Periodic Review 2023 (PR23)

Draft Determination

19 July 2023

Agenda

- Periodic review – introduction – 12:00 (10mins)

- Key messages from ORR's draft determination

  ① CP7 outcomes and Q & A – 12:10 (15mins)

  ② Asset sustainability and Q & A – 12:25 (15mins)

  ③ Health and Safety and Q & A – 12:40 (15mins)

  ④ Efficiency and Risk and Q & A – 12:55 (15mins)

  ⑤ Charges and Incentives and Q & A – 13:10 (15mins)

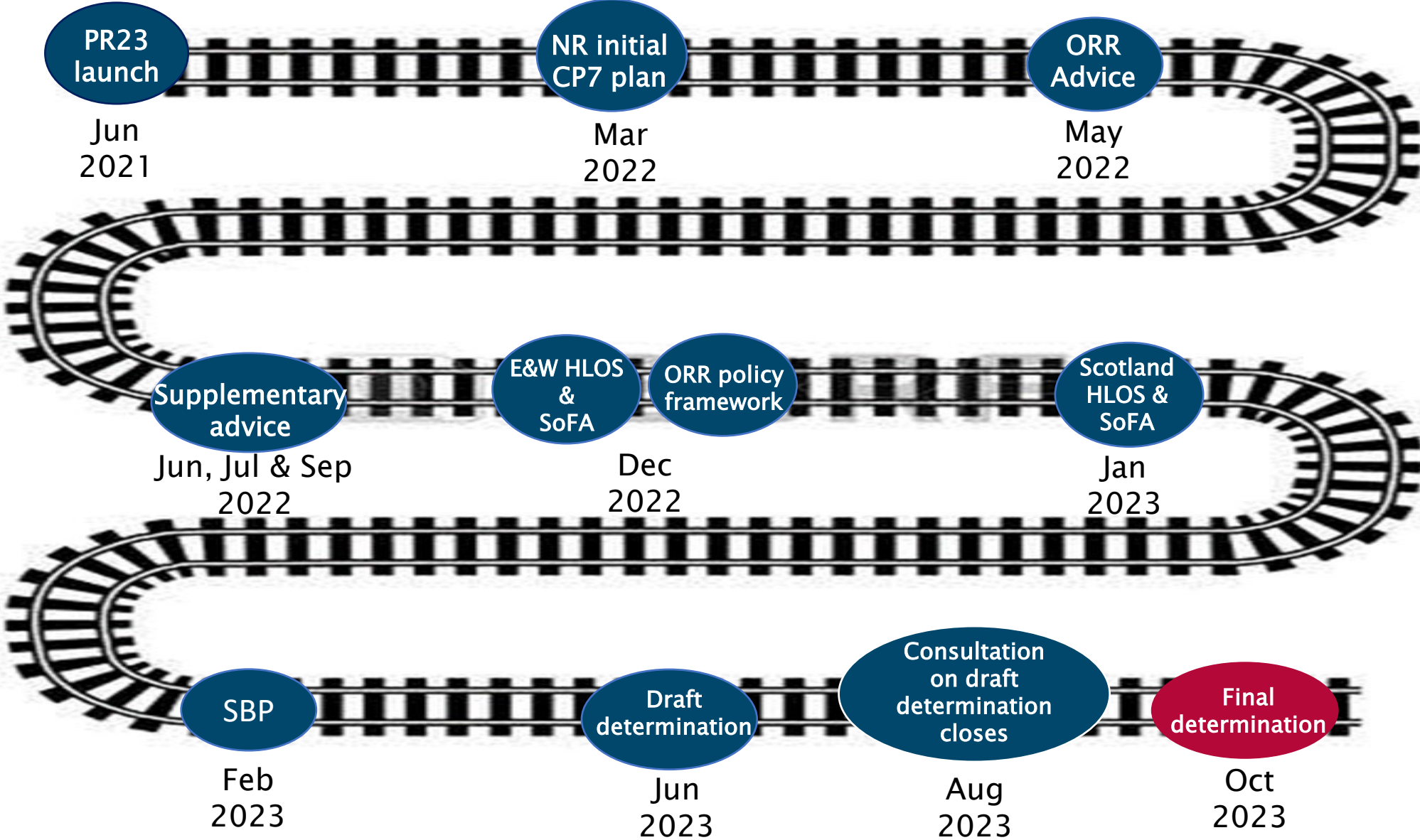- Next steps – 13:25 (5mins)

- Close – 13:30

Periodic review, PR23

1. Establishes the level of funding for the GB rail network for a five-year control period

2. Sets how ORR will hold Network Rail to account during a control period

3. Determines the framework for access charges and the contractual performance and possessions regimes

- **ORR leads** the periodic review process, which is one of the principal mechanisms by which we hold Network Rail to account and secure value for money for users and funders of the railway.

- Funders (**UK and Scottish Governments) play a key role** setting out what funding they make available and what they want Network Rail to deliver in return

- **Network Rail is responsible for delivering on its business plan** to satisfy the output requirements within the agreed funding

PR23 launch
Jun 2021

NR initial CP7 plan
Mar 2022

ORR Advice
May 2022

Supplementary advice
Jun, Jul & Sep 2022

E&W HLOS & SoFA

ORR policy framework
Dec 2022

Scotland HLOS & SoFA
Jan 2023

SBP
Feb 2023

Draft determination
Jun 2023

Consultation on draft determination closes
Aug 2023

Final determination
Oct 2023

ORR's draft and final determinations

- Network Rail plans to spend £44.8 billion to operate, maintain and renew the GB rail network in CP7

- Planned expenditure on the railway for England & Wales is £40 billion (an increase of £1.8 billion, or 5% compared to CP6)

- Planned expenditure for Scotland is £4.8 billion (an increase of £0.2bn, or 4%)

June 2023

- Consultation runs until 31 August
- We expect Network Rail to consider our proposals for how the available funding is used and the outcomes that should be delivered

Draft determination

October 2023

- Establishes Network Rail's commitments for CP7
- These will be reflected in Network Rail's CP7 delivery plan
- ORR will monitor delivery against these commitments and hold Network Rail to account

Final determination

PR23 key messages

PR23 objectives

- Safety
- Asset sustainability
- Performance
- Efficiency

ORR recognises Network Rail's plans were produced to challenging timescales and continue to evolve.

In the draft determination, ORR requires

- More ambition to deliver better train performance for passengers and freight

- Greater focus on renewing core assets – key drivers of safety and reliability

- Delivery of stretching but achievable efficiencies, building on CP6

- Better resilience to address uncertainties through increased provision for risk

CP7 outcomes with a focus on train performance
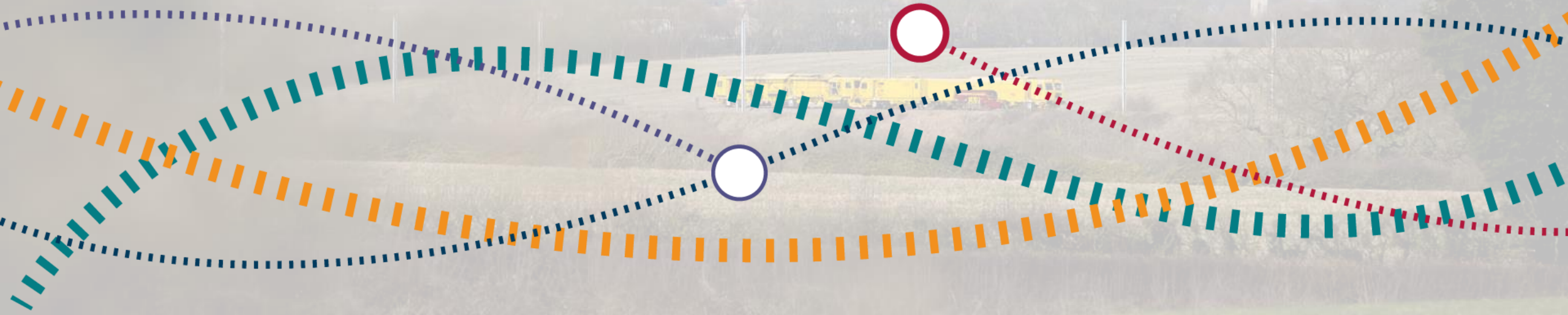
Outcomes framework

- Clarity of required CP7 outcome areas

- Success measures with firm baseline trajectories for relevant outcome areas

- Supporting measures and monitoring approaches to support each outcome area

- Success measure baseline trajectories set to be ambitious but realistic

Outcome area	Success measures
Train performance: passenger	On Time
	Cancellations
	Scotland train performance measure (Scotland only)
Train performance: freight	Freight Cancellations
Asset sustainability	Composite Sustainability Index (CSI)
Efficiency and financial performance	Financial Performance Measure (FPM) (opex/capex split)
	Efficiency (£)
Environmental sustainability	Carbon emissions scope 1 and 2
	Biodiversity Units
Freight growth	Freight net tonne kilometres moved

