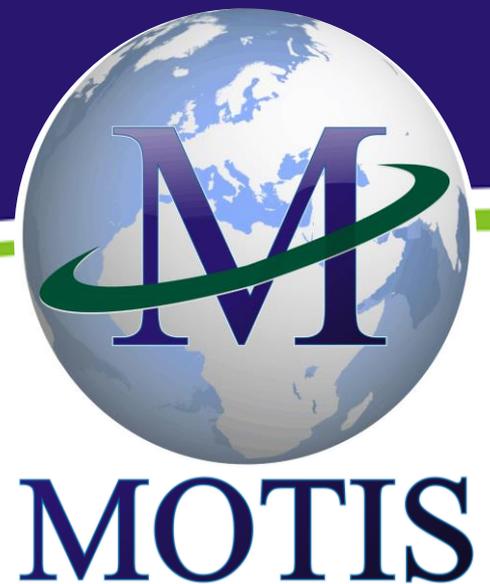


Operation Stack Dover TAP & Parking



Report compiled by MOTIS : May 2016

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1 About MOTIS

1.1 *Motis is one of the most progressive shipping companies in Europe with over 8000 customers, a network of offices and representatives across Europe, over 500 Freight Ferry routes and many other services relating to the European Transport sector.*

1.2 *Motis was founded in October of 2002 by David McComb and Patrick Hutley. It began as the preferred supplier for P&O Ferries services from the UK to the Continent and then steadily grew to offer a wide range of services including shipping on the Irish Sea, English Channel, North Sea, Mediterranean, Baltic, Adriatic Seas and Intermodal transport through the Alps as well as payment passes for the Mont Blanc and Frejus Tunnels. Beginning in a small office on the main street of Newry with only 5 employees, Motis now has a newly refurbished head-office in Newry and employs over 100 people throughout Europe. Services include:-*

- *Freight ferry bookings on over 500 routes*
- *European road toll payment tools (including HGV Levy)*
- *VAT and tax recovery*
- *Intermodal services*
- *Alpine tunnel payment services*
- *Insurance*
- *Fuel cards*
- *Running repairs and maintenance*
- *Logistics Management*
- *Parking (various sites in mainland Europe)*

55,000 European transport contacts



MOTIS
Freight Ferries // Motorway Tolls
Alpine Tunnels // Rolling Highways
Truck Parking // Freight Insurance
Freight Clearance // Tyres
Freight Forwarding // Fuel Cards

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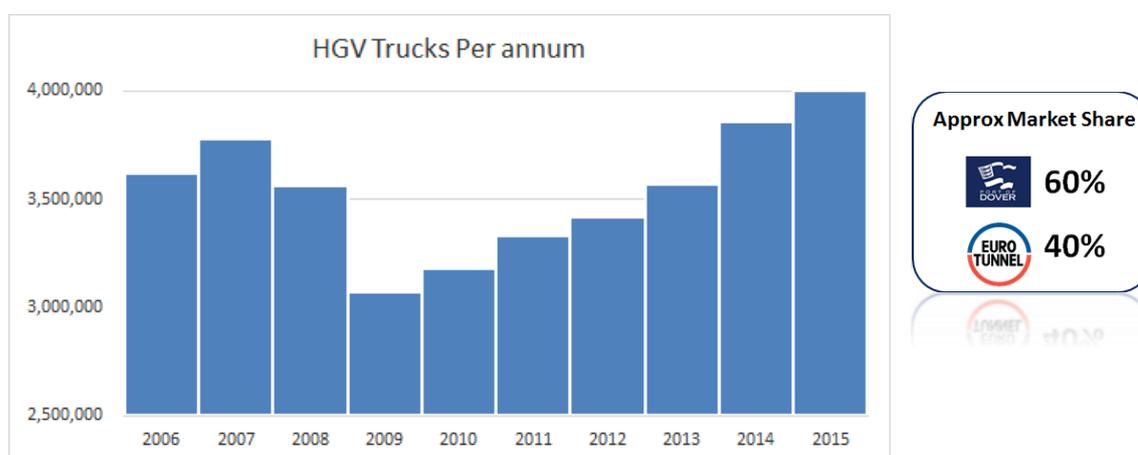
www.motis.com





