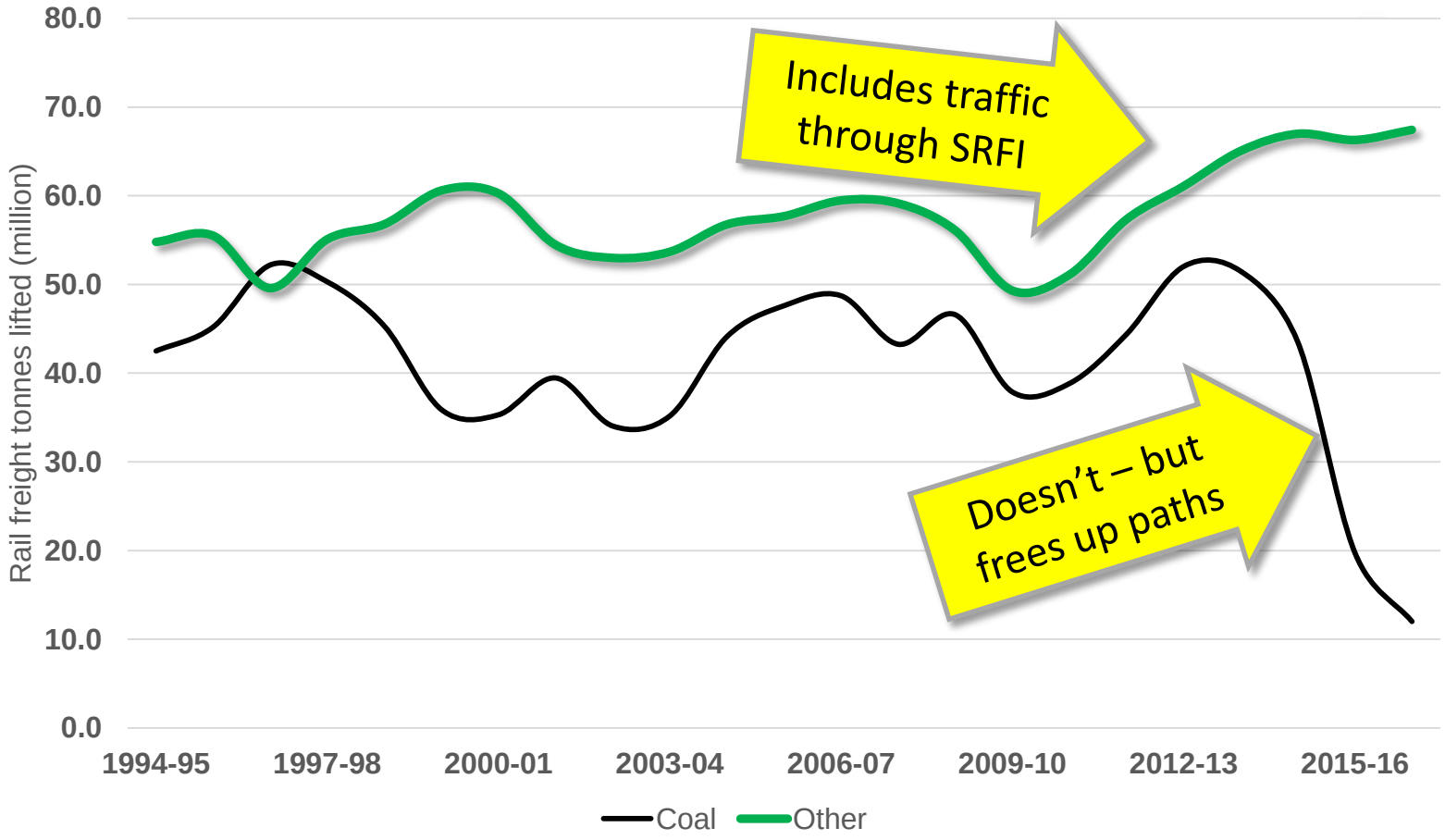

Rail Central
Northamptonshire

What we're covering today

- Rail freight growth related to SRFI developments
- Development of more SRFI - or not
- How the rail industry deals with future growth
- The Rail Central proposals
- The interface between Rail Central and the national network
- The process of developing the proposals with Network Rail

