### **Tritax Symmetry (Hinckley) Limited**

## HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

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## The Hinckley National Rail Freight Interchange Development Consent Order

**Project reference TR050007** 

# Written Statement of Oral Case ISH2 [Appendix G - HGV Miles and Carbon Savings]

Document reference: 18.6.7

**Revision: 1** 

#### **14 November 2023**

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Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

#### **HNRFI EXAMINATION**

#### **SUMMARY NOTE**

#### **LORRY MILES SAVED**

#### **METHODOLOGY**

#### 1. INTRODUCTION

- 1.1 The assessment of the indicative lorry miles saved has been expressed as c83m miles per annum assuming 16 trains use the Rail Freight Terminal each day and 4 on Saturdays. (Doc Ref. 6.2.3.1; PINS ref APP-131)
- 1.2 The assessment of this provides both lorry miles and kilometres saved, along with a summary analysis of the indicative build-up of services by additional trains; and associated lorry miles saved.
- 1.3 This has then been assessed for NET CO2e savings, having discounted for CO2e produced by the train movements. A deduction in lorry miles saved has been made to reflect that some container delivery points off-site may have had a slightly shorter road distance from the origin, if delivered direct by HGV.

#### 2. RAIL TO LORRY MOVEMENTS

- 2.1 The Rail to HGV / Lorry moves has been agreed with the Transport Working Group based on the model in Appendix 8.1: Transport Assessment [part 4 of 20] Trip Generation Addendum (document reference: 6.2.8.1, APP-141).
- 2.2 This was designed to stress test the highway network with a maximum probable outcome from 16 trains per day using the Rail Terminal, and assumes 100 TEU (Twenty Foot Equivalent) container capacity, using 775m Freightliner Shortliner trains at 81% utilisation (i.e. 81 TEU utilised).
- 2.3 Most containers are 40' and some are 20', but each container will require an HGV move, regardless of size (two 20' containers can be moved together, but this is not common). The conversion factor of TEU to Containers moved, is 1.8. A train of 81 TEU utilisation will have 45 containers each way to be moved 90 both ways.
- 2.4 Whether an HGV collects from the coastal port or from the inland rail port, it may arrive with another container to be dropped off before collecting a return load; or it may arrive empty simply collecting. This means that for each container moved the total number of HGV moves needs to reflect that some HGV's will have arrived empty. This is recognised at ports and rail terminals at a ratio of 1.35 HGV moves per container.
- 2.5 This then takes the number of HGV moves per train to 122, to move 90 containers.

#### 3. LORRY MOVE TO LORRY MILES SAVED

3.1 For the purposes of assessing Lorry Miles Saved, the above assessment has been utilised, with assumptions made on train routing in accordance with the capacity analysis undertaken by WSP and Network Rail. This allows for up to 10 trains travelling to and from the east of HNRFI and 6 trains to and from the west each weekday, (a reduced number of trains will operate on Saturdays).

#### 3.2 These comprise:

to the East:
Felixstowe 6
London Gateway 3
Teesport 1

And to the West:

Liverpool Port 2
Cardiff 1
Manchester 1
Glasgow 2

- 3.3 The HGV mileages for each of these origins and destinations is then multiplied by the number of HGV moves required for the same delivery by rail from that location per weekday. For Saturday the mileage saved is calculated as a proportion of the number of trains moved on a Saturday (4) compared to a weekday (16), i.e. 25%.
- 3.4 The assumptions for the origin and destination for the total number of trains from 1 to 16 has been provided as separate tabbed worksheets, to enable an indicative assessment of CO2 savings to be calculated as services are ramped-up. The ramp-up assumes two additional services for each year of operation, up to a maximum of 16 per weekday.
- 3.5 This provides a total annual mileage based on 260 weekday moves and 52 Saturday HGV moves, which at 16 trains per weekday and 4 on a Saturday, equates to c. 83 million miles per annum.

#### 4. LORRY MILES SAVED TO CO2 SAVINGS

- 4.1 As requested, a detailed analysis has been prepared and is attached setting out the assessment of Lorry Miles and CO2e saved, against each train, in order that there is complete transparency as to the benefits that will be obtained as this scheme matures.
- 4.2 The assumptions of CO2e emissions for HGV's are based on the International Council on Clean Transport (ICCT) published in Sept 2021 Working Paper 2021-2035. This identified a baseline CO2e of 0.7835 Kilograms per Kilometre emitted by a Group 5

- Tractor and Trailer with a long-haul payload of 13.84T. National Highways model has a similar figure of 0.78 Kilograms per Kilometre.
- 4.3 This has been used to assess the CO2e emissions for HGVs mileage identified for each train.
- 4.4 The total for 83m lorry miles (133.58 Kilometres) is 104.78 Kilo Tonnes CO2e per annum.
- 4.5 For each train movement the rail mileage (and kilo metres) has been identified between HNRFI and the origin and destination ports/terminals as per the lorry mile assessment.
- 4.6 The Office of Road and Rail ('ORR') publishes regular reports on its assessment of the CO2e from trains and for freight. This is expressed as CO2e grams per NET tonne kilometre moved. As of March 2022 this is published at 26.9 gms, being 0.0269 Kilograms per NET tonne kilometre moved.
- 4.7 The NET tonne is the payload, the freight actually moved by rail. To ensure a direct comparison therefore the assumed payload for a 40' container has been taken as the same as for the ICCT HGV, at 13.84Tonnes of freight.
- 4.8 Adjusting this to Twenty Foot Equivalent TEU's provides a TEU weight of 6.92T payload, which is then multiplied by the TEU/Train utilisation at 81, creating an assumed equivalent total of HGV movements, therefore 560.52 Tonnes of freight.
- 4.9 This has the been multiplied by the ORR's CO2e assessment for kilograms per net tonne kilometre (0.0269) and then by the round-trip distance between HNRFI and the Terminal.
- 4.10 At 16 trains the emitted diesel for the same payload as the HGV's, is 34.66 Kilo Tonnes CO2e per annum.
- 4.11 In order to identify the net benefit, the rail CO2e emissions have to be deducted from the HGV emissions.
- 4.12 This creates a net saving of 70.12 Kilo Tonnes CO2e per annum, when using diesel rail freight instead of HGVs, assuming 16 trains per weekday.
- 4.13 This is 67% more efficient than HGV's. This is slightly below the Government's published figure of 76%, but this will include an element of electric traction, as an overall headline figure.
- 4.14 This assessment has been provided in considerable detail to ensure transparency in the assessment. The base assumptions are published from reliable sources, being the Office for Road and Rail (ORR) and the International Council on Clean Transport (ICCT)