Train performance

ORR will introduce specific targets that are more challenging than proposed in Network Rail's plans

England & Wales	Current performance P1, 2023–2024 MAA	Network Rail CP7 Year 5	ORR CP7 Year 5
On Time	66.9%	65.2% to 67.5%	67.9%
Passenger Cancellations	3.9%	3.0% to 4.1%	2.3%
Freight Cancellations	7.9%	1.4% to 2.6%	1.2%

Scotland	Current performance P1, 2023–2024 MAA	Network Rail CP7 Year 5	ORR CP7 Year 5
Scotland performance measure	89.1%	92.5%	92.5%
On Time	69.0%	68.0%	72.6%
Passenger Cancellations	2.9%	3.0%	2.3%
Freight Cancellations	6.0%	2.0%	1.3%

Delivering these targets will require Network Rail to work with industry to run more trains on time, with fewer cancellations

ORR will hold Network Rail Scotland to account for Scottish Ministers' target of 92.5% for the Scotland train performance measure

Regulatory trajectories include greater ambition for freight , with 7.5% more freight moved in England & Wales, and 8.7% more in Scotland

Performance improvement funds

ORR proposes that Network Rail reserves dedicated funding to further support train performance

In England & Wales

- We propose £40 million for a train performance improvement and innovation fund (PIIF)

- This is intended to kick-start collaborative, cross-industry solutions

- We propose it is funded from adjustments to Network Rail's financial assumptions

In Scotland

- We propose a targeted performance fund to support Network Rail Scotland in making its contribution towards the Scottish Ministers' performance target

- Based on Network Rail Scotland's interim plan, up to £100 million could be available, but we anticipate this amount will change as Network Rail Scotland evolves its plans and as assumptions on available funding change

Environmental sustainability

- There is a step up in governments' expectations to contribute to legislative requirements

- The expenditure must be linked to clear commitments

England & Wales	Network Rail CP7 Year 5	ORR baseline trajectory CP7 Year 5
Carbon emissions scope 1 & 2	−18.4pp	−20.3pp
Biodiversity Units	3.9pp	4.2pp

Scotland	Network Rail CP7 Year 5	ORR baseline trajectory CP7 Year 5
Carbon emissions scope 1 & 2	−46.2%*	−21.2pp
Biodiversity Units	2.5pp	4.0pp

- We are requiring scope 1 and 2 emissions to reduce by at least 20 pp across all regions from CP6 exit to CP7 exit

- We are requiring at least 4 pp improvement in biodiversity units across all regions from CP6 exit to CP7 exit

* The Network Rail forecast (year 5 CP7) for Scotland was provided on a different basis to forecasts for in England & Wales

Q & A
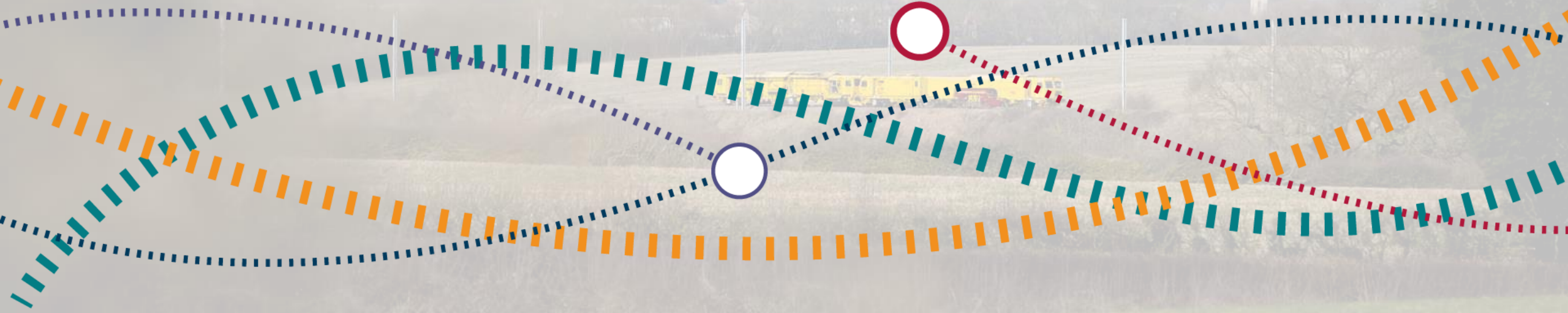
Asset sustainability

Greater focus on core renewals

Our review of the Network Rail's plans has identified areas where further spend on core renewals is required

| £millions	Track	Structures	Tunnels	Earthworks	Operational Property	Fire safety in tunnels	Address higher priority assets	Total
Southern	50	50		80	50			230
Eastern				30				30
Wales & Western	50	100		100				250
General England & Wales						20	20	40
Total E&W								550
Scotland		50						50
TOTAL	100	200		210	50	20	20	600

Core renewals

In England & Wales, we have identified options totalling c. £800m to address the £550m additional spend on core renewals. It is for Network Rail to decide how it prioritises its funding.

In Scotland, the additional £50m could be funded from the £221 million gap between Network Rail Scotland's interim plan and the funding made available by the Scottish Government

Options to release funding for core renewals

Expenditure item [total expenditure]	Potential reduction in expenditure	
	E&W	Scotland
West Coast Main Line (North) [£1.2 billion]	£0.3 billion	N/A
Digital signalling portfolio [£1.7 billion]	£0.26 billion	<£0.01 billion
High output plant [£0.04 billion]	£0.03 billion	<£0.01 billion
Route Services projects [£4.2 billion]	£0.09 billion	£0.01 billion
Project Reach [£0.14 billion]	£0.14 billion	N/A
Total	circa £0.8 billion	circa £0.02 billion

Q & A
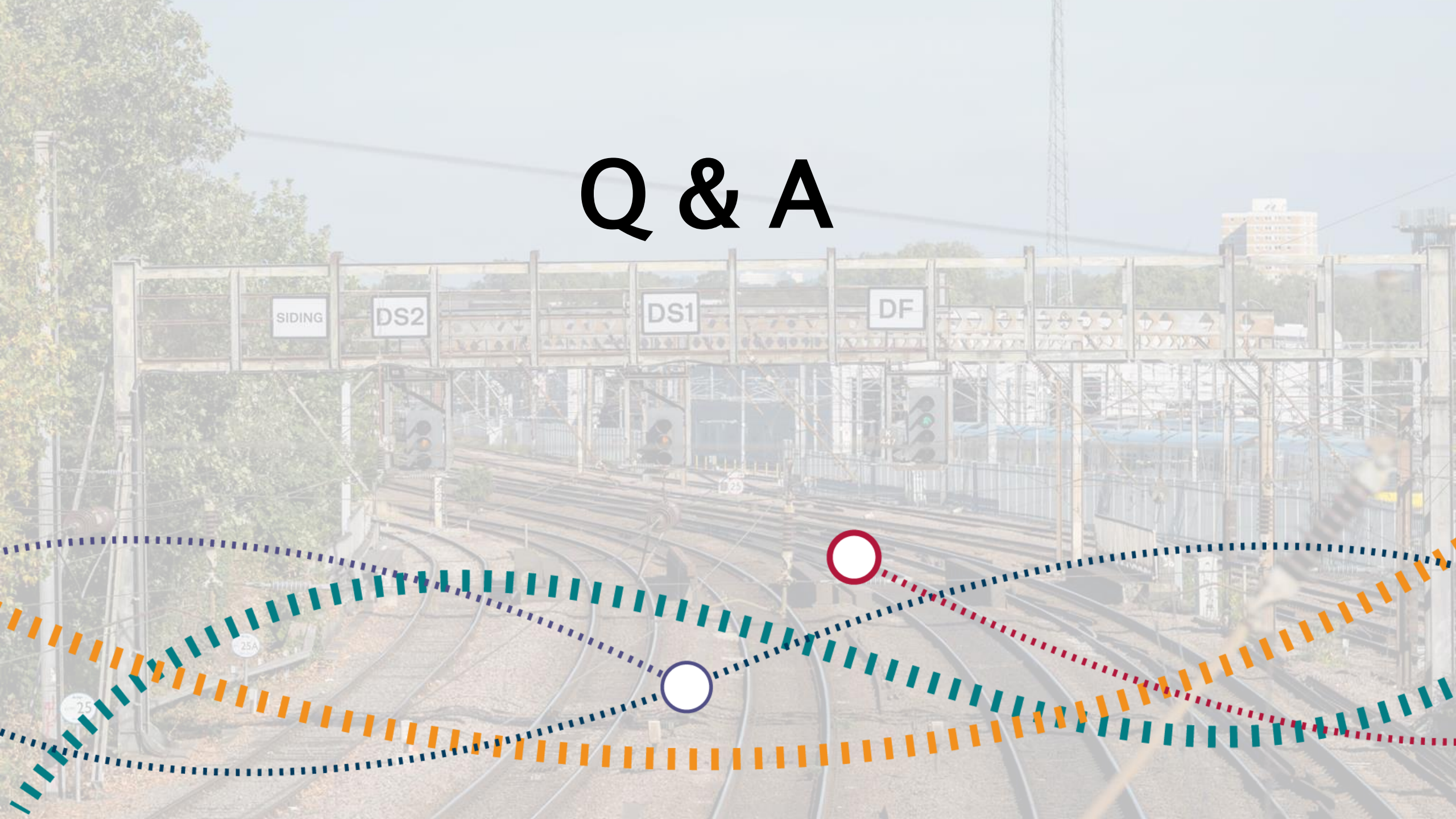
Health and Safety

Safety related to asset management, reduced renewals, increased maintenance

Asset management

Reduced renewals

Increased maintenance demand

Modernising maintenance

Operational Controls

NR proposes to conduct fewer renewals and more maintenance during CP7 in comparison to CP6.