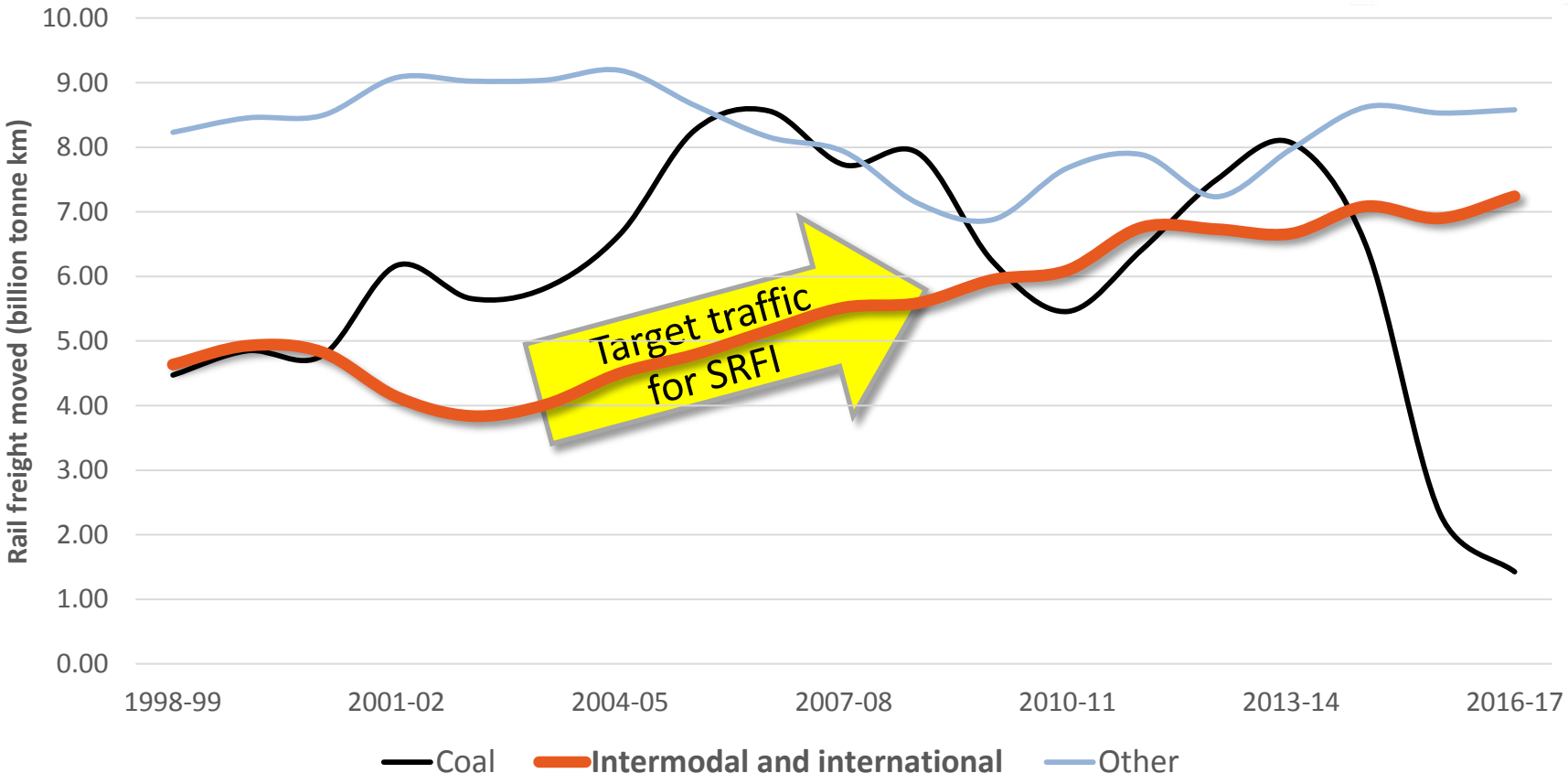
Rail freight: growth to date

- The changing market for rail: less coal, more containers



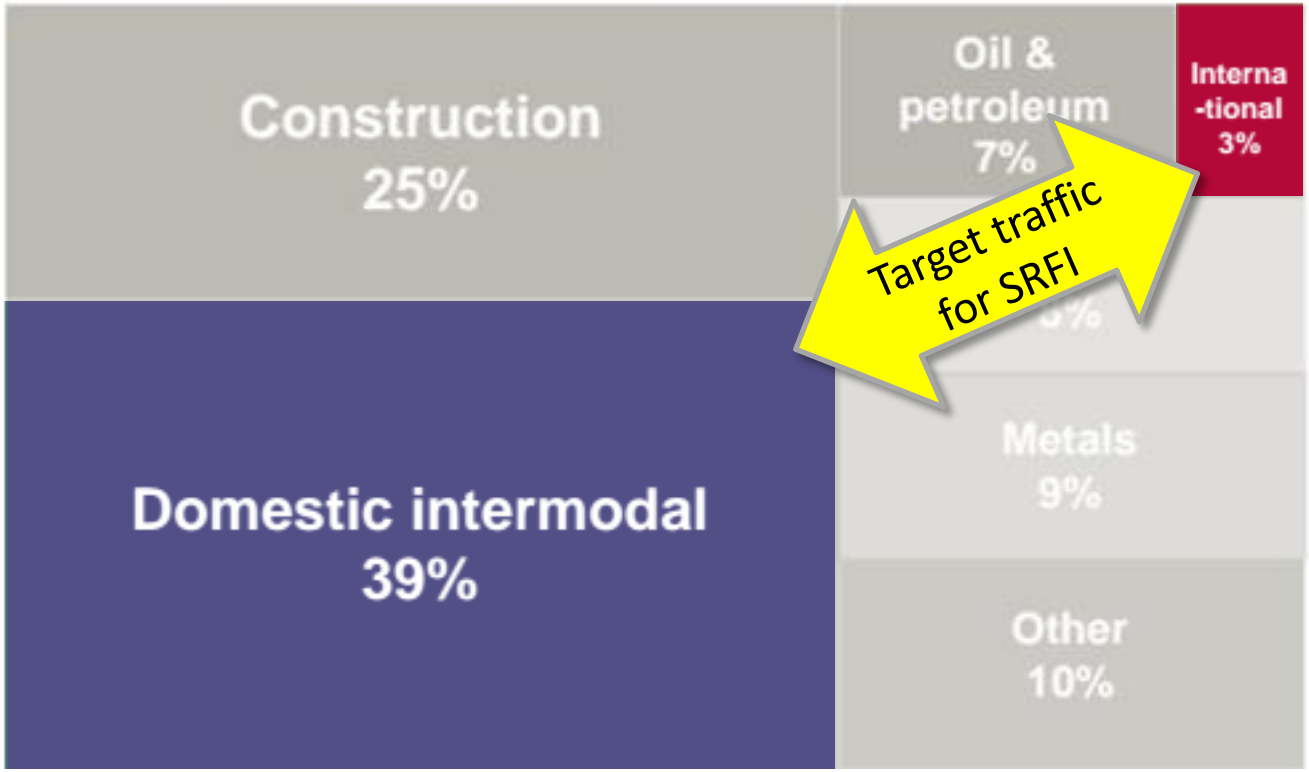
Rail freight: growth to date

- The market for SRFI: intermodal / international rail traffic



Rail freight: growth to date

- The changing market for rail: market structure, 2016/7



Domestic intermodal recorded the biggest share of freight moved in 2016-17 (39%), is the highest for this commodity since the start of the time series in 1998-99 and the largest for any commodity after 2006-07. International had the lowest share (3%) in 2016-17.