ASSUMPTIONS	S	70% of container to / 66% of offsite contain	/ from occupier at HNRFI / from off-site customer of ners continue direction of ners backtrack towards or	route (merely mod	de transfer)	81 Twenty-foot Equivalent 1.8 Twenty-foot Equivalent 15 miles each way average 260 Weekdays 52 Saturdays	t Unit to Containers	ASSUMPTIONS	0.0269 ORR Mar 2022 - Fr 13.84 Tonne equivalent p 6.92 Tonne adjusted to		ams per NET Tonne Km	(payload of freight mo		3.84T	83.1 m 70.12 kt	ains per day illion lorry miles saved pa CO2e saved ore efficient by diesel train
TRAINS PER DA	AY	MILLION LORRY MILES SAV	ED PER ANNUM		MILLION LORRY KILOMET	RES SAVED PER ANNUM		HGV Euro VI	KILO TONNES CO2e	PER ANNUM (ktpa)	DIESEL FREIGHT TRA	IN KILO	TONNES CO2e PER	ANNUM (ktpa)	NET	CO2e SAVINGS (ktpa)
WEEK DAY	SATURDAY	TOTAL	OCCUPIERS	OFF SITE	TOTAL	OCCUPIERS	OFF- SITE	TOTAL	OCCUPIERS	OFF- SITE	MILLION MILES PA	MILLION KMS PA	CO2e ktpa	TRAINS	%	CO2e ktpa
1	0	4.6	1.4	3.2	7.4	2.3	5.1	5.80	1.77	4.03	0.08	0.14	2.06	1	65%	3.74
2	0	9.1	2.8	6.3	14.6	4.5	10.1	11.47	3.53	7.94	0.17	0.27	4.11	2	64%	7.36
3	1	13.9	4.3	9.6	22.4	6.9	15.4	17.53	5.42	12.10	0.25	0.41	6.14	3	65%	11.39
4	1	17.8	5.5	12.3	28.6	8.9	19.8	22.44	6.94	15.51	0.32	0.51	7.76	4	65%	14.68
5	1	22.4	6.9	15.5	36.0	11.1	24.9	28.24	8.70	19.54	0.41	0.65	9.83	5	65%	18.42
6	2	27.2	8.4	18.8	43.8	13.5	30.3	34.30	10.59	23.71	0.49	0.78	11.83	6	66%	22.47
7	2	36.8	11.3	25.5	59.2	18.2	41.0	46.40	14.25	32.15	0.65	1.04	15.66	7	66%	30.74
8	3	42.4	13.0	29.4	68.2	20.9	47.3	53.46	16.39	37.07	0.75	1.20	18.14	8	66%	35.33
9	3	45.6	14.0	31.6	73.4	22.5	50.9	57.50	17.65	39.85	0.79	1.28	19.26	9	67%	38.24
10	4	56.2	17.2	39.0	90.4	27.7	62.8	70.86	21.69	49.18	0.97	1.56	23.52	10	67%	47.34
11	4	60.8	18.6	42.1	97.8	29.9	67.8	76.66	23.45	53.08	1.05	1.70	25.57	11	67%	51.09
12	4	64.6	19.8	44.8	104.0	31.9	72.1	81.46	24.97	56.49	1.12	1.80	27.17	12	67%	54.28
13	4	70.4	21.6	48.8	113.3	34.8	78.5	88.77	27.24	61.53	1.21	1.95	29.41	13	67%	59.35
14	4	74.3	22.8	51.5	119.6	36.7	82.9	93.69	28.75	64.94	1.28	2.06	31.03	14	67%	62.66
15	4	78.8	24.2	54.7	126.8 133.7	38.9 41.0	88.0 92.7	99.36 104.78	30.51 32.15	68.97 72.63	1.36	2.19	33.08 34.66	15	67%	66.28 <b>70.12</b>
16	4	83.1	25.5	57.6	133./	41.0	92.7	104.78	32.15	/2.63	1.43	2.30	34.66	16	6/%	70.12

CO2e SAVINGS PER ANNUM (ktpa)