2 Cross Channel Freight Demand / Capacity Alignment

2.1 *The cross channel HGV market is buoyant. 2015 was a record year, with 4+million trucks crossing the channel. In most cases capacity is aligned with demand, indeed load factor and yield management is part of the everyday business processes of Eurotunnel, P&O Ferries and DFDS Seaways.*



Data supplied by Eurotunnel and the Port of Dover

2.2 *There are times when capacity is reduced:-*

2.2.1 *Eurotunnel : technical problems – short term effect.*

2.2.2 *Eurotunnel : fire - medium to long term effect.*

2.2.3 *Ferries : bad weather, relatively predictable but unavoidable. Short term effect.*

2.2.4 *Ferries : Industrial action, normally instigated in France. Short to medium term effect but often called without warning .*

2.2.5 *Ferries : Refit season. Typically happens between Jan-Mar each year. Vessels are sent away for refurbishment and essential safety checks. In most cases these are scheduled around the tourist market since this is the main contributor to on-board sales (one of the main drivers for the re-fit). Refits are scheduled well in advance in order to secure ship-yard space. Short to medium term effect but normally managed with minimal impact.*

2.2.6 *Ferries : Damage or technical issue with vessel(s). Normally short term but has the potential to increase to medium term if a replacement vessel is required but not quickly available. The*

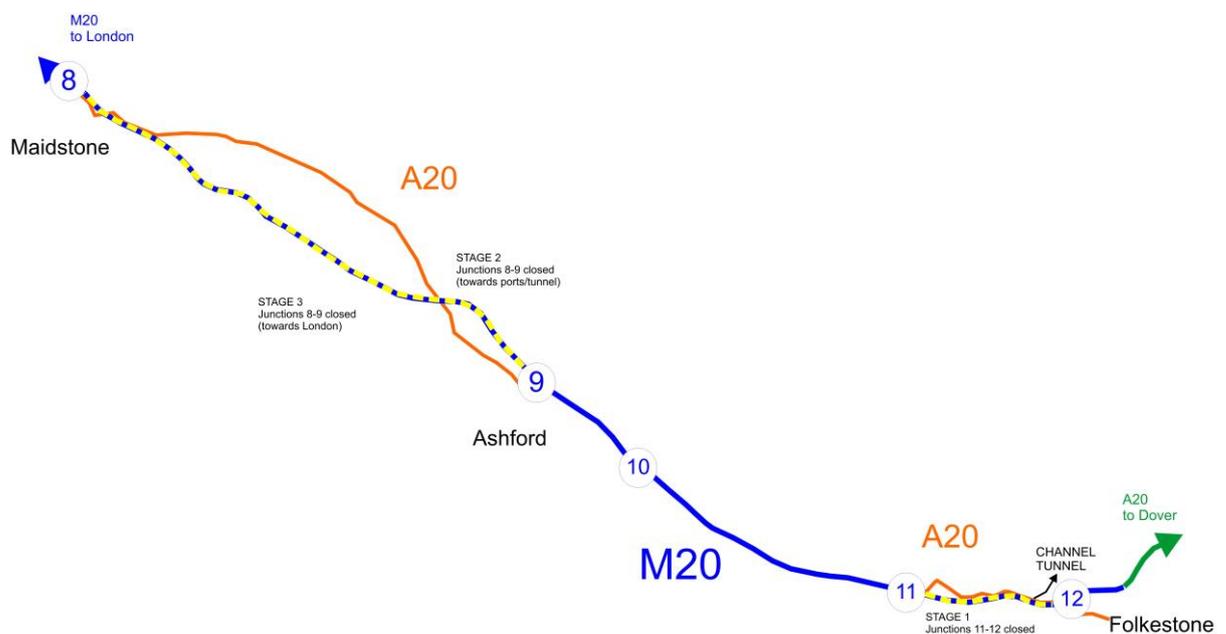


configuration of Dover vessels is quite unique and this limits the options in the bare boat and time charter markets.