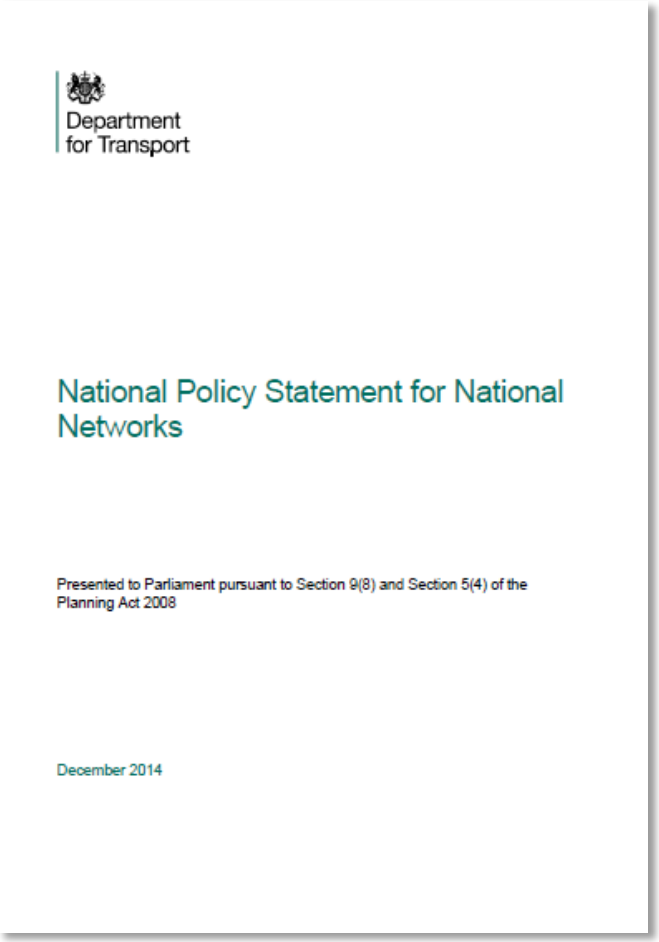
Rail freight: growth to date

- A key factor in domestic intermodal growth: a few SRFI

SRFI		Rail freight services per day each way
DIRFT	Northamptonshire	9
Hams Hall	Warwickshire	4
Birch Coppice	Warwickshire	3
3MG	Merseyside	6
Wakefield	Yorkshire	3
Mossend	Lanarkshire	3

Why do we need *more* SRFI?

- Can't we just keep everything on the roads as we do now?
  - Even with significant future improvements and enhancements to the Strategic Road Network, the forecast growth in freight demand would lead to increasing congestion both on the road network and at our ports, together with a continued increase in transport carbon emissions
  - Modal shift to rail therefore needs to be encouraged. This will require sustained investment in the capability of the national rail network and the terminals and interchange facilities which serve it


Department for Transport

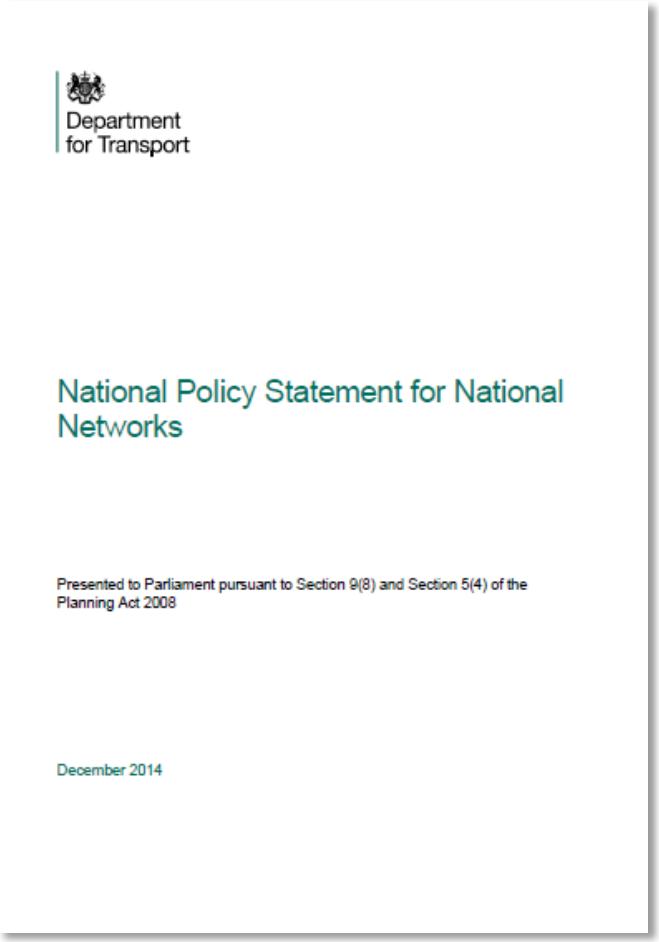
National Policy Statement for National Networks

Presented to Parliament pursuant to Section 9(8) and Section 5(4) of the Planning Act 2008

December 2014

Why do we need *more* SRFI?

