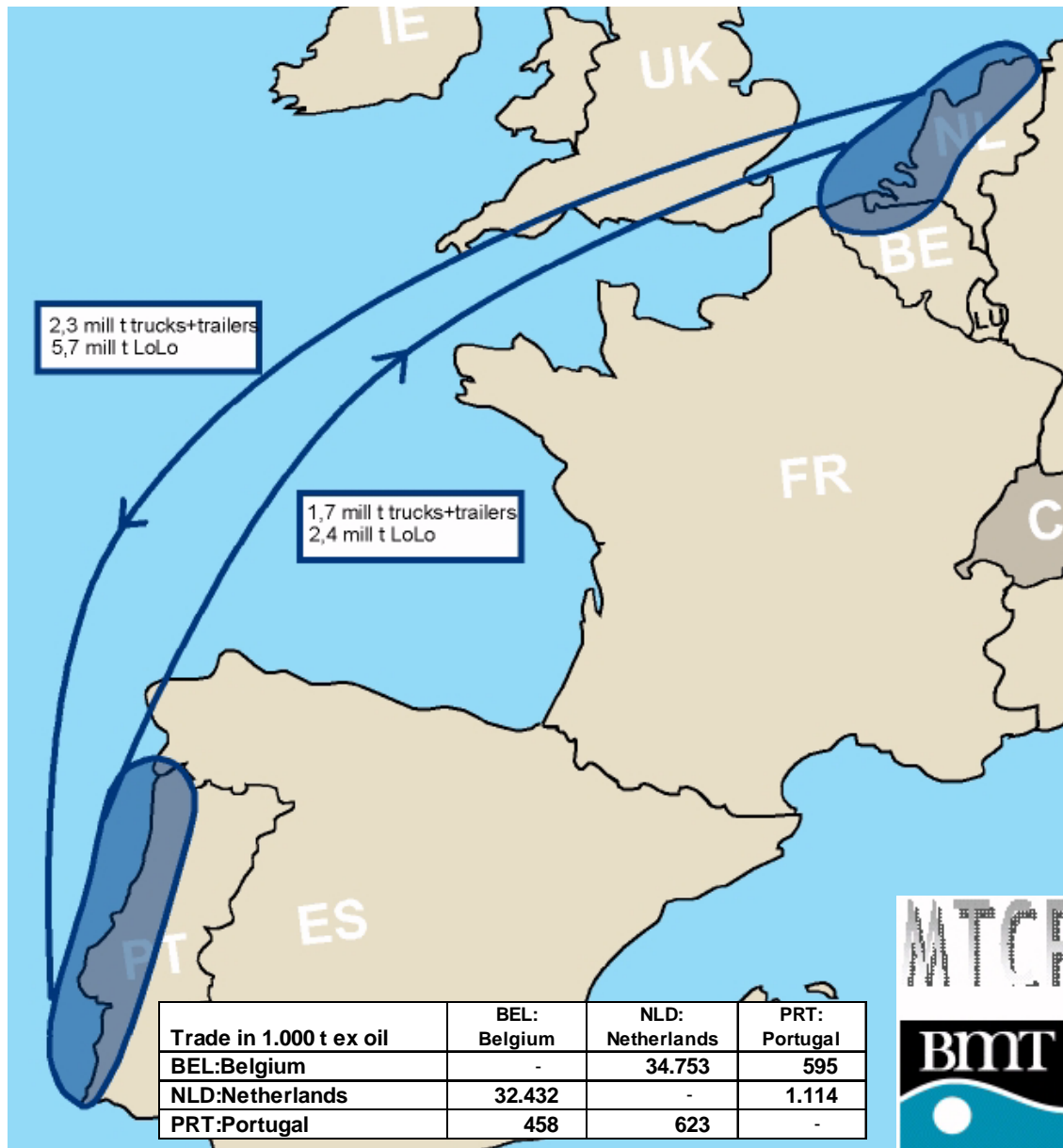
3,0 million tonnes RoRo
5,5 million tonnes containers
and other SSS

Southbound:

3,5 million tonnes RoRo
9,8 million tonnes containers
and other SSS

1 dep. per day per port per mode (two modes RoRo and LoLo) within the port regions

Simulated transport volumes originate from all relevant trade relations including also transit through the displayed countries.



MOS Linking port regions: Belgium/ Netherlands and Portugal

Potential:

Northbound

1,7 mill tonnes RoRo

2,4 mill tonnes containers and
other SSS

Southbound:

2,3 mill tonnes RoRo

5,7 mill tonnes containers and
other SSS

1 dep. per day per port per
mode (two modes; RoRo and
LoLo) within the port regions

Simulated transport volumes originate from all relevant trade relations including also transit through the displayed countries.

Modal shift potential

- Saved tonne-kms in % on total European road transport work (tkm)
 - Ireland - Spain/ Portugal
0,33%
 - French North coast - Spanish north coast
0,49%
 - French Atlantic coast - Spanish north coast
0,96%
 - Belgium/ Netherlands - Portugal
0,54%

Preliminary conclusions

- Ireland - Spain/Portugal
 - Potential for RoRo is evident, but there is almost no potential for container services. Attractive Irish MOS seem to attract considerable volumes for the UK market too.
- France - Spain
 - While the MOS from the French Channel coast seems to be able to attract more volumes in total, it however would manage only app. 50% of tonne-kms shift for road transport compared to the French Atlantic coast MOS.
 - The impact of the French Channel MOS on oversea container movements seems to be considerable.
 - The longer sea haul from the French Channel coast seems to be less attractive for trucks and trailers using such a link.
- Belgium/Netherlands - Portugal
 - Large potential for container potential and also surprising high potential for RoRo even on the long distance. Also some Spanish volumes are attracted.