- 2.2.7 Ferries : Reduction in vessel availability due to charter coming to an end. Medium to long term but normally manageable.
- 2.2.8 Both : Disruptions caused by migrant activity in France. Short sharp effect normally resolved within 24 hours.

3 What is Operation Stack?

- 3.1 Approximately 4million trucks cross the channel each year. 10,000+ trucks a day. Roughly balanced between inbound and outbound. Thus 5,000 trucks travel towards Eurotunnel and Dover per day and a similar number travel towards London.
- 3.2 These figures are expected to grow to between 14,000 and 16,000 per day within the next decade. Approximately 200 miles of freight each day.
- 3.3 According to a recent KCC report 80% of this traffic favours the M20/A20 corridor (the remainder using the M2/A2 route). This may change with the introduction of the Lower Thames Crossing. (Potentially a new crossing linked to the A2/M2 route.)
- 3.4 In simple terms Operation Stack is called when the demand significantly out-weighs available capacity. Traffic is unable to transit smoothly and this quickly creates a build-up on the terminal approach roads and surrounding motorways.





- 3.5 *In most cases this can be solved by Phase 1 Stack (circa 450 trucks) but, in extreme cases, the situation is elevated to Phase 2 (an additional 2,300 trucks being held). Phase 1 is an inconvenience but normally passes within a couple of days. The traffic build-up mostly effects residents and businesses in the Dover/Folkestone area, many of which rely on the Port and Eurotunnel for employment/business in their own right. In short the 'locals' are rather more lenient, providing Stack is well managed at the time.*
- 3.6 *The same cannot be said of Phase 2 (& 3). This stretches between Maidstone-Ashford and impacts residential and business communities not normally linked to the cross channel sectors. The inconvenience is felt much more and the call for action is louder.*
- 3.7 *Prior to Jan 2015 Phase 2 had not been in place since December 2009. Phase 3 was first used in July 2015.*
- 3.8 *Phases 1, 2 and 3 are capable of holding circa 5,000 trucks. During the extended delays in July 2015 Operation Stack was re-configured and two more phases were added. Over 7,000 vehicle were held.*
- 3.9 *It is estimated that Phase 1 & 2 involves 40+ Police personnel as well as additional marshalls provided by the Port and Eurotunnel as required. Furthermore there is an impact on local fire and emergency services and other agencies. In all the daily cost of Operation Stack is circa £100,000.*
- 3.10 *It costs an estimated £1 per minute in lost revenue (for the haulage contractor) whilst the vehicle is held beyond its normal legal down-time.*





4 Dover TAP (and TMI)

4.1 *Dover TAP is an experimental measure to control the flow of traffic from Aycliffe to the Port.*

4.2 *Traffic is held on the stretch of road from the Roundhill Tunnel to the Aycliffe roundabout (approx 6 miles) and only released when there is sufficient space within the Port to accommodate the next batch of trucks.*