RESULTS

SUMMARY SHEET

HINCKLEY NRFI

HGV MILEAGE INDICATIVE LORRY MILES SAVED PER ANNUM

HINCKLEY NRFI		HGV MILE	AGE I	NDICATIVE	LORRY MILES	SAVED								TRAIN MI	LES	
ASSUMPTIONS			wteen Origin and			HNRFI - Smithy Lane	e Jn 2 M69.		81	Twenty-foot Equiva						
		30%	of container to						1.8	Twenty-foot Equiva		ers				
		70%			customer of railpo				15	miles each way aver	rage					
		66%			direction of route				260	Weekdays						
		34%	of offsite cont	ainers backtrac	k towards origin, in	creasing overall jou	irney miles		52	Saturdays						
		1.60934	Kilometers per	Mile												
									OCCUPIERS			OFF SITE	TOTAL	TRA	AIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day	Container moves per	ratio container moves to HGV /	ALL HGV Moves	OCCUPIER HGV	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per	OFF SITE GROSS ROAD MILES	OFF SITE EXTRA CARTAGE MILES	OFF SITE NET LORRY MILES	ALL HGV LORRY MILES SAVED per	TRAIN MILES each way	PER DAY	PER ANNUM
			(both ways)	w/day	empty running	per w/uay	woves per w/day	woves per w/uay	w/day	SAVED per w/day	[er w/day	SAVED per w/ day	w/day	eacii way		ANNOW
to and from																
Felixstowe	148	1	162	90	1.35	122	36	85	5,395	12,587	434	12,154	17,548	163	326	84,760
London Gateway	128	0	0	0	1.35	0	0	0	-	-	-	-	-	130	0	-
Liverpool Port	128	0	0	0	1.35	0	0	0	-	-	-	-	-	130	0	-
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-	127	0	-
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	-	-	177	0	-
Manchester	108	0	0	0	1.35	0	0	0	-	-	-	-	-	94	0	-
Glasgow	300	0	0	0	1.35	0	0	0	-	=	-	=	=	295	0	-
TOTALS PER WEEKDAY		1	162	90		122	36	85	5,395	12,587	434	12,154	17,548	TOTAL W'DAY	326	84,760
				TRAINS	1	WEEKDAYS	260	Miles Saved PA	1,402,596			3,159,948	4,562,544			

1,402,596

1.4

2.3

Saturdays

52

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

0

TRAINS

TOTALS PER ANNUM

TOTALS PER ANNUM

4,562,544

4.6

7.4

3,159,948

3.2

5.1

SATURDAY

Million Train miles

Milliom Train Kms

0.08

ASSUMPTIONS	Road miles bev	vteen Origin and HNRFI		HNRFI - Smithy Lan	e Jn 2 M69.		81	Twenty-foot Equiva	lent Unit/Train Utili	sation					
	30%	of container to / from or	cupier at HNRFI				1.8	Twenty-foot Equiva	lent Unit to Contain	ers					
	70%	of container to / from of	f-site customer of railpo	ort			15	miles each way ave	rage						
	66%	of offsite containers con	tinue direction of route	(merely mode tran	sfer)		260	Weekdays							
	34%	of offsite containers bac	ktrack towards origin, ir	creasing overall jou	urney miles		52	Saturdays							
	1.60934	Kilometers per Mile													
								_				_			
							OCCUPIERS			OFF SITE	TOTAL		TRAI	N MILES USE	D
		TOTAL TEU Contain	er ratio container			055 6155 1101	OCCUPIER ROAD	OFF SITE GROSS	OFF SITE EXTRA	OFF SITE NET	ALL HGV LORRY				
	Miles one way No. trains	per w/day moves i	oer moves to HGV /	ALL HGV Moves	OCCUPIER HGV	OFF SITE HGV Moves per w/day	MILES SAVED per	ROAD MILES	CARTAGE MILES	LORRY MILES	MILES SAVED per		TRAIN MILES	PER DAY	PER ANNUM
		(both ways) w/da	empty running	per w/day	woves per w/day	ivioves per w/day	w/day	SAVED per w/day	[er w/day	SAVED per w/ day	w/day		each way		

	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORR MILES SAVED p w/day
o and from													
elixstowe	148	2	324	180	1.35	243	73	170	10,789	25,175	868	24,307	35,0
ondon Gateway	128	0	0	0	1.35	0	0	0	-	-	-	-	-
iverpool Port	128	0	0	0	1.35	0	0	0	-	-	-	-	-
ardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-
eesport	187	0	0	0	1.35	0	0	0	-	-	-	-	
Manchester	108	0	0	0	1.35	0	0	0	-	-	-	-	
Glasgow	300	0	0	0	1.35	0	0	0	-	-	-	-	-
OTALS PER WEEKDAY		2	324	180		243	73	170	10,789	25,175	868	24,307	35,0
				TRAINS	2	WEEKDAYS	260	Miles Saved PA	2,805,192			6,319,895	9,125,0
				TRAINS	0	Saturdays	52	Miles Saved PA	-			-	-, -,
						•			2,805,192			6,319,895	9,125,0
OTALS PER ANN	UM				LORRY MILI	ES SAVED PER	ANNUM appro	x million miles	2.8			6.3	9.1
OTALS PER ANN	UM			10	RRY MILES SA	VED PER ANNI	JM approx mill	ion kilometres	4.5			10.1	14.6

TRA	AIN MILES U	SED
TRAIN MILES each way	PER DAY	PER ANNUN
163	652	169,520
130	0	-
130	0	-
127	0	-
177	0	-
94	0	-
295	0	-
TOTAL W'DAY	652	169,520
SATURDAY	0	-
Million Trai	n miles	0.17
Milliom Tra	in Kms	0.27

TRAIN MILES

HGV MILEAGE

HINCKLEY NRFI

INDICATIVE LORRY MILES SAVED

TOTALS PER WEEKDAY		3	486	270		365	109	255	15,455	36,061	1,301	34,760	50,215	TOTAL W'I	A) 912	237,120
				Ť												
Glasgow	300	0	0	0	1.35	0	0	0	_	_	_	_		295	0	_
Manchester	108	0	0	0	1.35	0	0	0	_	_	_	_		94	0	_
Teesport	187	0	0	0	1.35	0	0	0	_	_	_	_		177	0	_
Cardiff	138	0	0	0	1.35	0	0	0	_	_	_	_		127	0	_
Liverpool Port	128	0	0	0	1.35	0	0	0	4,000	10,880	434	10,433	15,116	130	200	07,000
London Gateway	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118	130	260	67,600
to and from Felixstowe	148	,	324	180	1.35	243	73	170	10,789	25,175	868	24,307	35,096	163	652	169,520
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MIL each wa	PER DAY	PER ANNUM
									OCCUPIERS	1	İ	OFF SITE	TOTAL		TRAIN MILES U	SED
		1.60934	Kilometers per	Mile												
		34%	of offsite conta	ainers backtrac	k towards origin, in	creasing overall jou	rney miles		52	Saturdays						
		66%				(merely mode trans	fer)		260	Weekdays	-0-					
		70%			customer of railpo	ort			15	miles each way aver						
		30%	of container to						1.8	Twenty-foot Equival						
ASSUMPTIONS	- I	Road miles bev	teen Origin and	HNRFI		HNRFI - Smithy Lane	2 Jn 2 M69.		81	Twenty-foot Equival	ent Unit/Train Utilis	ation				