We expect NR to demonstrate:

- its understanding of, and how it will manage the change, in risk profile which results from conducting fewer renewals and taking a more maintenance-based approach to management and operation of its infrastructure.

- maintenance volumes aligned to renewal plans

- maintenance capability to deliver increased maintenance volumes.

- how operational controls will be applied to ensure safety.

Drainage & earthworks

Prioritisation of Assets which are particularly vulnerable to the effects of climate change.

Assurance that the maintenance resource required for drainage management is fully available under the modernised maintenance arrangements.

Commitment to delivery of

Mair/Slingo recommendations

Additional evidence required to demonstrate:

- effective management of risks from the reduced levels of earthworks renewals

- delivery of the Mair report action plans with respect to drainage management; and

- provision of maintenance resource.

Modernising Maintenance

Approach of fewer renewals and more maintenance is reliant on implementing maintenance modernisation programme

ORR supportive
of modernising maintenance but
requires effective implementation.

ORR seeks assurance of ability to embed
and deliver the additional work required

- Tight timescales

- Competence requirements

- Embedding to achieve efficiency gains

- Mair Slingo recommendations

- Deferred renewals

- Maintenance backlog

Wider health and safety requirements

- **Fatigue management**: more detail to identify how Network Rail might accommodate potential changes to roster patterns and other fatigue controls.

- **Occupational health**: more detail on planned improvements to risk controls or allocation of funding to deliver the SBP commitments on work related ill-health.

- **Electrical safety programme** – importance of delivering the programme

- **Off-track boundaries** – delivery of effective boundaries

- **Signalling** – scope and development plans for OTTO

- **Level Crossings** – more detail of NR plans

Q & A

Efficiency and Risk
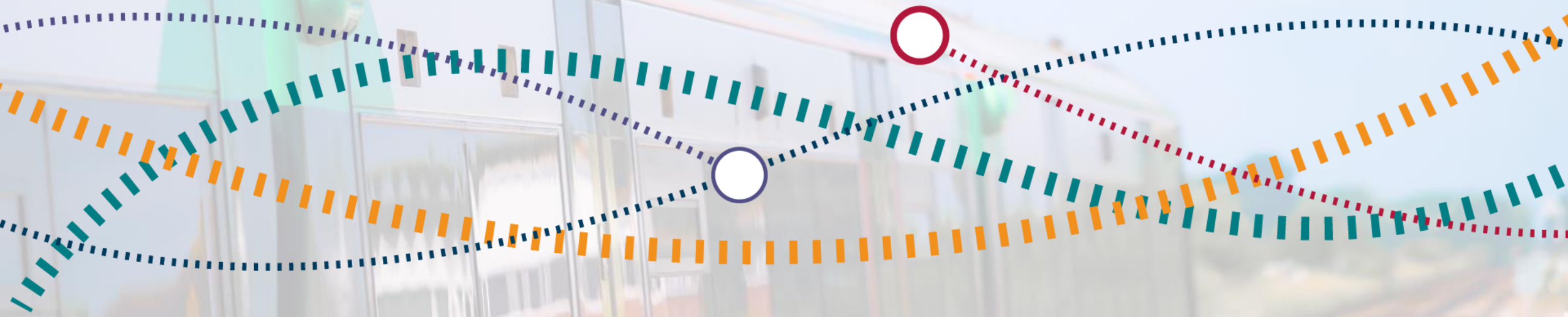
Efficiency (1)

- Network Rail is on course to deliver £4.0 billion of efficiencies in CP6, which is higher than the £3.5bn target in our PR18 determination.

- In our draft determination we have set Network Rail in England & Wales the target of delivering at least £3.2 billion of efficiencies in CP7.

- In Scotland the target is £429 million, £380 million of which will be delivered by Network Rail Scotland and £49 million by the National Functions.

- Overall this is a 15% efficiency for renewals and a 10% efficiency for operations, maintenance and support activities (opex) by 2028–29, the last year of CP7. This is for both E&W and Scotland

It is vital that Network Rail continues to build on the success of recent efficiency initiatives

ORR has found Network Rail's efficiency targets for the next five years to be stretching but achievable

Efficiency (2)

- Network Rail is pursuing a variety of efficiency initiatives over CP7. These include:

  - ■ 1 – **Industry Reform (27%)** – Network Rail working with industry partners to maximise the efficiency of the industry overall including workforce management

  - ■ 2 – **Various local initiatives (24%)** – Including Integrated Delivery

  - ■ 3 – **Other (21%)**

  - ■ 4 – **National Programmes (18%)** – Including Project Reach

  - ■ 5 – **Project Speed (10%)** – Swift, Pragmatic and Efficient Enhancement Delivery
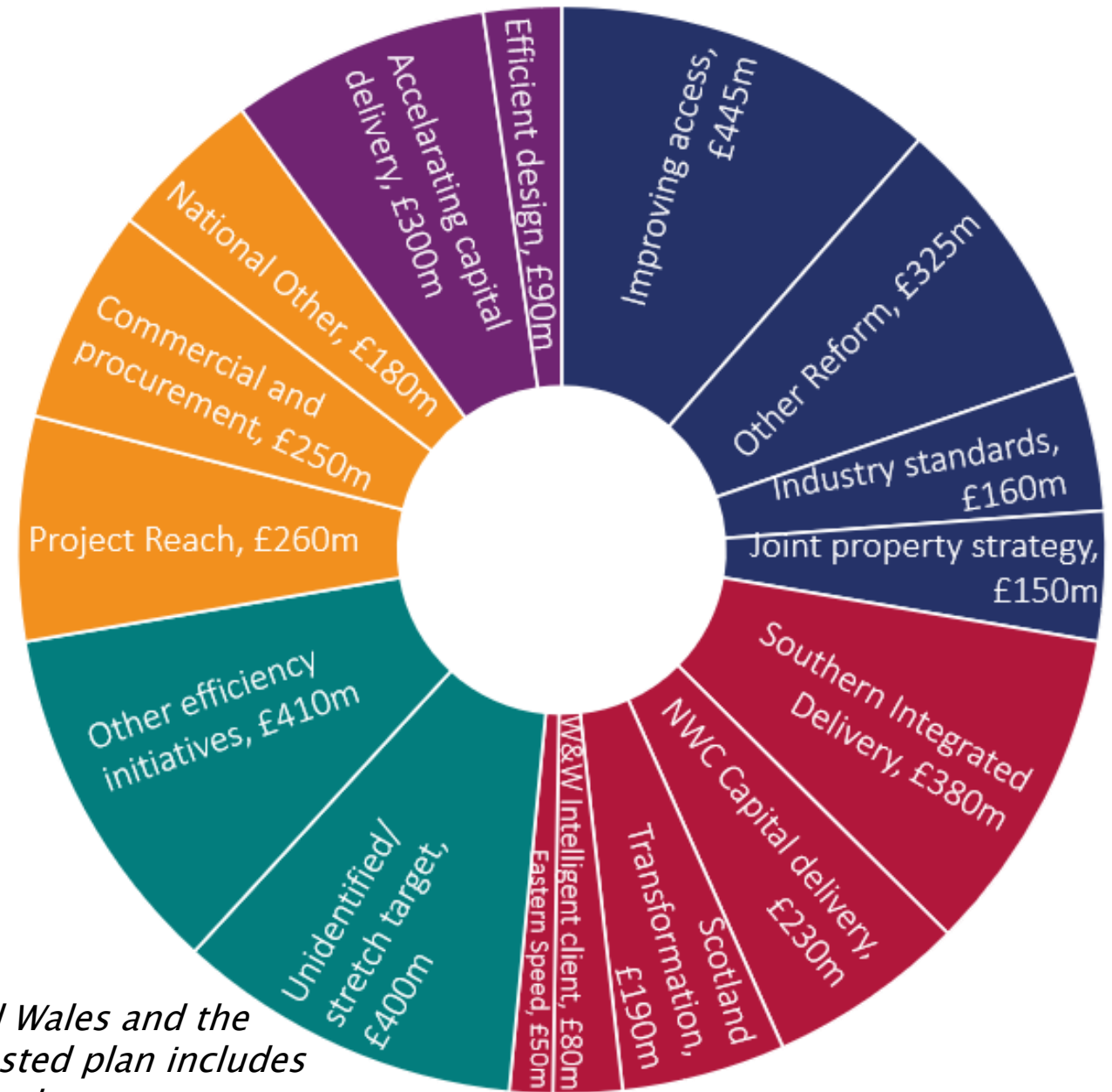
£m in 2023–24 prices and reflect the full plan for England and Wales and the Scotland plan (total: £3.9bn of efficiencies). The E&W risk adjusted plan includes £3.2bn of efficiencies. Scotland is aiming for £0.4bn of efficiencies.