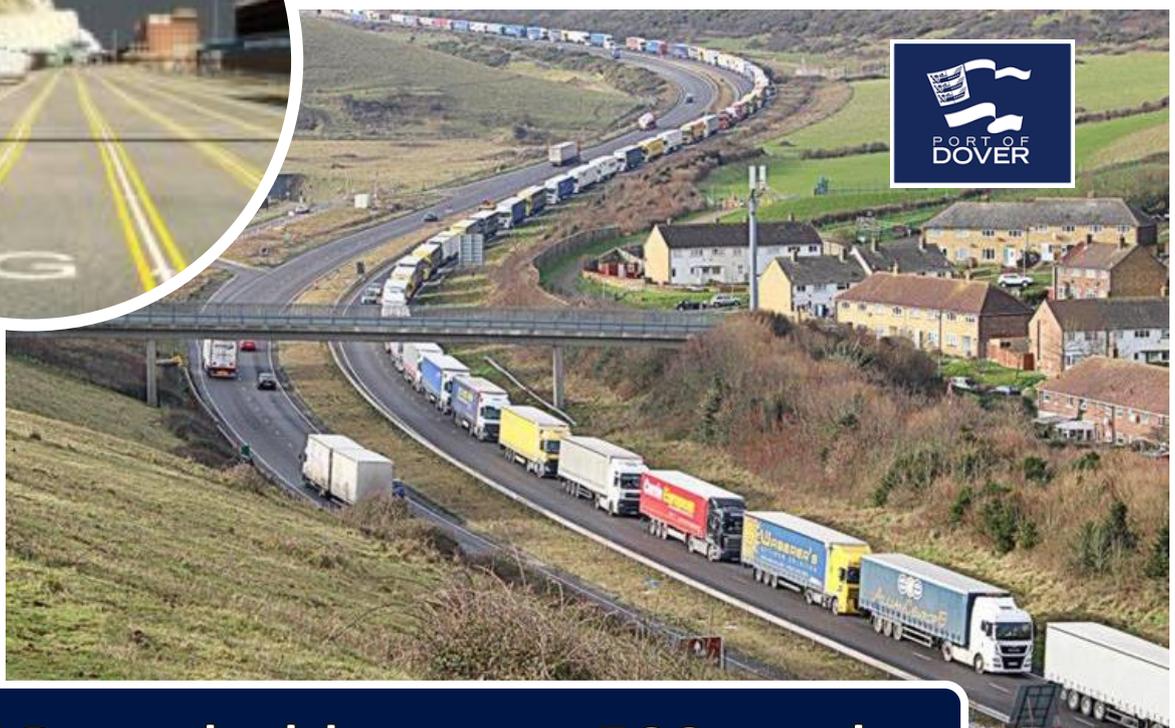
4.3 *HGV traffic is kept to the left hand lane and there is a 40mph speed restriction.*

4.4 *This keeps the Town (and Townwall Street in particular) free from congestion.*

4.5 *Dover TAP has been a regular event but the introduction of additional holding areas within the Port (TMI) together with an increase in Dover/Calais capacity from DFDS has seen a reduction in use. That said there are now roadworks involving two key roundabouts on the approach to the Port that will last most of the year and could well cause further disruption.*

4.6 *There are now 12 vessels ex Dover (6 P&O, 3 DFDS Calais and 3 DFDS Dunkerque)*

*TMI
additional holding
area for 220 trucks*



TAP can hold approx 500 trucks



5 Eurotunnel

- 5.1 Eurotunnel have also just extended and re-configured their freight check-in area at Folkestone.
- 5.2 Prior to these improvements Eurotunnel could process 200 trucks per hour and this often led to the queue of trucks backing up to the M20 turn-off.
- 5.3 Now that these works have been completed, Eurotunnel can process 300 trucks per hour which also means they can increase shuttle capacity, potentially, to a freight shuttle departure every 7 ½ minutes at peak times (260 trucks per hour)
- 5.4 For reference, Dover can process approximately 420 export trucks per hour with 12 ships operating.