Miles Saved PA

4,018,248

4,286,131

4.3

6.9

267,883

HGV MILEAGE

HINCKLEY NRFI

TOTALS PER ANNUM

TOTALS PER ANNUM

WEEKDAYS

Saturdays

260

52

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

TRAINS

TRAINS

INDICATIVE LORRY MILES SAVED

9,037,583

602,506 9,640,089

9.6

15.4

13,055,831

13,926,220

13.9

22.4

870,389

TRAIN MILES

SATURDAY

Million Train miles

Milliom Train Kms

304

15,808

0.25

HINCKLEY NRFI		HGV MILE	AGE	NDICATIVE	LORRY MILES	SAVED								· ·	TRAIN MII	LES	
ASSUMPTIONS		30%	wteen Origin and of container to	o / from occupi	er at HNRFI	HNRFI - Smithy Lan	e Jn 2 M69.		1.8	Twenty-foot Equival	lent Unit to Containe						
		70% 66%			customer of railpo direction of route		-f\		15 260	miles each way aver Weekdays	rage						
		34%			k towards origin, ir				52	Saturdays							
		1.60934	Kilometers pe		k towards origin, ir	creasing overall jou	arney miles		52	Saturdays							
									OCCUPIERS			OFF SITE	TOTAL	ŗ.	TRA	IN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day		RAIN MILES each way	PER DAY	PER ANNUM
to and from																	
Felixstowe	148	2	324	180	1.35	243	73	170	10,789	25,175	868	24,307	35,096		163	652	169,520
London Gateway	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118		130	260	67,600
Liverpool Port	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118		130	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-		127	0	-
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	-	-		177	0	-
Manchester	108	0	0	0	1.35	0	0	0	-	-	-	=	-		94	0	-
Glasgow	300	0	0	0	1.35	0	0	0	-	-	-	-	-		295	0	-
TOTALS PER WEEKDAY		4	648	360		486	146	340	20,120	46,948	1,735	45,213	65,333	Ţ	OTAL W'DA	1172	304,720
				TRAINS TRAINS	4 1	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	5,231,304 261,565 5,492,869	J		11,755,271 587,764 12,343,034	16,986,575 849,329 17,835,904	S	ATURDAY	293	15,236

8.9

+44 20 7788 4784

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

TOTALS PER ANNUM

TOTALS PER ANNUM

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17.8

28.6

12.3

19.8

Million Train miles

Milliom Train Kms

0.32

HINCKLEY NRFI		HGV MILE	AGE	NDICATIVE	LORRY MILES	SAVED									TRAIN M	ILES	
ASSUMPTIONS		Road miles be	wteen Origin and	HNRFI		HNRFI - Smithy Lan	e Jn 2 M69.		81	Twenty-foot Equiva	ent Unit/Train Utilis	ation					
		0.3	of container to	/ from occupi	ier at HNRFI				1.8	Twenty-foot Equiva	ent Unit to Containe	ers					
		70%	of container to	o / from off-site	e customer of railpo	ort			15	miles each way aver	age						
		66%	of offsite cont	ainers continue	e direction of route	(merely mode tran	sfer)		260	Weekdays							
		34%	of offsite cont	ainers backtrad	k towards origin, ir	creasing overall jou	urney miles		52	Saturdays							
		1.60934	Kilometers pe	r Mile													
										_				_			
									OCCUPIERS			OFF SITE	TOTAL		TR	AIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day		TRAIN MILES each way	PER DAY	PER ANNUM
to and from Felixstowe	148	3	486	270	1.35	365	109	255	16,184	37,762	1,301	36,461	52,645		163	978	254,280

85

85

0

0

0

0

425

Miles Saved PA

Miles Saved PA

4,666

4,666

25,515

6,633,900

265,356

6,899,256

11.1

10,886

10,886

59,535

TOTALS PER ANNUM	LORRY MILES SAVED PER ANNUM approx million miles	6.9	15.5	22.4

36

36

0

0

182

260

52

TRA	IN MILES US	ED
TRAIN MILES each way	PER DAY	PER ANNUM
163	978	254,280
130	260	67,600
130	260	67,600
127	0	-
177	0	-
94	0	-
295	0	-
TOTAL W'DAY	1498	389,480
SATURDAY	299.6	15,579
Million Tra	in miles	0.41
Milliom Tra		0.65