Pie chart segments:
- Improving access, £445m
- Other Reform, £325m
- Industry standards, £160m
- Joint property strategy, £150m
- Southern Integrated Delivery, £380m
- NWC Capital delivery, £230m
- Scotland Transformation, £190m
- W&W Intelligent client, £80m
- Eastern Speed, £50m
- Unidentified/stretch target, £400m
- Other efficiency initiatives, £410m
- Project Reach, £260m
- Commercial and procurement, £250m
- National Other, £180m
- Accelerating capital delivery, £300m
- Efficient design, £90m

Efficiency (3)

- Around £400m (10%) of efficiencies in the CP7 plan are due to come from unidentified initiatives

- Project Reach – working with NR on the scale / scope of efficiencies from Project Reach for CP7 which is bringing forward renewals from later periods

- Integrated delivery – four supply-chain partners, along with Network Rail's Works Delivery team, will form an integrated, performance-based alliance to merge capabilities and to deliver renewals

- We will monitor Network Rail on delivery of efficiencies, in particular the delivery of supply chain initiatives, through the use of our leading indicators, which look at supply chain preparedness

Risk (1)

- There are a number of risks in CP7, the largest of which is inflation which added circa £0.6 bn to the E&W CP7 plan for the draft determination. Based on the latest forecast, another £1bn would be added to the plan.

- Network Rail received £3bn of risk funding in CP6 (cash prices) for GB. This has allowed it to deliver its workbank efficiently whilst managing risks such as the impact of Covid-19 and high inflation.

- The E&W CP7 plan has two options for risk funding, either £0.5bn or £2.0bn – the increase of £1.5bn would be funded from reduced renewals (this is the 'risk adjusted plan').

- For E&W, our draft determination opts for the £2.0bn risk fund option which we have increased by a further £0.15bn reflecting the net impact of our financial adjustments on issues such as inflation.

> **England & Wales**
> Our draft determination proposes that Network Rail brings total risk provision in England & Wales to £2.15 bn

Risk (2)

- The initial Scotland CP7 plan proposes £206m of risk funding

- For Scotland, our assessment indicates that there is room within funding to increase the risk fund by a further circa £100m but we note that the latest forecast of CPI would add circa £100m to the plan in Scotland

UK inflation at 8.7% in May 2023

May 23
8.7%

BoE target

2014   2016   2018   2020   2022
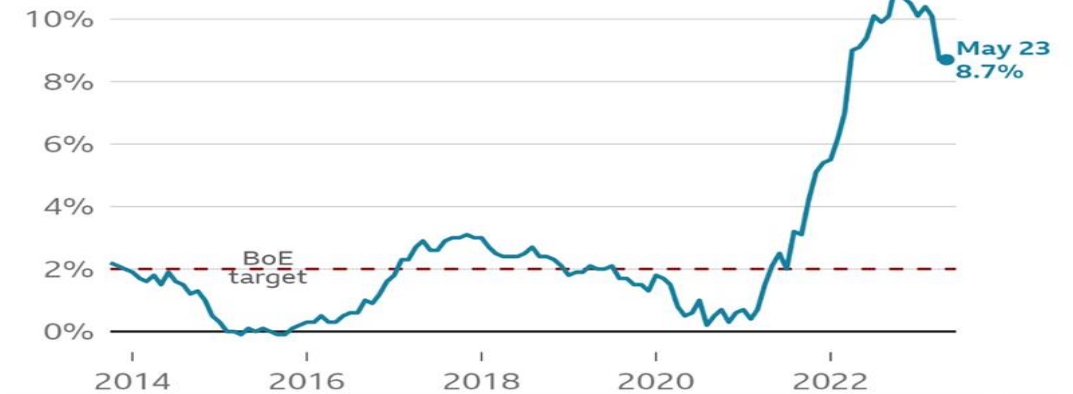
Source: Office for National Statistics

BBC

Scotland
Network Rail Scotland is proposing £206m of risk funding. Our assessment indicates that there is room within the budget to increase this by circa £100m

Q & A
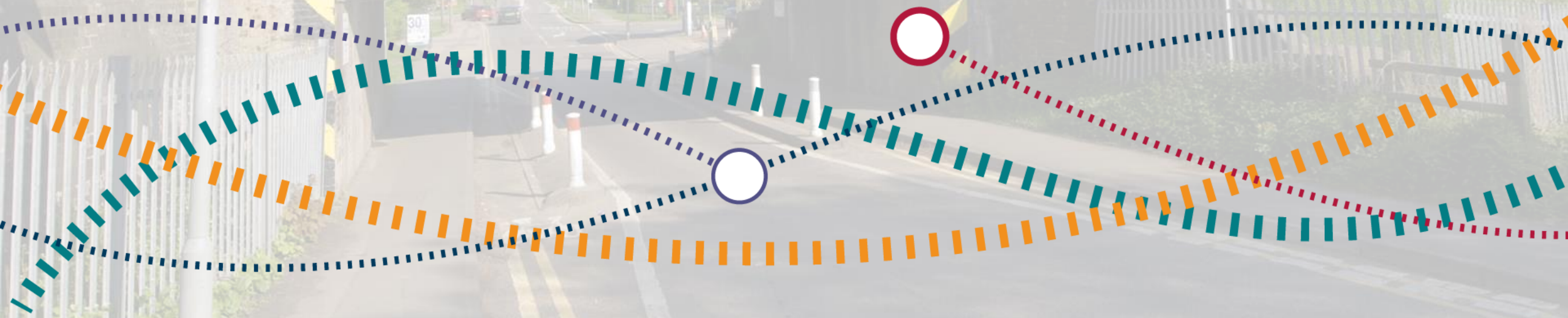
Charges & Incentives

Charges

Through PR23, ORR sets:

- **variable charges** (primarily the VUC), which are paid by all train operators and recover the costs directly incurred in using the network

- **infrastructure cost charges** (ICCs) for some operators, based on their ability to pay additional charges over and above variable charges

We will retain the same overarching charging framework for passenger and freight operators during CP7

Uncapped VUC rates are set to increase by an average of 9% in real terms in CP7, compared to CP6

VUC rates for freight and charter were capped in PR18, so are currently below cost. ORR proposes to continue capping these

- We propose to continue capping freight and charter VUC rates in CP7, with rates increasing broadly along the same trajectory as was set in PR18
- For freight, this would imply a c.18% increase in average VUC rates by the end of CP7 and a c.11% increase for charter (in real terms).
- We will maintain the open access infrastructure cost charge on interurban services at £5/train mile (2023–24 prices)

Incentives

Our draft determination includes draft decisions on outstanding Schedule 8 matters, and recaps decisions already made during the PR23 process.
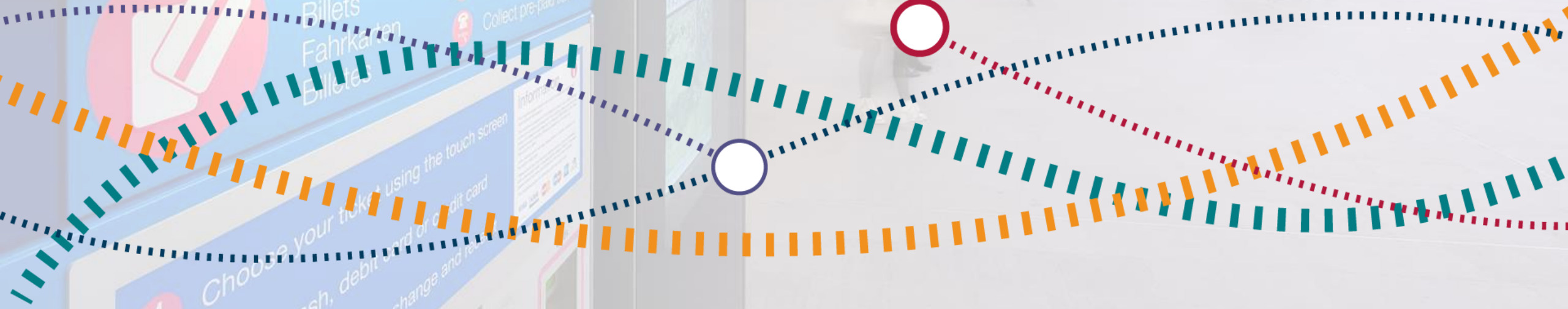
- We are creating scope for the 'switch-off' of Schedule 8 payments for GBR's future operators if GBR is formed and if legislative reform allows for this.