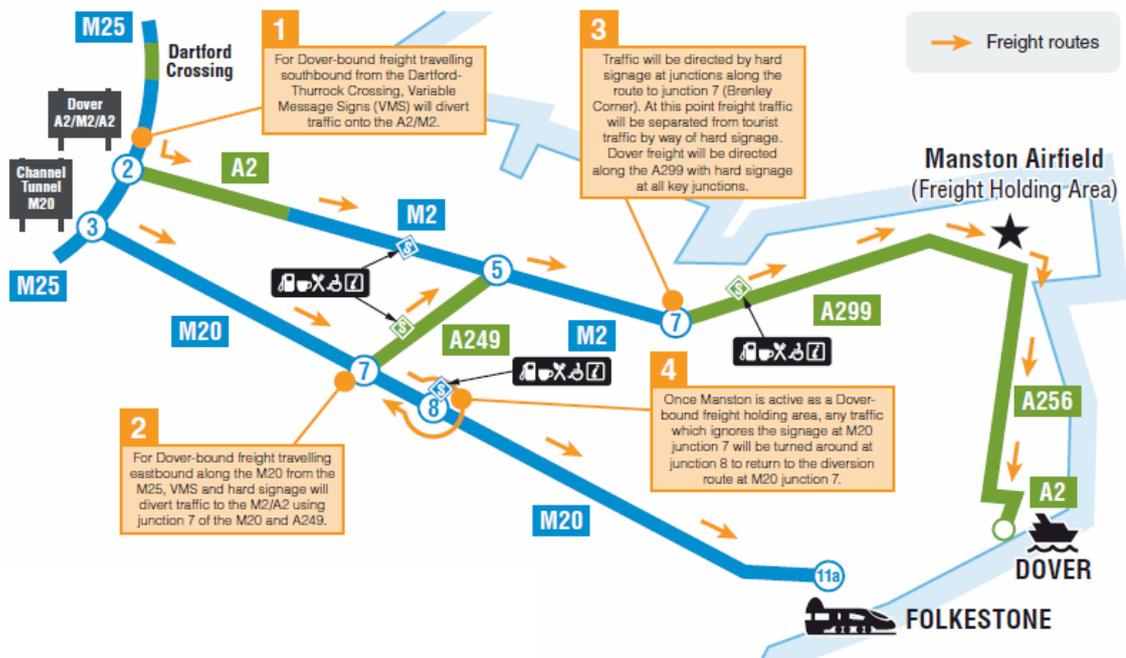
up to 8 UK departures an hour!





6 Manston

- 6.1 It has never been used but for the sake of completeness it needs to be included in this report. (The very fact that it has not yet been used might actually be the most significant element of this report!)
- 6.2 Manston was 'opened' for stack in August 2015. It doesn't solve stack (far from it) but it does create a bit of breathing space whilst a better solution is sought.



- 6.3 The way in which Manston would be used is not particularly clear but it seems to be instead of Phase 3 stack (used for the first time in July 2015 and under extreme conditions) and even then solely for Dover based traffic.
- 6.4 It appears to be a politically motivated solution rather than one driven by firm operational needs.
- 6.5 It has been noted that Manston would not solve anything, merely 'spread it around a bit!'
- 6.6 Back to the significance of it not being used as yet... How would one ask the Chancellor for £x million to solve a problem that already has a short term solution – which has not been used. Problem? What problem?



7 Driver behaviour and thought process

7.1 Driver's hours are governed by tachograph regulations. These are now mostly digital format and are therefore almost impossible to manipulate. The rules are the rules and the tachograph controls the compliance. Drivers are fined for non-compliance. Vehicles are often impounded until the fine is paid. Fines in France can be as much as €5,000. It is complicated legislation with many variables but in simple terms:-

7.1.1 Driver can drive for 4.5 hours and then must take a 45min mid-shift break.

7.1.2 He can then drive for another 4.5 hours and then must take an 11 hour break.

7.2 Due to the speed of transit the Eurotunnel service tends to suit traffic on a mid shift break and the ferries are best suited to daily rest traffic.

7.3 The Ferry crossing can form part of the 11 hour daily rest period providing the driver does not make more than two truck movements within the period and that these two movements collectively do not exceed 1 hour.

7.4 Typically a driver will start his rest period in Calais, board the ferry, disembark at Dover and drive to the nearest truck park to continue his rest. Motis FSA at Dover is reachable within the 1 hour limitation. Stanford & Westenhanger are not. This has been confirmed by VOSA.

7.5 Stanford & Westenhanger are reachable from Eurotunnel but the shuttle cannot be considered part of the rest period as the driver does NOT have access to a couchette. However due to the speed of crossing many inbound drivers will pull in to STOP24 (and Ashford Truckstop) having not even started their break yet.