128

128

138

187

108

300

London Gateway

TOTALS PER WEEKDAY

TOTALS PER ANNUM

Liverpool Port

Cardiff

Teesport

Glasgow

Manchester

162

162

0

0

810

1

1

0

0

90

90

0

0

450

TRAINS

TRAINS

1.35

1.35

1.35

1.35

1.35

1.35

122

122

0

608

WEEKDAYS

Saturdays

LORRY MILES SAVED PER ANNUM approx million kilometres

10,453

10,453

57,366

596,609

14,915,219

15,511,827

24.9

434

434

2,169

15,118

15,118

82,881

861,965

21,549,119

22,411,083

36

ASSUMPTIONS		30% 30% 70% 66% 34% 1.60934	of container to of offsite cont	o / from occupi o / from off-site ainers continue ainers backtrac		(merely mode trans	sfer)		81 1.8 15 260 52	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays Saturdays	ent Unit to Containe						
	Miles one way	No. trains	TOTAL TEU per w/day	Container moves per	ratio container moves to HGV /	ALL HGV Moves	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIERS  OCCUPIER ROAD MILES SAVED per	OFF SITE GROSS ROAD MILES	OFF SITE EXTRA CARTAGE MILES	OFF SITE  OFF SITE NET LORRY MILES	ALL HGV LORRY MILES SAVED per		TRA N MILES h way	IN MILES US	PER ANNUM
to and from Felixstowe	148	3	(both ways)	w/day 270	empty running	365	109	255	w/day 16,184	37,762	[er w/day	36,461	w/day 52,645		163	978	254,280
Liverpool Port Cardiff	128 128 138	1 0	324 162 0	180 90 0	1.35 1.35 1.35	243 122 0	73 36 0	170 85 0	9,331 4,666 -	21,773 10,886 -	868 434 -	20,905 10,453 -	30,236 15,118 -		130 130 127	520 260 0	135,200 67,600 -
Teesport Manchester Glasgow	187 108 300	0	0	0	1.35 1.35 1.35	0	0	0	-	- - -	- - -	- - -	-		177 94 295	0	-
TOTALS PER WEEKDAY		6	972	540		729	219	510	30,181	70,421	2,603	67,819	97,999	TOTA	L W'DA	1758	457,080
				TRAINS TRAINS	6 2	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	7,846,956 523,130 8,370,086			17,632,906 1,175,527 18,808,433	25,479,862 1,698,657 27,178,520	SATU	RDAY	586	30,472

8.4

13.5

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

INDICATIVE LORRY MILES SAVED

+44 20 7788 4784

HINCKLEY NRFI

TOTALS PER ANNUM

TOTALS PER ANNUM

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**HGV MILEAGE** 

27.2

43.8

18.8

30.3

TRAIN MILES

Million Train miles

Milliom Train Kms

0.49

ASSUMPTIONS		Road miles be 30% 70% 66% 34% 1.60934	of container to of offsite cont	o / from occupi o / from off-site ainers continue ainers backtrac		(merely mode trans	sfer)		81 1.8 15 260 52	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays Saturdays	ent Unit to Containe						
	Miles one way	No. trains	TOTAL TEU	Container moves per	ratio container moves to HGV /	ALL HGV Moves	OCCUPIER HGV	OFF SITE HGV	OCCUPIERS  OCCUPIER ROAD  MILES SAVED per	OFF SITE GROSS ROAD MILES	OFF SITE EXTRA	OFF SITE  OFF SITE NET LORRY MILES	ALL HGV LORRY MILES SAVED per	TRAIN	MII ES	N MILES USE	ED PER
to and from	willes one way	NO. Clains	(both ways)	w/day	empty running	per w/day	Moves per w/day	Moves per w/day	w/day	SAVED per w/day	[er w/day	SAVED per w/ day	w/day	each	way	FLRDAI	ANNUM
Felixstowe	148	3	486	270	1.35	365	109	255	16,184	37,762	1,301	36,461	52,645	16	3	978	254,280
London Gateway	128	2	324	180	1.35	243	73	170	9,331	21,773	868	20,905	30,236	13	0	520	135,200
Liverpool Port	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118	13	0	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-	12	7	0	-
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	-	-	17		0	-
Manchester	108	0	0	0	1.35	0	0	0	-	-	-	-	-	9.		0	-
Glasgow	300	1	162	90	1.35	122	36	85	10,935	25,515	434	25,081	36,016	29	5	590	153,400
TOTALS PER WEEKDAY		7	1134	630		851	255	595	41,116	95,936	3,036	92,900	134,016	TOTAL	W'DA1	2348	610,480
				TRAINS TRAINS	7 2	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	10,690,056 610,860 11,300,916	I		24,154,030 1,380,230 25,534,260	34,844,086 1,991,091 36,835,177	SATUR	DAY 67	70.857143	34,885

18.2

LORRY MILES SAVED PER ANNUM approx million kilometres

LORRY MILES SAVED PER ANNUM approx million miles

36.8

59.2

25.5

41

TRAIN MILES

Million Train miles

Milliom Train Kms

0.65

1.04

**HGV MILEAGE** 

HINCKLEY NRFI

TOTALS PER ANNUM

TOTALS PER ANNUM

INDICATIVE LORRY MILES SAVED

HINCKLEY NRFI		HGV MILE	AGE	NDICATIVI	LORRY MILES	SAVED								TRAIN M	ILES	
ASSUMPTIONS		30% 70%		o / from occup o / from off-sit	ier at HNRFI e customer of railpo				81 1.8 15	Twenty-foot Equival Twenty-foot Equival miles each way aver	ent Unit to Containe					
		66% 34% 1.60934		ainers backtra	e direction of route ck towards origin, in		,		260 52	Weekdays Saturdays						
									OCCUPIERS			OFF SITE	TOTAL	TR	AIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MILES each way	PER DAY	PER ANNUM
to and from																
Felixstowe London Gateway	148 128	4	648 324	360 180	1.35 1.35	486 243	146 73	340 170	21,578 9,331	50,350 21,773	1,735 868	48,615 20,905	70,193 30,236	163 130	1304 520	339,040 135,200
Liverpool Port	128	1	162	90	1.35	122	73 36	85	9,331 4,666	10,886	434	10,453	15,118	130	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	4,000	10,880	-	10,433	13,118	127	0	
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	_	_	177	0	
Manchester	108	0	0	0	1.35	0	0	0	-	-	-	-	-	94	0	-
Glasgow	300	1	162	90	1.35	122	36	85	10,935	25,515	434	25,081	36,016	295	590	153,400
TOTALS PER WEEKDAY		8	1296	720		972	292	680	46,510	108,524	3,470	105,054	151,564	TOTAL W'DA	2674	695,240
				TRAINS TRAINS	8 3	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	12,092,652 906,949 12,999,601	J		27,313,978 2,048,548 29,362,526	39,406,630 2,955,497 42,362,127	SATURDAY	1002.75	52,143
TOTALS PER ANN	UM				LORRY MIL	ES SAVED PER	ANNUM approx	million miles	13			29.4	42,562,127 <b>42.4</b>	Million Tr	ain miles	0.75