- Can't we just use the existing ones?
  - Perpetuating the status quo, by design or default, is simply not a viable option
  - Road congestion would continue to increase and the deep-sea ports would face increasing difficulties in ensuring the efficient inland movement of the forecast growth in the volume of sea freight trade, causing port congestion and unacceptable costs and delays for shippers
  - This would constitute a constraint on economic growth, private sector investment and job creation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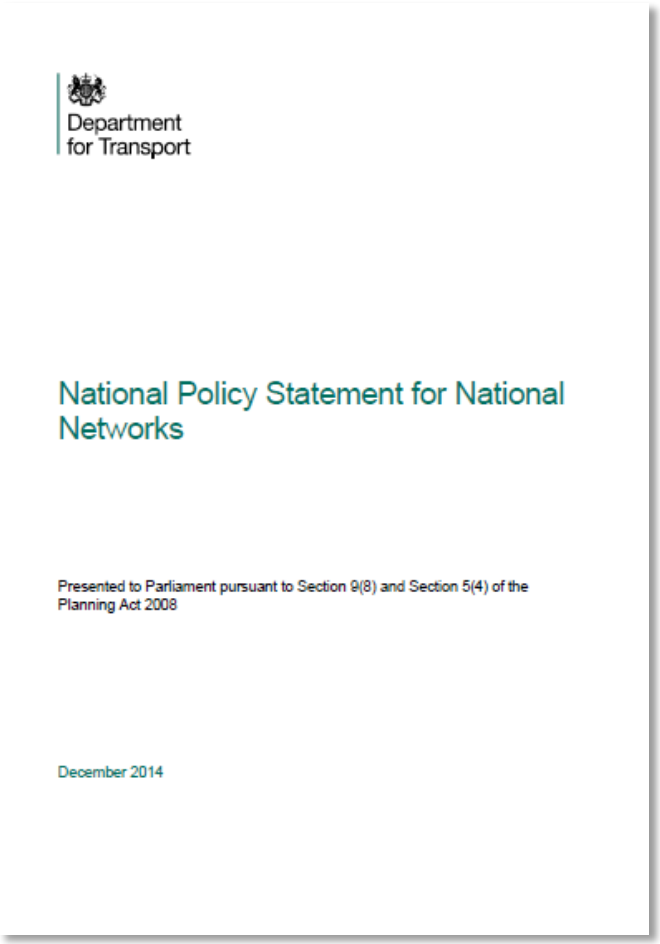
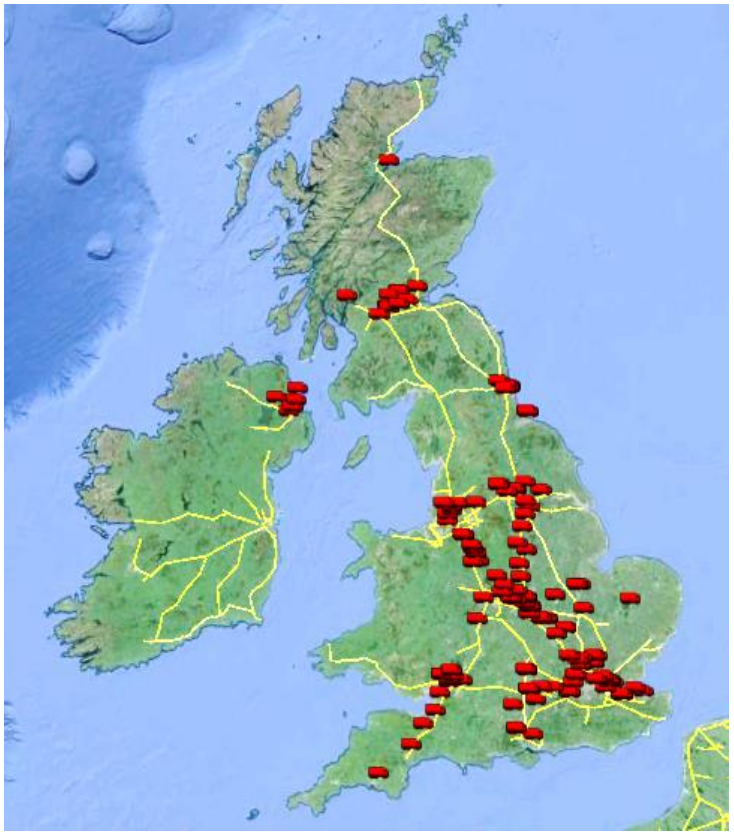
Why do we need *more* SRFI?

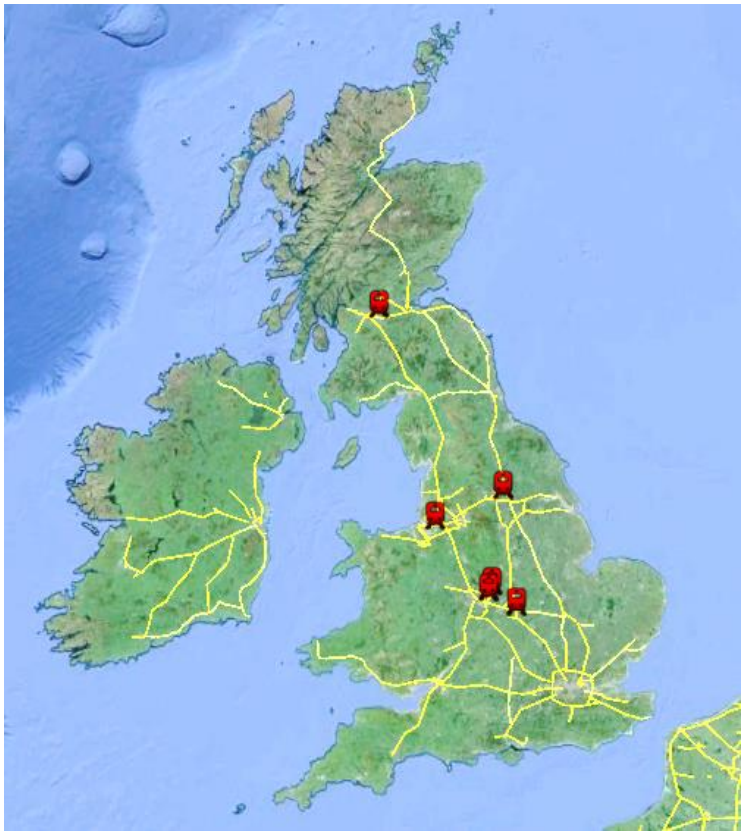
- Can't we just use lots of smaller rail freight terminals instead?
  - The increasing performance and efficiency required of our logistics system would not allow reliance on an expanded network of smaller terminals
  - While there is a place for local terminals, these cannot provide the scale economies, operating efficiencies and benefits of the related business facilities and linkages offered by SRFIs



Why do we need *more* SRFI?

- There are plenty of road-served distribution centres (left), but only 6 operational SRFI (right) – 6 does not make a network!





Catering for future growth

- Over the next 30 years:
  - Bigger population (more consumers)
  - Greater economic activity (eg manufacturing, trade, shopping)
  - More demand for goods and the logistics to move it
  - More consumers demanding next-day and same-day delivery
  - More warehousing space needed to hold more goods
  - But finite capacity of transport network to move it around
  - So choice between:
    - Do not expand capacity and hope it all works somehow
    - Plan for growth, making best use of existing and new capacity
  - Approach by Government and business – plan for growth, and make best use of all available modes of transport

Catering for future growth

- West Coast Main Line 10 years ago would not have coped with today's level of traffic
- West Coast Main Line will need to cope with more traffic in future – nearly twice as much freight by 2043 (mainly from SRFI)
- Network Rail's long term planning approach therefore:
  - Forecast growth out to 2043
  - Make best use of existing capacity in the meantime
    - Make trains longer (12-car passenger, 775m long freight)
    - Free up unused capacity (nearly 5000 paths per week)
  - Continue to expand overall network capacity
    - New routes (eg Crossrail, HS2, HS3)
    - Enhance existing network