- This is in addition to allowing operators to 'opt out' of Schedule 4 if they wish to do so.

- We are also creating a new 'in-period' recalibration mechanism for Schedule 8, to add flexibility in CP7 in the event of a material change in circumstances.

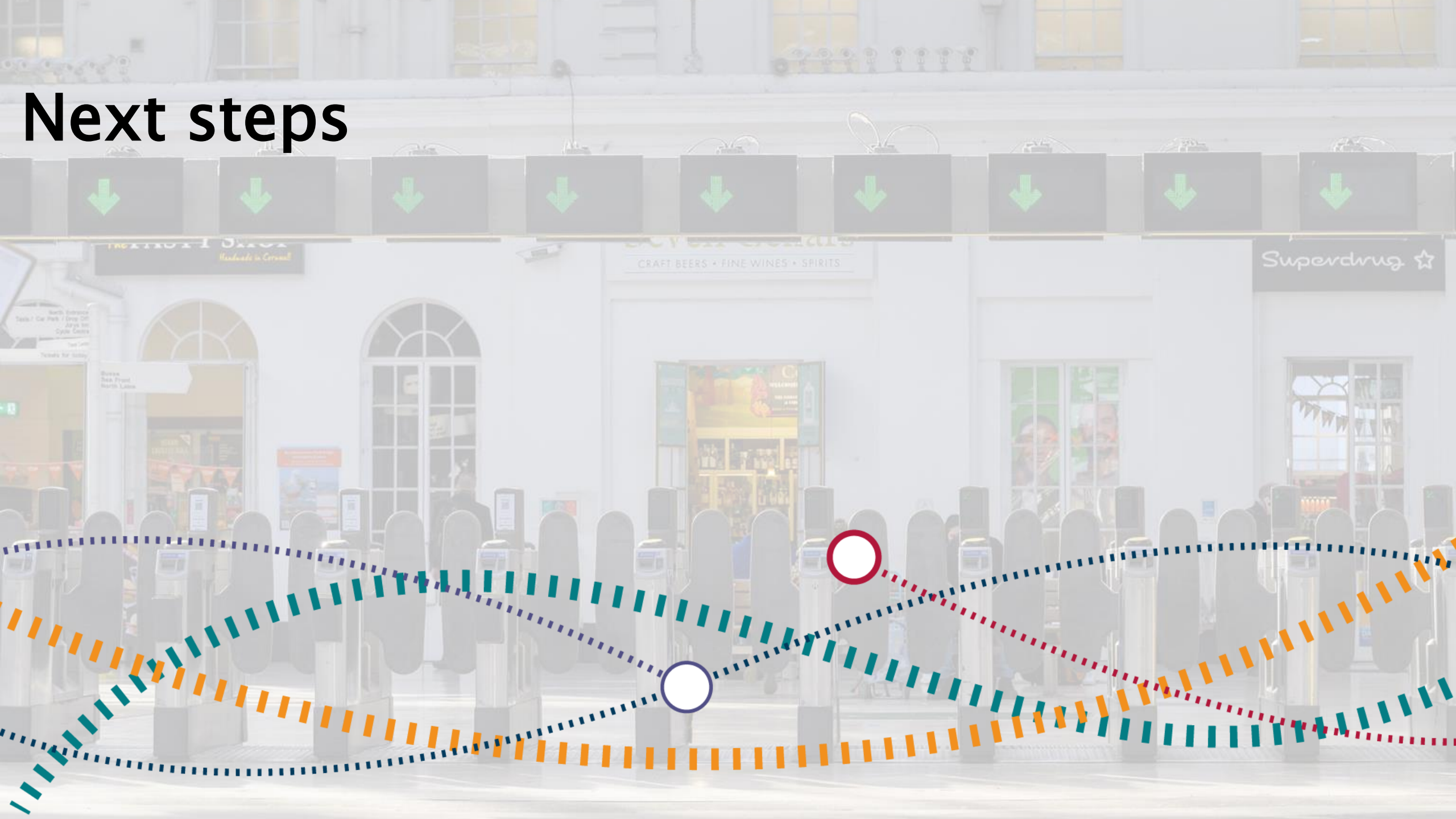**Recalibration of Schedule 4 & 8 regimes is underway**

Indicative draft results show a **significant (75%) reduction** in Network Rail payment rates in the Schedule 8 passenger regime, due to newer evidence on how passengers respond to disruption, and to a lower revenue base post-Covid

Other parameters, such as benchmarks, also currently being updated

Q & A

Next steps

PR23 milestones

Jun 23

ORR draft determination published

Jul 23

Consultation on changes to access charges contracts begins

Aug 23

Consultation on draft determination and drafting changes to access contracts close

Sept 23

Drafting agreed for the network grant arrangements with a profile of payments

Oct 23

ORR final determination published and Delivery Plan notice issued

Dec 23

ORR serves Review Notices to all affected parties

Feb 24

Changes to access contracts consultation outcome published

Mar 24

ORR serves Review Implementation Notices to all affected parties

Apr 24

Control Period 7 begins
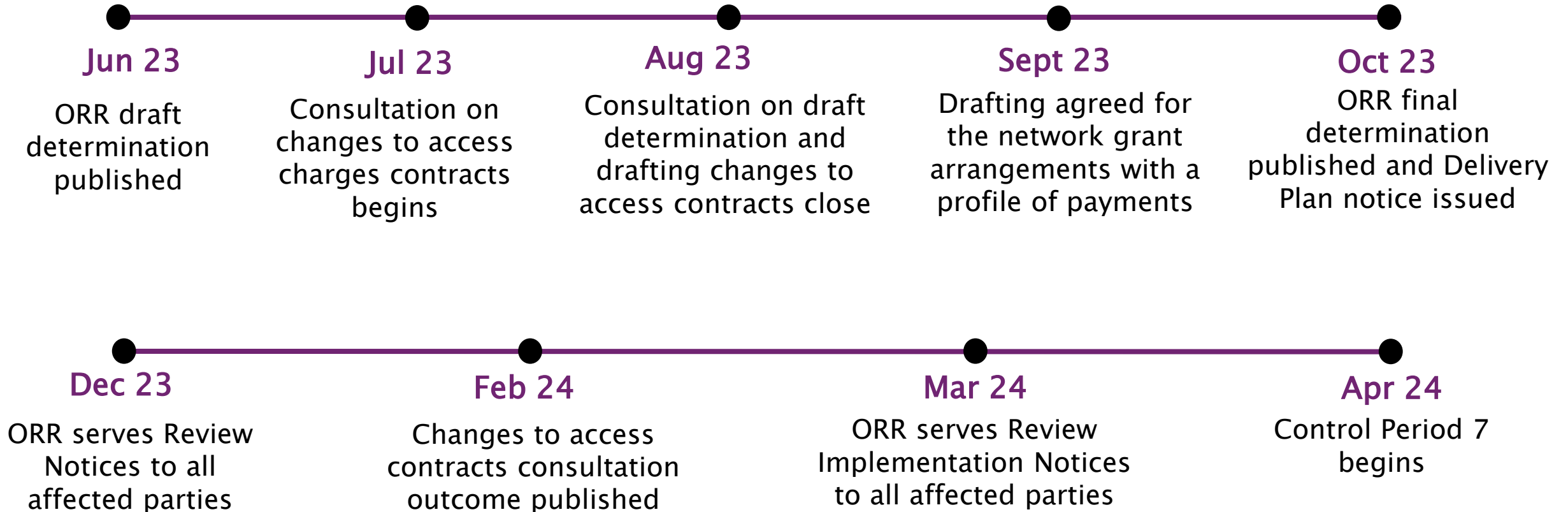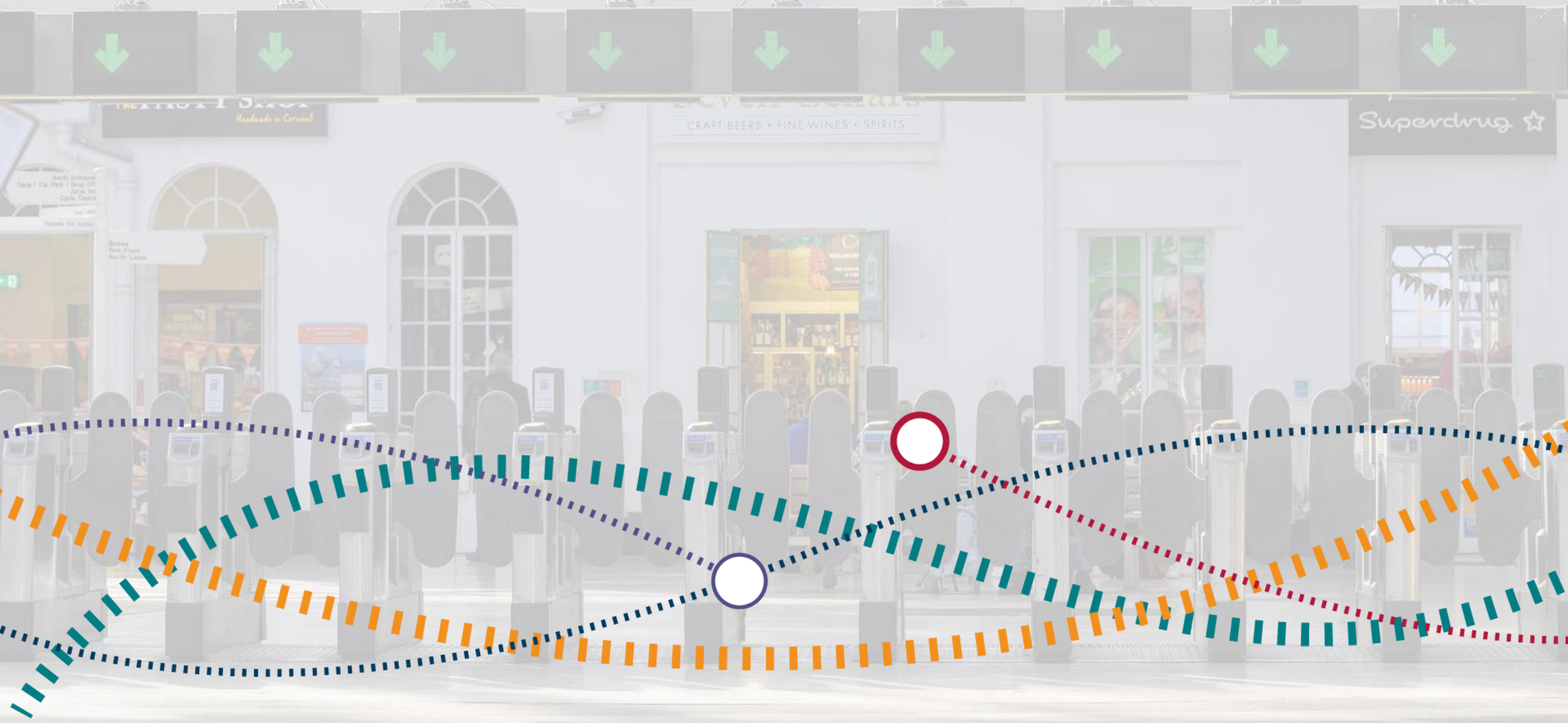
Close and next steps