Breaks from driving	A break of no less than 45 minutes must be taken after no more than 4.5 hours of driving. The break can be divided into two periods – the first at least 15 minutes long and the second at least 30 minutes – taken over the 4.5 hours.
Daily driving	Maximum of 9 hours, extendable to 10 hours no more than twice a week.
Weekly driving	Maximum of 56 hours.
Two-weekly driving	Maximum of 90 hours in any two-week period.
Daily rest	Minimum of 11 hours, which can be reduced to a minimum of 9 hours no more than three times between weekly rests. May be taken in two periods, the first at least 3 hours long and the second at least 9 hours long. The rest must be completed within 24 hours of the end of the last daily or weekly rest period.
Multi-manning daily rest	A 9-hour daily rest must be taken within a period of 30 hours that starts from the end of the last daily or weekly rest period. For the first hour of multi-manning, the presence of another driver is optional, but for the remaining time it is compulsory.
Ferry/train daily rest	A regular daily rest period (of at least 11 hours) may be interrupted no more than twice by other activities of not more than 1 hour's duration in total, provided that the driver is accompanying a vehicle that is travelling by ferry or train and has access to a bunk or couchette.
Weekly rest	A regular weekly rest of at least 45 hours, or a reduced weekly rest of at least 24 hours, must be started no later than the end of six consecutive 24-hour periods from the end of the last weekly rest. In any two consecutive weeks a driver must have at least two weekly rests – one of which must be at least 45 hours long. A weekly rest that falls across two weeks may be counted in either week but not in both. Any reductions must be compensated in one block by an equivalent rest added to another rest period of at least 9 hours before the end of the third week following the week in question.



8 What does a driver do when confronted with Stack (or TAP)?

- 8.1 *In simple terms he joins the queue. He is no more disadvantaged than his colleagues and competitors and similarly he has no advantage over them. Some try and jump the queue but this is normally self-policed. He is a professional driver and can cope with some delays providing they apply to all.*
- 8.2 *Eurotunnel and the Ferry crossing are turn-up-and-go services. It is not possible (or practical) to book space on a specific sailing (contrary to the habits of the tourist market). This means the channel crossing is an 'unknown' and is the very reason why most drivers complete the crossing and then park. Precisely why 65+% of the traffic in existing Kent truck parks is inbound.*
- 8.3 *A driver joins the Ops Stack queue and immediately has his position established. He moves slowly until he runs out of driving hours, he may then go over his hours or simply turn his truck off and go to bed – the others will have to pull around him. It's not precise but the driver knows that he has done everything he is allowed to do and cannot lose his job as a consequence.*
- 8.4 *It costs £1 per minute to delay a truck during working hours – and £0 to delay a truck during the driver's daily rest period!*





9 Supply and demand

9.1 We have identified that approximately 5,000 trucks per day head towards Eurotunnel and the Port for export transit. This is a linear figure that does not consider peak traffic flows or the reduction in traffic on Saturdays. In reality it is more like 6,000 per day and up to 1,000 per hour at peak.

9.2 Eurotunnel can carry 260 outbound trucks per hour. Dover can carry 420. Dover Port can also hold approximately 500 trucks waiting for shipment beyond one hour.

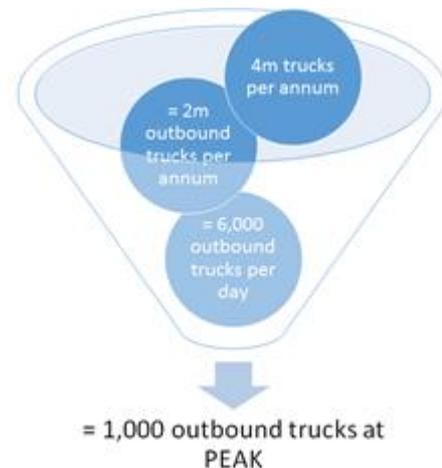
9.3 So at full peak there are 1,000 trucks for departure and the operators can move or hold more than that amount. TAP takes up the slack (with an additional 500 holding places if required).

9.4 We have not included any holding areas in Eurotunnel Folkestone terminal as the traffic is quick-moving and not designed to be held for more than 30 minutes.

9.5 Turn off Eurotunnel and/or Dover for anything more than two hours and freight traffic very quickly backs-up (as would any motorway!)

9.6 Building a truck park on the M20 that can hold 3,500 trucks would only be necessary when the current arrangements fail..... and if that were the case it would be too small!