Catering for future growth

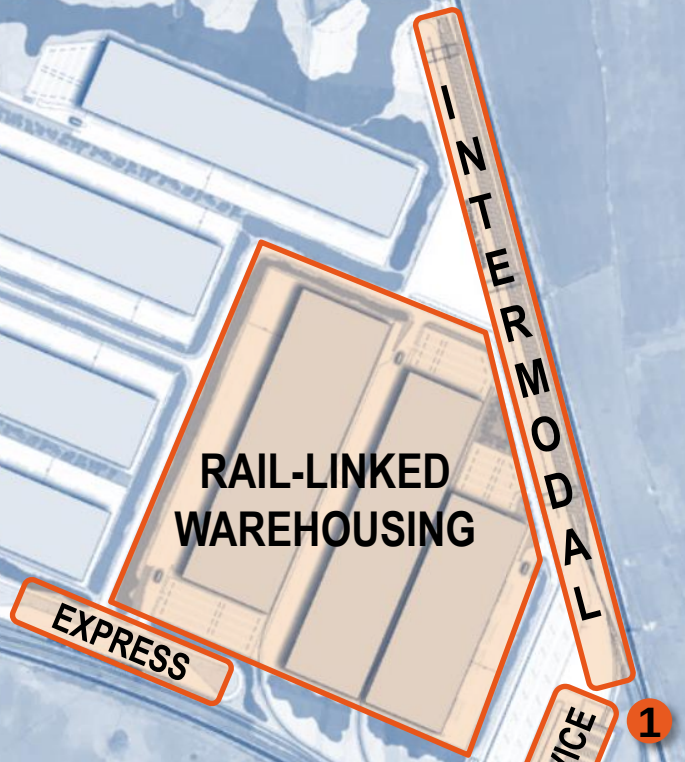
- Example: the Port of Felixstowe current processes more than 30 intermodal trains per day each way
- The port has expanded its interchange capacity, which now exceeds that of the Felixstowe branch line into which it connects
- Network Rail plans to expand the capacity on the branch line, to enable it to carry twice as many trains as at present
- The port therefore is future-proofing the on-site infrastructure, to expand in line with the rest of the rail network
- In turn, the capacity of the current small network of SRFI will also need to expand in order to receive this traffic
- Ports, SRFI and Network Rail are therefore working together on a long-term plan to expand capacity beyond current levels


J15A
The proposals
M1
A43
West Coast Main Line
(Northampton Loop)
West Coast Main Line
(Fast Lines)

The proposals

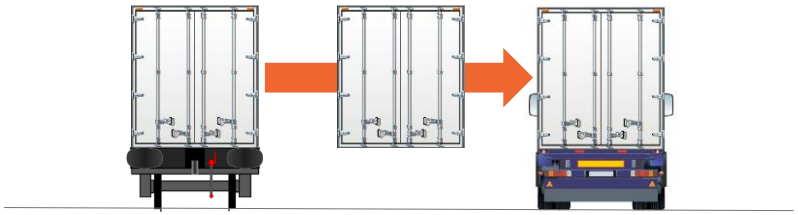
- A strategic location on the core road and rail transport networks, with sufficient critical mass of warehousing
- A national distribution hub, linking deepsea ports and landbridge services to mainland Europe and China with the rest of Britain
- Four points of access interconnecting all 4 tracks of the main line, with electrification and enough headroom for tall containers
- Access to both routes on the main line offers the best match for each type of service, and contingency during engineering works
- A complete suite of rail freight interchange facilities (intermodal, conventional *and* express)
- Capable of handling *and* maintaining freight trains, reducing the need for empty train movements on the main line
- Track layout alongside main line allows trains to serve the site en route to/from other SRFI, increasing opportunities for joint working

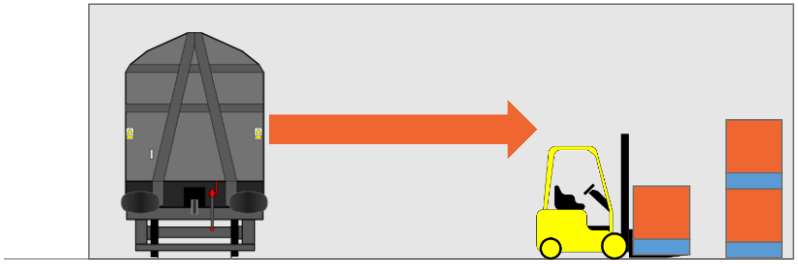
The proposals

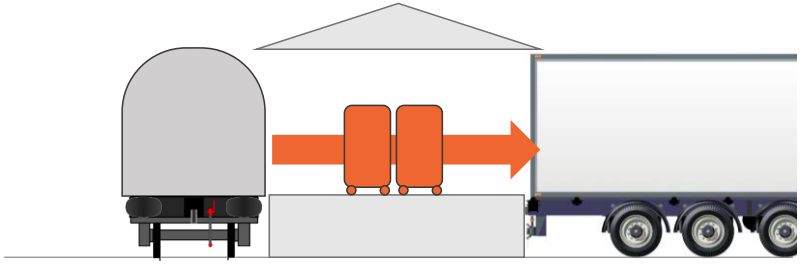


The proposals

- 3 main types of rail freight through the site:







  - **Intermodal trains**

    Intermodal trains would deliver containers to site, transferred to road vehicles for movement to warehouses on site, or to other companies off site