For the key documents please refer to [Periodic review 2023: draft determination | Office of Rail and Road (orr.gov.uk)](orr.gov.uk)

Please send responses by 31 August 2023 to pr23@orr.gov.uk using our [consultation response proforma]()
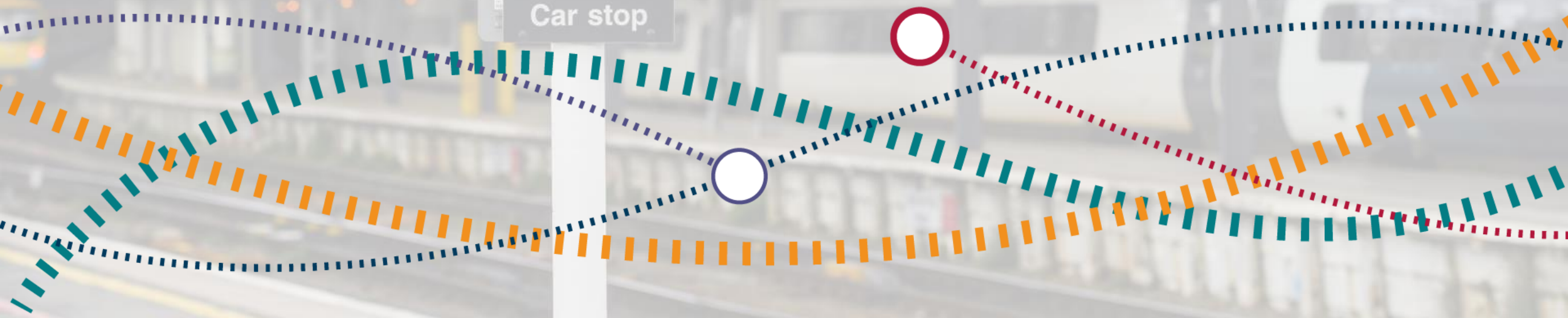
Annexes

Network Rail's proposed expenditure in CP7 vs CP6

Network Rail's proposed expenditure for Great Britain

(£ billion, 2023–24 prices)	CP6 total expenditure	CP7 total expenditure	Change compared to CP6 (%)
Operations	4.0	4.2	6%
Support	5.8	5.2	−10%
Maintenance	10.4	11.2	7%
Renewals	20.9	19.1	−8%
*Of which core renewals**	18.7	16.7	−11%
Industry costs, rates, & traction electricity	4.6	6.4	40%
Risk provisions + unallocated funding	0	2.4	n/a
Electricity for Traction (EC4T) income	(2.9)	(4.5)	56%
ETCS	0	0.8	n/a
Total expenditure	**42.7**	**44.8**	**5%**

* Core renewals covers: track, off–track, signalling, level crossings, structures, earthworks, drainage, buildings, electrification and fixed plant and telecoms.

Network Rail's proposed expenditure for England & Wales

(£ billion, 2023–24 prices)	CP6 total expenditure	CP7 total expenditure	Change compared to CP6 (%)
Operations	3.6	3.8	6%
Support	5.2	4.7	−10%
Maintenance	9.4	10.1	7%
Renewals	18.4	17.0	−8%
*Of which core renewals**	16.5	14.7	−11%
Industry costs, rates, & traction electricity	4.2	5.7	38%
Risk provisions	0	2.0	n/a
Electricity for Traction (EC4T) income	(2.6)	(4.1)	58%
ETCS	0	0.8	n/a
Total expenditure	38.2	40.0	5%

* Core renewals covers: track, off-track, signalling, level crossings, structures, earthworks, drainage, buildings, electrification and fixed plant and telecoms.

Network Rail Scotland's expenditure

(£ million, 2023–24 prices)	CP6 total expenditure	CP7 total expenditure	Change compared to CP6 (%)
Operations	354	419	18%
Support	551	476	−14%
Maintenance	1,019	1,104	8%
Renewals	2,468	2,130	−14%
Of which core renewals*	2,217	1,964	−11%
Industry costs, rates, & traction electricity	395	629	59%
Risk Provision	10	206	n/a
Additional funding not yet allocated		221**	n/a
Electricity for Traction (EC4T) income	(243)	(429)	76%
Total expenditure less EC4T	4,553	4,756	4%

* Core renewals covers: track, off–track, signalling, level crossings, structures, earthworks, drainage, buildings, electrification and fixed plant and telecoms.
** There was a £221m difference between the interim SBP and the SoFA.
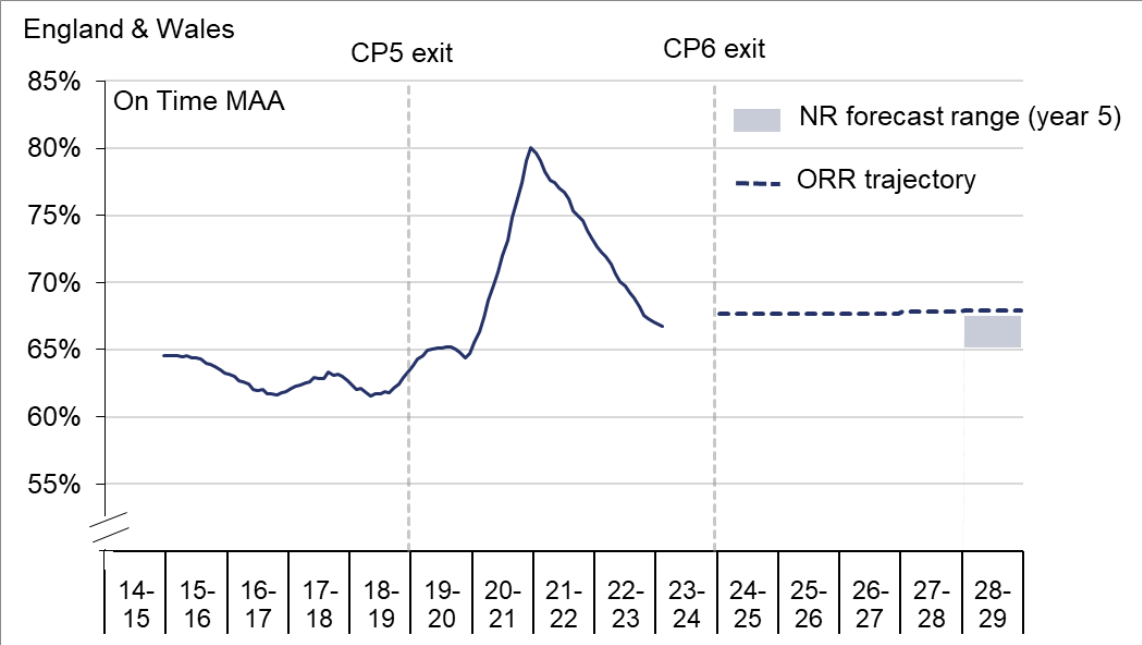
Train performance trajectories