9.7 Allow truck parking also at that site and the available space would be reduced further. It is vital to note that when a truck is parked it cannot move until the rest period is completed – potentially there could be a demand for stack holding area but the parkers literally can't move so that space is unavailable for up to 12 hours.....





10 Fly parking

- 10.1 The recent KCC report stated that 76% of drivers have their overnight parking paid for them in some form. This sounds a significant figure, after all it only leaves 24% of trucks looking for a solution. That can be as many as 2,500 trucks per day. Remember to count the inbound traffic. It is currently considered unsafe to park in Calais, even at the secure parks. It is not unusual for clandestines to jump from one parked lorry to the next. The park might be secure but the weak point is the truck. Each truck entering the site is potentially a Trojan horse.
- 10.2 The five significant truck parks in the Kent area currently provide around 1,200 overnight parking spaces. The further development of these sites has been hampered by the proposal to build a truck park on the M20. Having said that, despite this concern four of the parks have increased capacity to meet current demand. The private sector should be allowed (and encouraged) to service this demand without competition from the public sector.
- 10.3 Fly parking (the practice of parking in an inappropriate place) is yet to be fully quantified. Truck parks are ready to service this additional demand but this must go hand-in-hand with effective enforcement processes to prevent fly parking and to promote parking in an appropriate place.





11 Build a Truck Park!

11.1 The perception is that a large park is needed for Operation Stack and that it might as well solve the truck parking issue at the same time!

11.2 There are two sites under consideration:-



1. **Stanford West**

2. **J11 North**

Furthermore there are four alternatives as to how either of these sites would be configured:-

- Operation Stack only (free parking/holding)
- Operation Stack and TAP (free parking/holding)
- Operation Stack, TAP (free) and Overnight Parking (estimated at 500 chargeable spaces)
- Operation Stack, TAP (free) and Truckstop facilities (estimated at 1,000 chargeable spaces unless Operation Stack in place, could be more)

11.3 KCC have concluded that option 1c is preferable and we fully expect Highways England to reach the same conclusion.

11.4 Option 1 is described as “to the north and south of M20 just west of J11”. This is effectively connected to the existing truck parking facilities at STOP24. Whilst there is no suggestion that the site would be run as anything other than a separate entity, the very fact that the potential entrance/exit would be via STOP24 is not acceptable (and contradictory).

11.5 This would give a clear commercial advantage to STOP24 and as such would present unfair competition to Motis and the other significant truck parks in Kent. Equally, depending on how it is configured it may actually present significant competition to STOP24.

11.6 Whilst option 1 may be a clear leader it is nothing more than the ‘best of a bad lot’. Consider:-



- 11.6.1 *For Operation Stack it needs to be twice the size*
- 11.6.2 *Should it operate as a truck park it will represent unfair competition and a mis-use of public funds*
- 11.6.3 *As a truck park – it is too big*
- 11.6.4 *When the Lower Thames crossing is built the M20 truck park could effectively be in the wrong place – traffic will have to cross on the A249 (Manston would actually be better in this scenario!)*
- 11.6.5 *Manston has not been needed since the unprecedented events in the Summer of 2015*
- 11.6.6 *Capacity (and terminal/Port developments) have been aligned to current demand*
- 11.6.7 *When the traffic grows, historically, the shipping fleets (or ships themselves) get bigger*
- 11.6.8 *Eurotunnel would appear to be almost at full capacity with 7.5 departures per hour, but Dover has room to grow.*
- 11.6.9 *Operation Stack (phase 2+) is a rare event – the M20 truck park will, at best, become a white elephant (for 90% of the time) or, at worst, become a commercial truck park.*
- 11.7 *Surely a better solution would be to allow the private truck parks and service areas to grow and separately to seek a better solution to Operation Stack.*
- 11.8 *One should remember that if Operation Stack is in place in Kent there will be a similar build-up of traffic on the French side of the channel. Due to security issues in the Calais area, once the vehicle has crossed the channel (in to the UK) the driver will look for somewhere to park. What then? The M20 park will be full with stacked vehicles itself and the Kent truck parks will have been deterred from expanding due to the presence of the M20 truck park!*
- 11.9 *Is there an alternative?*