  - **Conventional wagon trains**

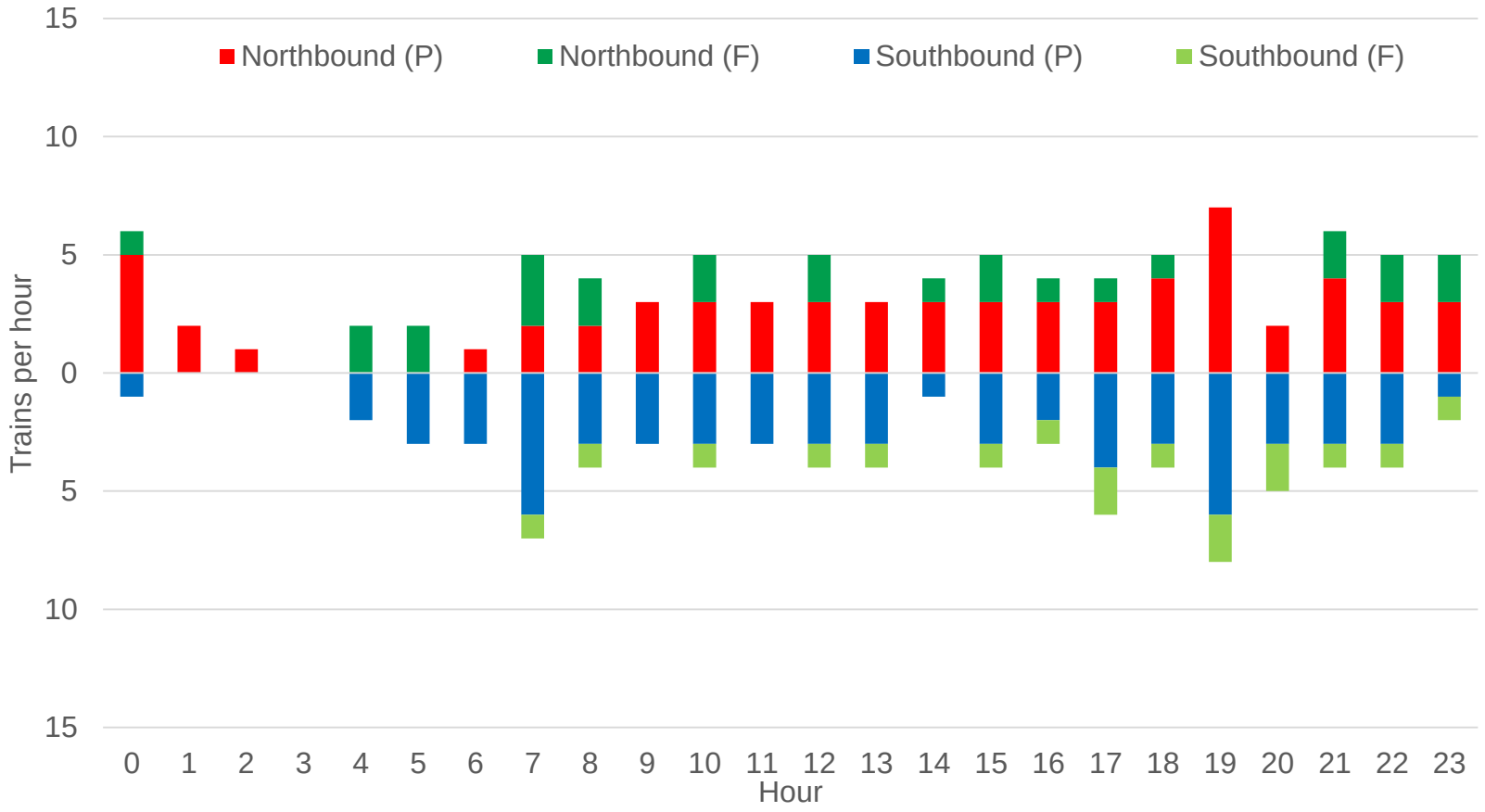
    Conventional wagon trains would be taken into or alongside some of the warehouses, for freight to be unloaded by fork lift truck

  - **Express freight trains**

    Express trains would use a “cross-dock” platform to unload pallets or roll cages into road vehicles, for movement to warehouses on site, or to other companies off site