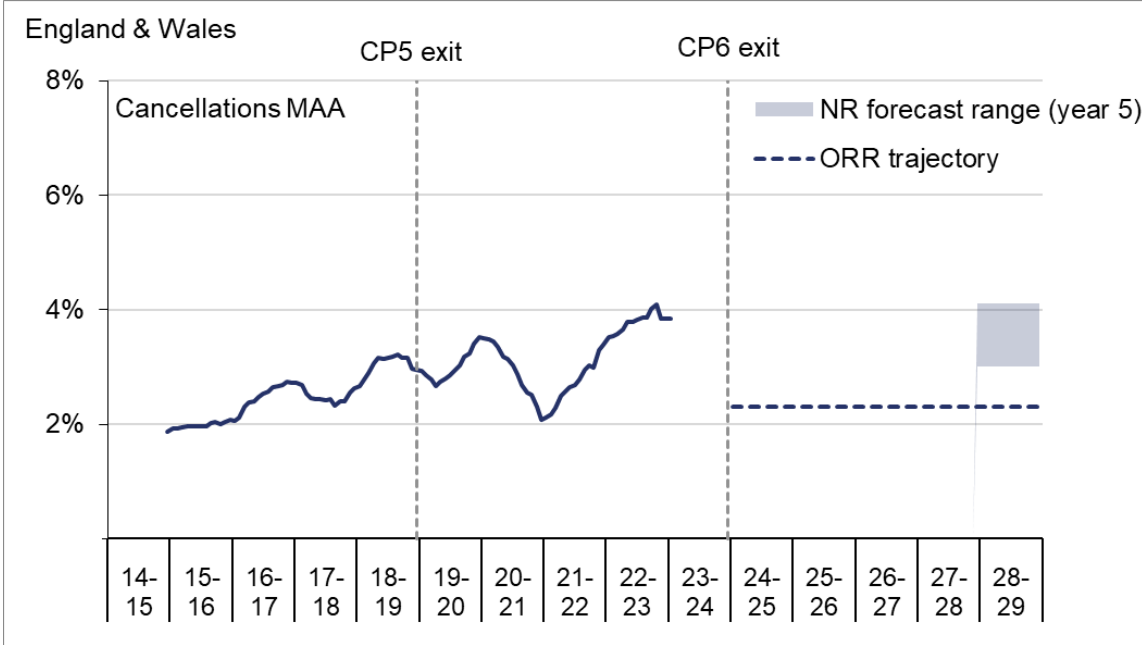# Passenger train performance – England & Wales

On Time

England & Wales
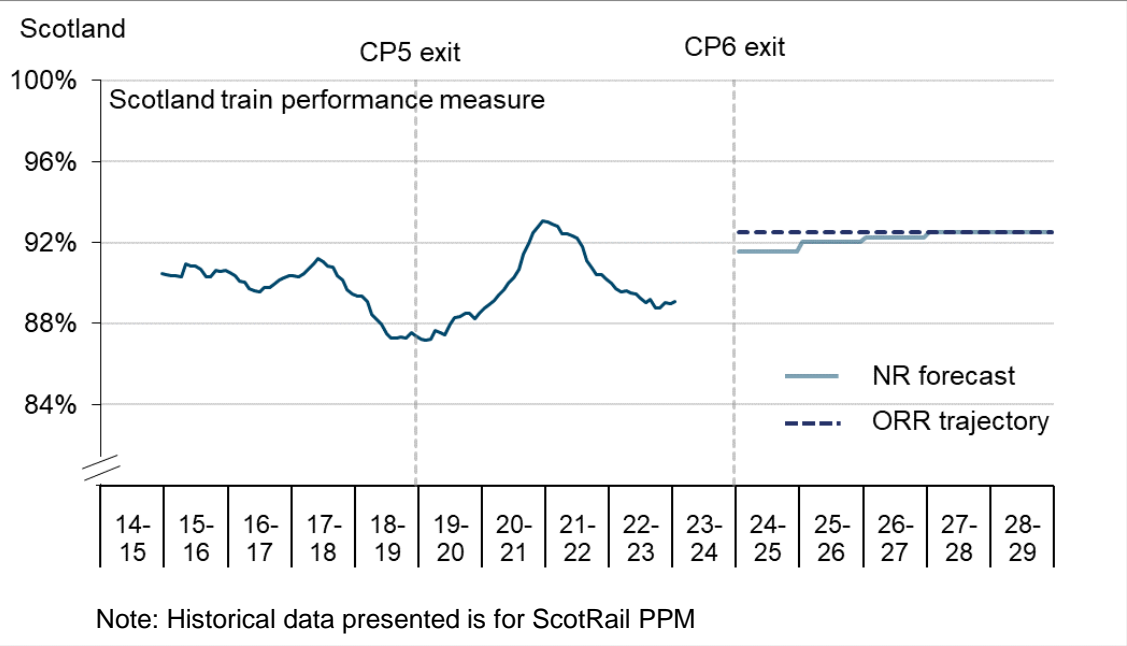
On Time MAA

Legend:
- NR forecast range (year 5)
- ORR trajectory

Y-axis: 55%, 60%, 65%, 70%, 75%, 80%, 85%

X-axis: 14-15, 15-16, 16-17, 17-18, 18-19, 19-20, 20-21, 21-22, 22-23, 23-24, 24-25, 25-26, 26-27, 27-28, 28-29

Markers: CP5 exit, CP6 exit

Cancellations

England & Wales

Cancellations MAA

Legend:
- NR forecast range (year 5)
- ORR trajectory

Y-axis: 2%, 4%, 6%, 8%

X-axis: 14-15, 15-16, 16-17, 17-18, 18-19, 19-20, 20-21, 21-22, 22-23, 23-24, 24-25, 25-26, 26-27, 27-28, 28-29