Milliom Train Kms

1.20

47.3

18.6.7 Appendix G - HGV Miles and Carbon Savings

68.2

LORRY MILES SAVED PER ANNUM approx million kilometres

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+44 20 7788 4784

TOTALS PER ANNUM

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HINCKLEY NRFI		HGV MILE	AGE	INDICATIVE	LORRY MILES	SAVED									TRAIN MIL	LES	
ASSUMPTIONS		Road miles he	wteen Origin and	HNREI		HNRFI - Smithy Lan	e In 2 M69		81	Twenty-foot Equiva	lent Unit/Train Utilis	ation					
7.5501111 7.10115		30%	of container to			5	C 311 Z 11103.		1.8	Twenty-foot Equival							
		70%			customer of railpo	ort			15	miles each way aver		.13					
		66%				(merely mode tran:	cfor)		260	Weekdays	age						
		34%				creasing overall jou			52	Saturdays							
		1.60934	Kilometers pe		k towarus origiri, ii	icreasing overall jou	arriey miles		32	Saturdays							
		1.60934	Kilometers pe	riville													
									OCCUPIERS	1		OFF SITE	TOTAL	_	TDA	IN MILES US	ED
									OCCOT IERS			OTT SITE	TOTAL			III WILLS OS	
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day		RAIN MILES each way	PER DAY	PER ANNUM
to and from																	
Felixstowe	148	4	648	360	1.35	486	146	340	21,578	50,350	1,735	48,615	70,193		163	1304	339,040
London Gateway	128	2	324	180	1.35	243	73	170	9,331	21,773	868	20,905	30,236		130	520	135,200
Liverpool Port	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118		130	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-		127	0	-
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	_	-		177	0	-
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8,752	12,688		94	188	48,880
Glasgow	300	1	162	90	1.35	122	36	85	10,935	25,515	434	25,081	36,016		295	590	153,400
TOTALS PER WEEKDAY		9	1458	810		1,094	328	765	50,447	117,709	3,904	113,805	164,252	T	OTAL W'DA	2862	744,120
				TRAINS	9	WEEKDAYS	260	Miles Saved PA	13,116,168	_		29,589,405	42,705,573				
				TRAINS	3	Saturdays	52	Miles Saved PA	874,411			1,972,627	2,847,038	S/	ATURDAY	954	49,608
									13,990,579			31,562,032	45,552,612	-			

14

22.5

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

TOTALS PER ANNUM

TOTALS PER ANNUM

45.6

73.4

Million Train miles

Milliom Train Kms

0.79

1.28

31.6

HINCKLEY NRFI		HGV MILE	AGE	INDICATIVI	LORRY MILES	SAVED								TRAIN M	ILES	
ASSUMPTIONS		Road miles be	wteen Origin and	I HNRFI		HNRFI - Smithy Lan	e Jn 2 M69.		81	Twenty-foot Equiva	ent Unit/Train Utilis	ation				
		30%	of container t	o / from occup	ier at HNRFI				1.8	Twenty-foot Equival	ent Unit to Containe	ers				
		70%	of container t	o / from off-sit	e customer of railpo	rt			15	miles each way aver	age					
		66%	of offsite cont	ainers continu	e direction of route	(merely mode trans	sfer)		260	Weekdays						
		34%	of offsite cont	ainers backtra	k towards origin, in	creasing overall jou	rney miles		52	Saturdays						
		1.60934	Kilometers pe	r Mile												
									OCCUPIERS			OFF SITE	TOTAL	TR	AIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MILES each way	PER DAY	PER ANNUM
to and from																
Felixstowe	148	4	648	360	1.35	486	146	340	21,578	50,350	1,735	48,615	70,193	163	1304	339,040
London Gateway	128	2	324	180	1.35	243	73	170	9,331	21,773	868	20,905	30,236	130	520	135,200
Liverpool Port	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118	130	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-	127	0	-
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	-	-	177	0	-
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8,752	12,688	94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032	295	1180	306,800
TOTALS PER WEEKDAY	1	10	1620	900		1,215	365	851	61,382	143,224	4,338	138,887	200,268	TOTAL W'DA	3452	897,520
				TRAINS	10	WEEKDAYS	260	Miles Saved PA	15,959,268	J		36,110,529	52,069,797			
				TRAINS	10	Saturdays	52	Miles Saved PA	15,959,268			2,888,842	4,165,584	SATURDAY	1380.8	71,802
				INAINS	4	Jacurudys	32	IVIIIES JAVEU PA	17,236,009			2,888,842 38,999,371	56,235,381	SATURDAT	1380.8	/1,802
TOTALC DED AND					LODDYAM	C CAVED DED	A B18111B #							natility . T		
TOTALS PER ANN	IUIVI				LUKKY MIL	ES SAVED PER	ANNUM approx	x million miles	17.2			39	56.2	Million Tr	ain miles	0.97

90.4

Milliom Train Kms

1.56

62.8

TOTALS PER ANNUM

LORRY MILES SAVED PER ANNUM approx million kilometres

HINCKLEY NRFI		HGV MILE	AGE I	NDICATIVE	LORRY MILES	SAVED								TRAIN MI	LES	
ASSUMPTIONS		Road miles be 30% 70% 66% 34% 1.60934	of offsite cont	o / from occupi o / from off-site ainers continue ainers backtrae		merely mode trans	sfer)		81 1.8 15 260 52	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays Saturdays	ent Unit to Containe					
									OCCUPIERS			OFF SITE	TOTAL	TR/	AIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MILES each way	PER DAY	PER ANNUM
to and from																
Felixstowe	148	5	810	450	1.35	608	182	425	26,973	62,937	2,169	60,768	87,741	163	1630	423,800
London Gateway	128	2	324	180	1.35	243	73	170	9,331	21,773	868	20,905	30,236	130	520	135,200
Liverpool Port	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118	130	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-	127	0	
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	-	-	177	0	-
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8,752	12,688	94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032	295	1180	306,800
TOTALS PER WEEKDAY		11	1782	990		1,337	401	936	66,776	155,812	4,771	151,040	217,817	TOTAL W'DA	3778	982,280
				TRAINS	11	WEEKDAYS	260	Miles Saved PA	17,361,864	]		39,270,477	56,632,341			