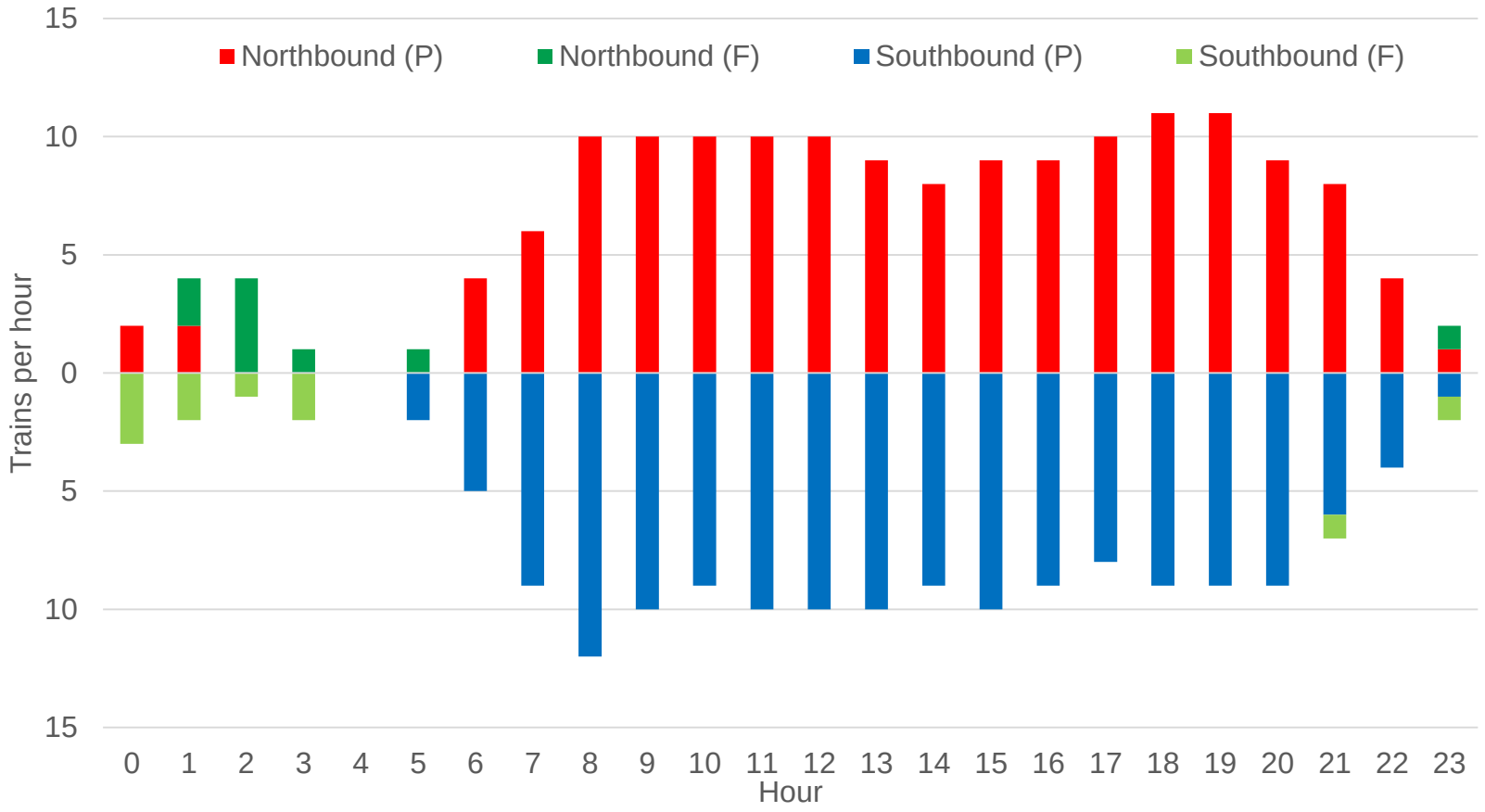
Rail traffic and network capacity

- Current traffic on the main line (Northampton Loop); the focus would be on off-peak “white space” to support start-up services



Rail traffic and network capacity

- Current traffic (Fast Lines), the focus again being on use of off-peak white space, in this case mainly for express services



Rail traffic and network capacity

- Current freight trains passing the site:
  - Intermodal
    - Coatbridge <> Felixstowe
    - Coatbridge <> London Gateway
    - Garston <> Felixstowe
    - Garston <> London Gateway
    - 3MG <> Felixstowe
    - Trafford Park <> Felixstowe
    - Trafford Park <> London Gateway
    - Crewe <> Felixstowe
    - Burton <> Felixstowe
    - Birch Coppice <> Felixstowe
    - Birmingham <> Felixstowe
    - Hams Hall <> Felixstowe
    - DIRFT <> Southampton
    - DIRFT <> Purfleet
  - Conventional
    - Nievenheim (D) <> 3MG
    - Evian (F) <> DIRFT
    - Dagenham <> Garston
    - Dagenham <> Mossend
  - Express
    - London <> Warrington
    - London <> Glasgow
  - Bulk
    - Midlands <> London (stone)
    - Engineering trains

Rail traffic and network capacity

- Main causes of delays to passenger services on WCML:

  - London Midland services (2015-16):
    - 56% Network Rail
    - 28% London Midland
    - 16% Other train operators (including freight)

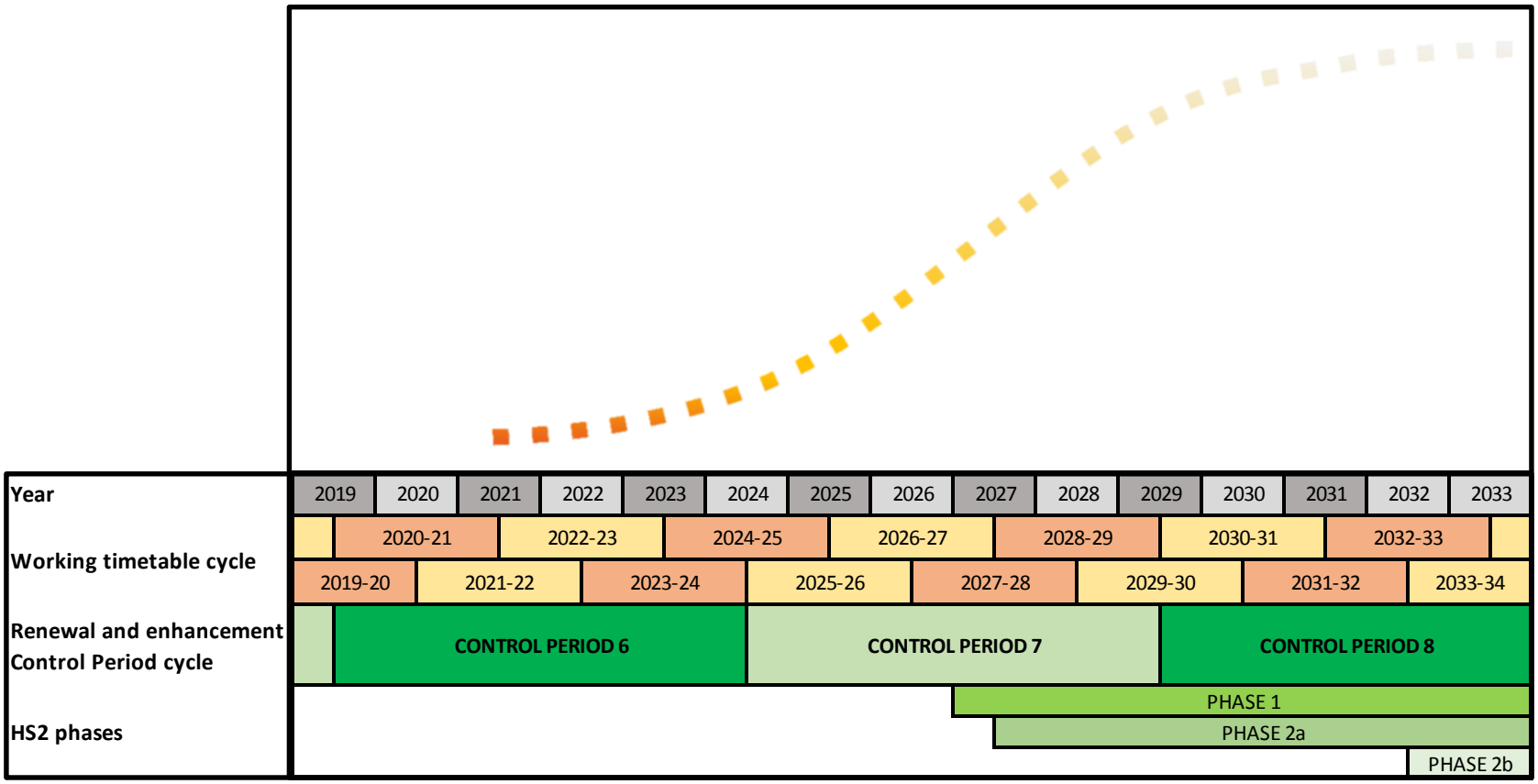
  - Virgin Trains services (2015-16):
    - 71% Network Rail
    - 14% Virgin Trains
    - 15% Other train operators (including freight)