12 Solving the Problem

- 12.1 *Truck parking should be provided by the private sector. Fly parking should be enforced vigorously and this, itself, will promote investment in private truck parks. Support funding and smoother planning processes should be afforded to private truck park operators. (There is a will to grow already but the moment you mention 'truck' the response is negative.)*
- 12.2 *A Truck park is NOT the solution for Operation Stack. Trucks do not need to park they need to form an orderly queue. Think Theme Park, would you leave the queue to have lunch and expect to return to the point you left (while all others have patiently stood there?).*
- 12.3 *What is required is a holding area. A long strip of tarmac that allows a queue, an example (although not practical) would be Brands Hatch or Lydden race track – a continuous strip of road rather than a square of concrete. The M26 perhaps....*
- 12.4 *Better use of the hard shoulder on the M20 particularly on the 14mile stretch between junction 8 and 9. Lessons can be learnt here from the smart motorway plan.*
- 12.5 *Closer liaison with the operators (Eurotunnel and ferry) for the early identification of pinch points (refits – charters coming to an end etc)*

Operation Stack requires a
lateral solution brought
about by **lateral** thinking



13 The M26

13.1 9 miles of motorway – could accommodate 5,000 trucks in an orderly queue

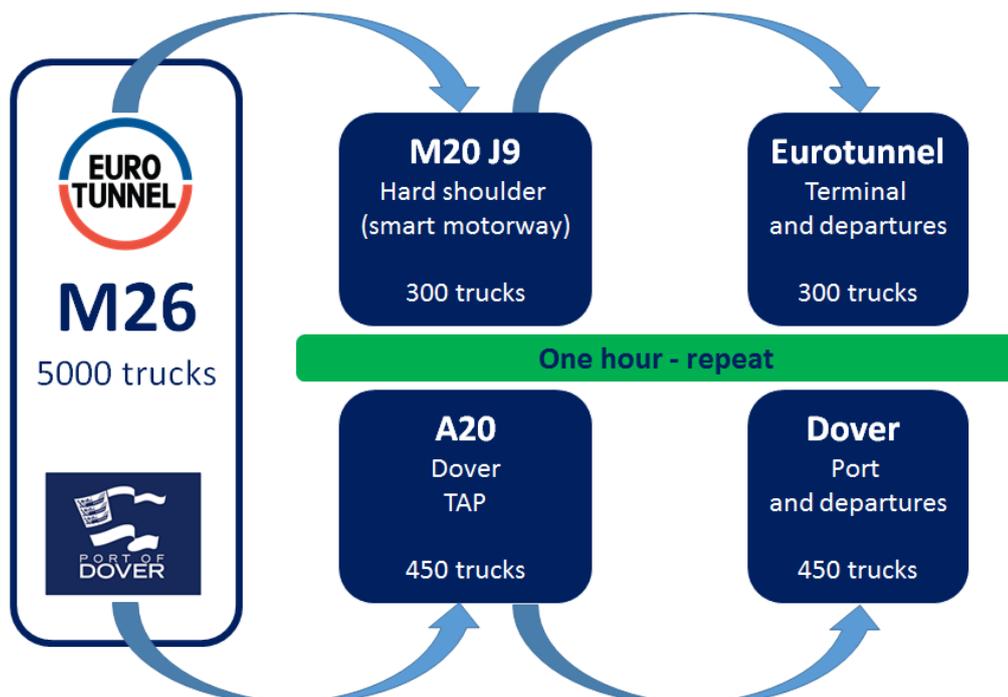
13.2 Motorway could be closed but route to from M20 and M25 would still be accessible via J3

13.3 M26 is a short-cut motorway and not an essential route. Could be temporarily closed with minimal impact.

13.4 Configuration suits holding lorries in a stack formation, initially southbound but could be adapted to northbound also.

13.5 At least one junction would need to be altered but this would appear significantly cheaper than building a £250m truck park folly.

13.6 In extreme cases the process would be thus:-





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