1,262,681

18,624,545

18.6

29.9

TRAINS

4

4,118,716 60,751,056

60.8

97.8

2,856,035 42,126,511

42.1

67.8

SATURDAY 1373.81818

Million Train miles

Milliom Train Kms

71,439

1.05

1.70

TOTALS PER ANNUM

TOTALS PER ANNUM

Saturdays

52

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

HINCKLEY NRFI		HGV MILE	AGE	NDICATIVE	LORRY MILES	SAVED									TRAIN MII	LES	
ASSUMPTIONS		Road miles be 30% 70% 66% 34% 1.60934	of offsite cont	o / from occupi o / from off-site ainers continue ainers backtrac	er at HNRFI customer of railpo direction of route	HNRFI - Smithy Lan ort (merely mode tran ocreasing overall jou	sfer)		1.8	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays Saturdays	lent Unit to Containe						
									OCCUPIERS			OFF SITE	TOTAL		TRA	IN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day		RAIN MILES each way	PER DAY	PER ANNUM
to and from																	
Felixstowe	148	5	810	450	1.35	608	182	425	26,973	62,937	2,169	60,768	87,741		163	1630	423,800
London Gateway	128	3	486	270	1.35	365	109	255	13,997	32,659	1,301	31,358	45,355		130	780	202,800
Liverpool Port	128	1	162	90	1.35	122	36	85	4,666	10,886	434	10,453	15,118		130	260	67,600
Cardiff	138	0	0	0	1.35	0	0	0	-	-	-	-	-		127	0	-
Teesport	187	0	0	0	1.35	0	0	0	-	-	-	-	-		177	0	-
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8,752	12,688		94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032		295	1180	306,800
TOTALS PER WEEKDAY		12	1944	1080		1,458	437	1,021	71,442	166,698	5,205	161,493	232,935	T	OTAL W'DA	4038	1,049,880
				TRAINS TRAINS	12 4	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	18,574,920 1,238,328	l T		41,988,164 2,799,211	60,563,084 4,037,539	c.	ATURDAY	1346	69,992
				INAINS	4	Jaculudys	32	ivilles saveu PA	19,813,248			2,799,211 44,787,375	64,600,623	<u> 31</u>	ATURDAT	1546	69,992

31.9

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

TOTALS PER ANNUM

TOTALS PER ANNUM

64.6

104

Million Train miles

Milliom Train Kms

1.12

1.80

44.8

HINCKLEY NRFI		HGV MILE	AGE	INDICATIV	LORRY MILES	SAVED								TRAIN I	<b>MILES</b>	
ASSUMPTIONS		Road miles be 30% 70% 66%		o / from occup o / from off-sit					81 1.8 15 260	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays	ent Unit to Containe					
		34% 1.60934		ainers backtra	ck towards origin, in				52	Saturdays						
									OCCUPIERS			OFF SITE	TOTAL		RAIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MILE each way	S PER DAY	PER ANNUM
to and from																
Felixstowe	148	5	810	450	1.35	608	182	425	26,973	62,937	2,169	60,768	87,741	163	1630	423,800
London Gateway	128	3	486	270	1.35	365	109	255	13,997	32,659	1,301	31,358	45,355	130	780	202,800
Liverpool Port Cardiff	<b>128</b> 138	0	162 0	90 0	1.35 1.35	122 0	36 0	85 0	4,666	10,886	434	10,453	15,118	130 127	260 0	67,600
Teesport	187	1	162	90	1.35	122	36	85	6,816	15,904	434	15,471	22,287	177	354	92,040
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8.752	12,688	94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032	295	1180	306,800
TOTALS PER WEEKDAY		13	2106	1170		1,580	474	1,106	78,258	182,602	5,639	176,964	255,222	TOTAL W'D	4392	1,141,920
				TRAINS TRAINS	13 4	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	20,347,119 1,252,130 21,599,249			46,010,519 2,831,417 48,841,936	66,357,638 4,083,547 70,441,185	SATURDAY	1351.38462	70,272
TOTALS PER ANN	UM				LORRY MIL	ES SAVED PER	ANNUM approx	million miles	21.6			48.8	70.4	Million 1	rain miles	1.21

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LORRY MILES SAVED PER ANNUM approx million kilometres

TOTALS PER ANNUM

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113.3

Milliom Train Kms

1.95

HINCKLEY NRFI		HGV MILE	AGE	INDICATIVI	LORRY MILES	SAVED								TRAIN N	TILES	
ASSUMPTIONS		Road miles be 30% 70% 66% 34%	of offsite cont	o / from occup o / from off-sit ainers continu		(merely mode trans	sfer)		81 1.8 15 260 52	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays Saturdays	lent Unit to Containe					
		1.60934	Kilometers pe	r Mile					OCCUPIERS			OFF SITE	TOTAL	7	RAIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MILE each way	S PER DAY	PER ANNUM
to and from																
Felixstowe	148	5	810	450	1.35	608	182	425	26,973		2,169	60,768	87,741	163	1630	423,800
London Gateway	128	3 2	486 324	270	1.35 1.35	365 243	109	255	13,997	32,659 21,773	1,301 868	31,358 20,905	45,355	130	780 520	202,800
Liverpool Port Cardiff	128 138	0	324 0	180 0	1.35	0	73 0	170 0	9,331	21,773	808	20,905	30,236	130 127	0	135,200
Teesport	187	1	162	90	1.35	122	36	85	6,816	15,904	434	15,471	22,287	177	354	92,040
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8.752	12,688	94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032	295	1180	306,800
TOTALS PER WEEKDAY		14	2268	1260		1,701	510	1,191	82,924	193,489	6,073	187,416	270,340	TOTAL W'DA	4652	1,209,520
				TRAINS TRAINS	14	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	21,560,175 1,232,010	l T		48,728,207 2,784,469	70,288,382 4,016,479	SATURDAY	1329.14286	69,115
				INAINS	4	Jacurudys	32	IVIIIES SAVEU PA	22,792,185			51,512,676	74,304,861	SATURDAY	1323.14286	69,115
TOTALS PER ANN	UM				LORRY MILI	S SAVED PER	ANNUM approx	million miles	22.8			51.5	74.3	Million T	rain miles	1.28