Rail traffic and network capacity

- The proposal is estimated to generate enough rail freight to fill 26 intermodal trains per day (ie 13 in and 13 out) at maturity
- In practice, the freight would be spread across a mixture of intermodal, conventional and express freight services
- Trains to/from Rail Central could comprise:
  - New services exclusively to or from Rail Central
  - New or existing services serving Rail Central and other SRFI en route (eg DIRFT, Hams Hall, Birch Coppice)
  - Services transferred from other RFI
- Existing SRFI have grown over 20 years from an initial small number of pilot services – we would expect the same here

Rail traffic and network capacity

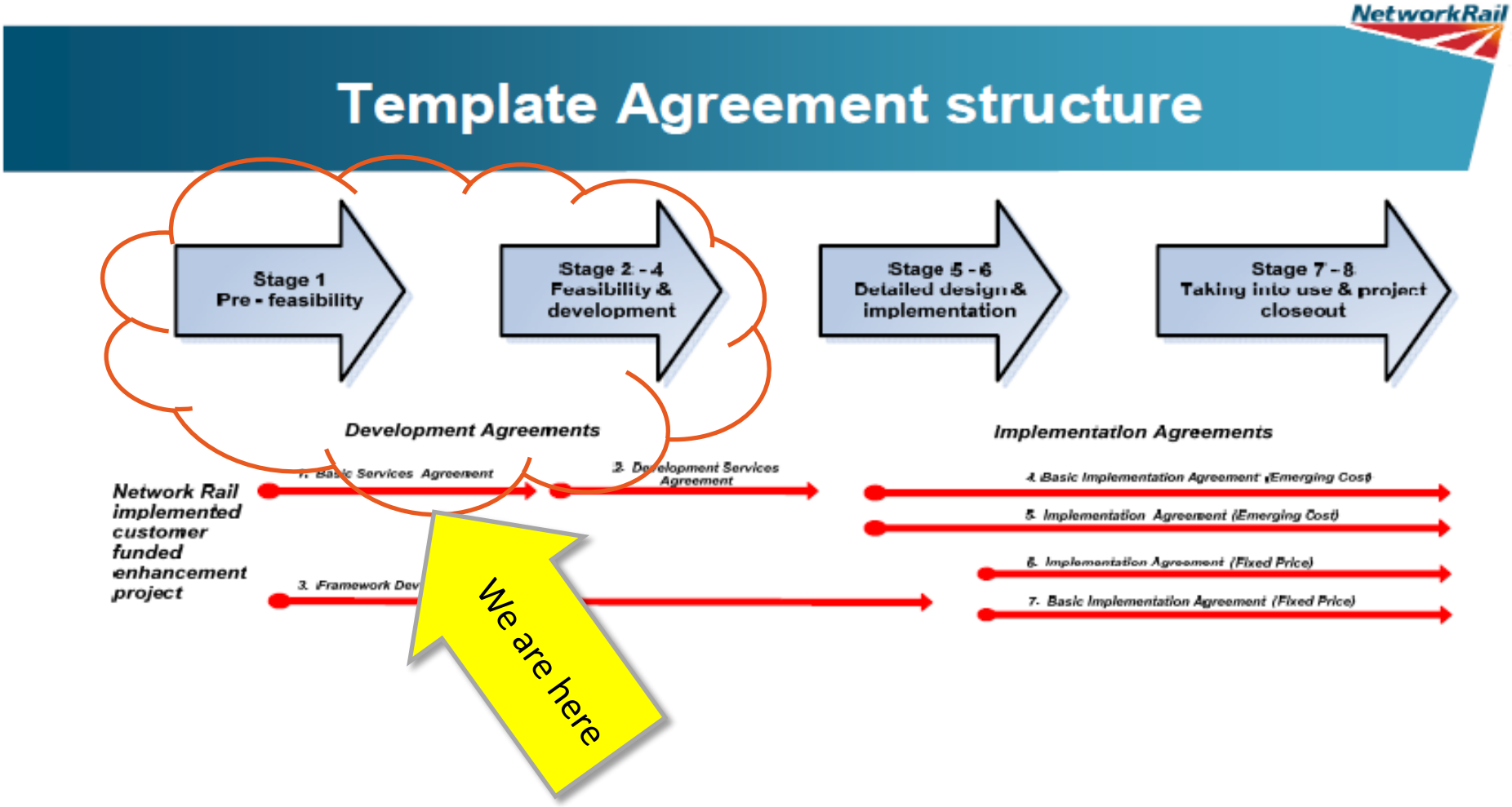
- Rail traffic through Rail Central would grow in line with customer demand, network capacity and timetable planning



Rail Central & Network Rail

- Network Rail is ultimately responsible for the rail network
- It can decide whether or not to engage with third-parties
- Any new third-party proposal is scrutinised by internal Network Rail stakeholders, before deciding whether to engage
- The Rail Central proposals have been through this process
- Network Rail has engaged, helping shape the initial proposals and considering the wider network benefits of the scheme
- The process has followed Network Rail's in-house development framework known as GRIP (Governance for Railway Investment Projects)
- Work continues to refine the proposals, and determine an indicative programme for connecting to the main lines

Rail Central & Network Rail



What we've covered today

- Rail freight traffic from SRFI has grown in recent years, in absolute terms and as a share of the total rail freight market
- Every SRFI built and operated to date has attracted occupiers and rail freight, switching longer-distance freight from road
- Since privatisation, the railway has planned for, and catered for, significant growth in traffic, current plans stretching to 2043/4
- The Rail Central proposals will expand the small number of SRFI, expanding capacity and networking opportunities
- New rail services from site will follow the same incremental path as existing SRFI, making best use of available capacity
- Network Rail continues to engage, helping to refine the proposals in line with its own established development process


Rail Central
Northamptonshire