119.6

Milliom Train Kms

2.06

82.9

TOTALS PER ANNUM

LORRY MILES SAVED PER ANNUM approx million kilometres

HINCKLEY NRFI		HGV MILE	AGE	NDICATIVE	LORRY MILES	SAVED									TRAIN MI	LES	
ASSUMPTIONS		Road miles be 30% 70% 66% 34% 1.60934	of offsite cont	o / from occupi o / from off-site ainers continue ainers backtrac	er at HNRFI customer of railpo direction of route	HNRFI - Smithy Lan ort (merely mode tran ocreasing overall jou	sfer)		81 1.8 15 260 52	Twenty-foot Equival Twenty-foot Equival miles each way aver Weekdays Saturdays	lent Unit to Containe						
									OCCUPIERS			OFF SITE	TOTAL	ſ	TRA	AIN MILES USI	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day		TRAIN MILES each way	PER DAY	PER ANNUM
to and from																	
Felixstowe	148	6	972	540	1.35	729	219	510	32,368	75,524	2,603	72,922	105,289		163	1956	508,560
London Gateway	128	3	486	270	1.35	365	109	255	13,997	32,659	1,301	31,358	45,355		130	780	202,800
Liverpool Port	128	2	324	180	1.35	243	73	170	9,331	21,773	868	20,905	30,236		130	520	135,200
Cardiff	138	0	0	0	1.35	0	0	0	=	-	-	-	-		127	0	-
Teesport	187	1	162	90	1.35	122	36	85	6,816	15,904	434	15,471	22,287		177	354	92,040
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8,752	12,688		94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032		295	1180	306,800
TOTALS PER WEEKDAY		15	2430	1350		1,823	547	1,276	88,318	206,076	6,506	199,570	287,888		TOTAL W'DA	4978	1,294,280
				TRAINS TRAINS	15 4	WEEKDAYS Saturdays	260 52	Miles Saved PA Miles Saved PA	22,962,771 1,224,681 24,187,452	J		51,888,155 2,767,368 54,655,523	74,850,926 3,992,049 78,842,975		SATURDAY	1327.46667	69,028

38.9

LORRY MILES SAVED PER ANNUM approx million miles

LORRY MILES SAVED PER ANNUM approx million kilometres

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TOTALS PER ANNUM

TOTALS PER ANNUM

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18.6.7 Appendix G - HGV Miles and Carbon Savings

78.8

126.8

Million Train miles

Milliom Train Kms

1.36

2.19

54.7

88

HINCKLEY NRFI		HGV MILE	AGE I	NDICATIVE	LORRY MILES	SAVED								TRAIN M	LES	
ASSUMPTIONS	İ	Road miles ber 30% 70% 66% 34% 1.60934	of offsite cont	o / from occupi o / from off-site ainers continue ainers backtrae		(merely mode trans	sfer)		81 1.8 15 260 52	Twenty-foot Equiva Twenty-foot Equiva miles each way aver Weekdays Saturdays	lent Unit to Contain					
									OCCUPIERS			OFF SITE	TOTAL	TR	AIN MILES US	ED
	Miles one way	No. trains	TOTAL TEU per w/day (both ways)	Container moves per w/day	ratio container moves to HGV / empty running	ALL HGV Moves per w/day	OCCUPIER HGV Moves per w/day	OFF SITE HGV Moves per w/day	OCCUPIER ROAD MILES SAVED per w/day	OFF SITE GROSS ROAD MILES SAVED per w/day	OFF SITE EXTRA CARTAGE MILES [er w/day	OFF SITE NET LORRY MILES SAVED per w/ day	ALL HGV LORRY MILES SAVED per w/day	TRAIN MILES each way	PER DAY	PER ANNUM
to and from																
Felixstowe	148	6	972	540	1.35	729	219	510	32,368		2,603	72,922	105,289	163	1956	508,560
London Gateway	128	3	486	270	1.35	365	109	255	13,997	32,659	1,301	31,358	45,355	130	780	202,800
Liverpool Port	128	2	324	180	1.35	243	73	170	9,331	21,773	868	20,905	30,236	130	520	135,200
Cardiff	138	1	162	90	1.35	122	36	85	5,030		434	11,303	16,333	127	254	66,040
Teesport	187	1	162	90	1.35	122	36	85	6,816	15,904	434	15,471	22,287	177	354	92,040
Manchester	108	1	162	90	1.35	122	36	85	3,937	9,185	434	8,752	12,688	94	188	48,880
Glasgow	300	2	324	180	1.35	243	73	170	21,870	51,030	868	50,162	72,032	295	1180	306,800
TOTALS PER WEEKDAY		16	2592	1440		1,944	583	1,361	93,348	217,813	6,940	210,873	304,221	TOTAL W'DAY	5232	1,360,320
			•	TRAINS	16	WEEKDAYS	260	Miles Saved PA	24,270,597			54,826,972	79,097,569			
				TRAINS	4	Saturdays	52	Miles Saved PA	1,213,530 25,484,127			2,741,349 57,568,321	3,954,878 83,052,448	SATURDAY	1308	68,016
TOTALS PER ANNI	UM				LORRY MIL	ES SAVED PER	ANNUM approx	k million miles	25.5			57.6	83.1	Million Tra	ain miles	1.43

41

LORRY MILES SAVED PER ANNUM approx million kilometres

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Milliom Train Kms

92.7

18.6.7 Appendix G - HGV Miles and Carbon Savings

133.7

2.30

TOTALS PER ANNUM

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