Markers: CP5 exit, CP6 exit

Passenger train performance – Scotland

Scotland train performance measure
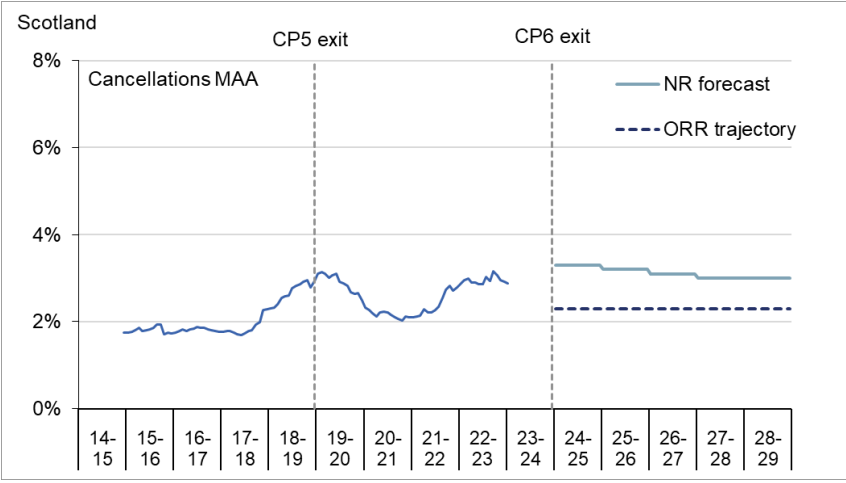

Note: Historical data presented is for ScotRail PPM

On Time
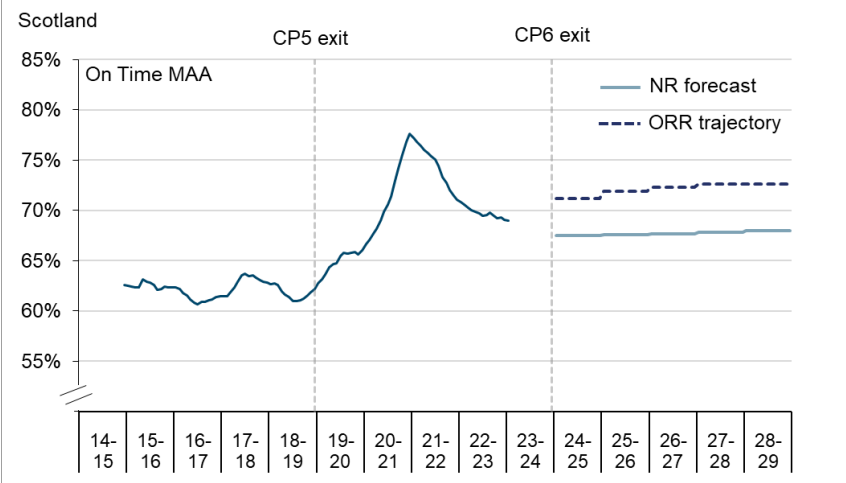
Cancellations

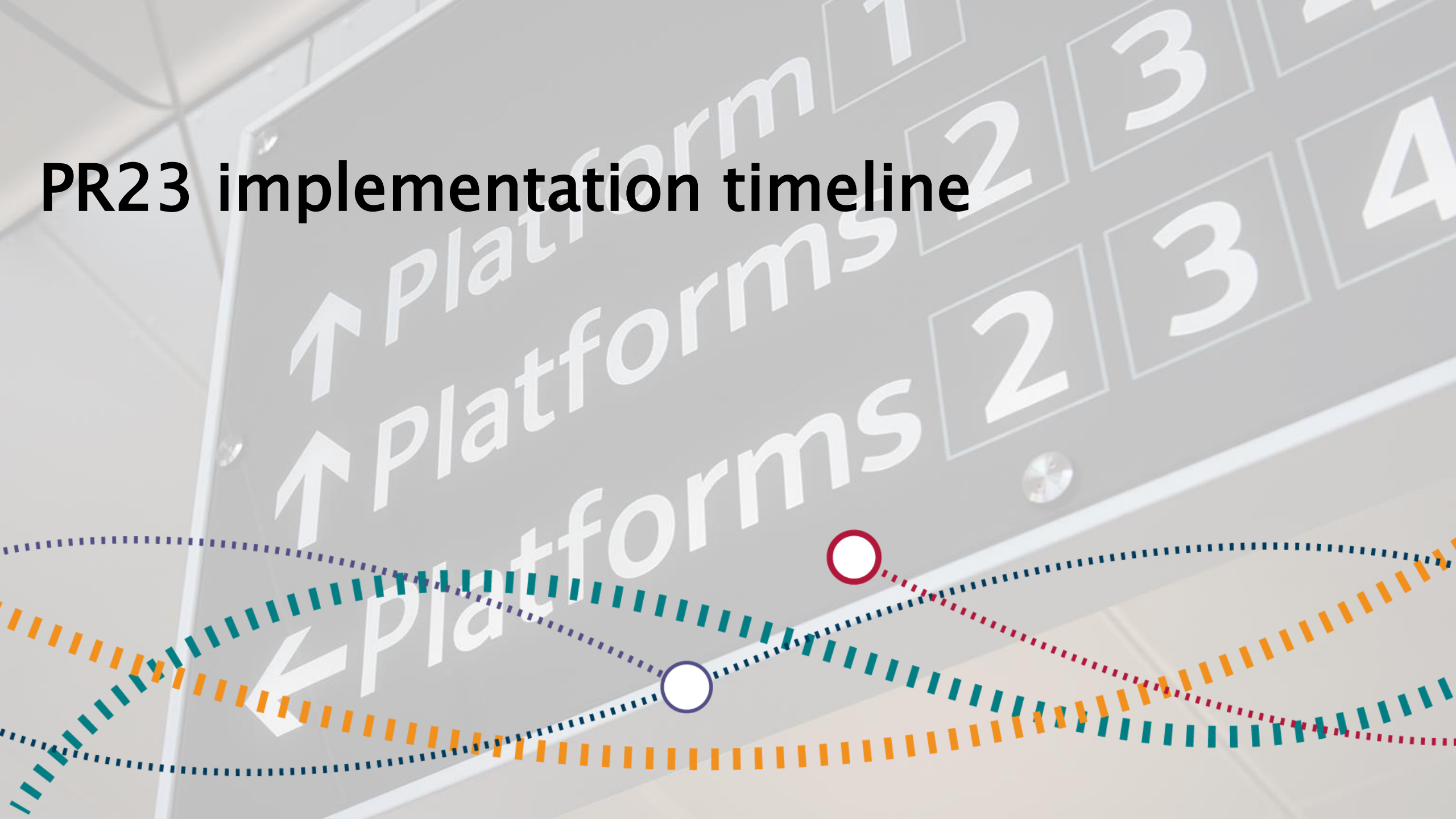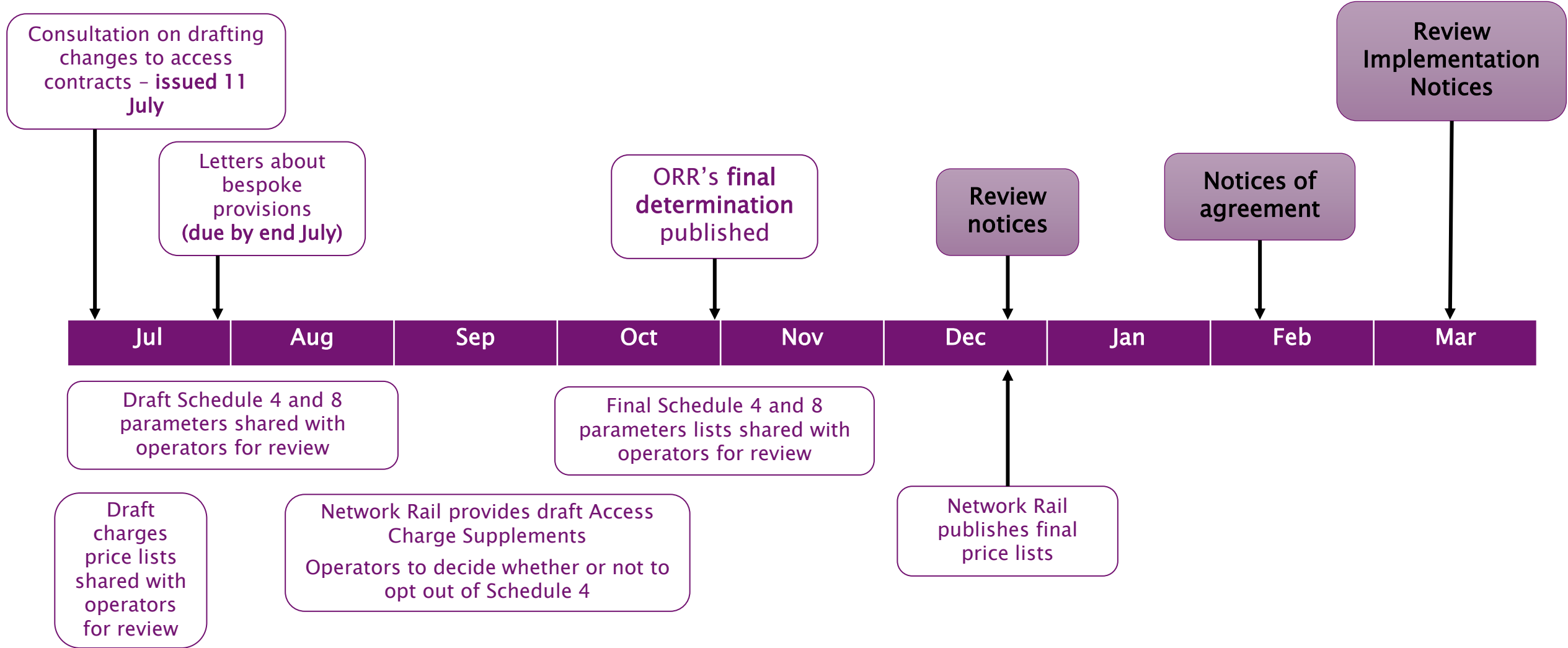# Options to release funding for core renewals

Options to release funding for core renewals

Expenditure item [total expenditure]	Rationale for adjustment	Potential reduction in expenditure	
		England & Wales	**Scotland**
WCML(N) [£1.2 billion]	Complex programmes which interact with multiple other programmes are likely to be delayed. Our analysis of CP6 data showed that 12 to18 months slippage was typical for similar projects in NW&C. While we support Network Rail's approach to this programme, we estimate that circa 25% of the proposed works will slip into CP8, reducing expenditure in CP7 by circa £0.3 billion.	£0.3 billion	N/A
Digital signalling portfolio [£1.7 billion]	Assessment of these complex projects and programmes indicates that cost estimates and delivery assumptions are not yet mature. Experience from the East Coast Digital Programme (ECDP) in CP6 showed that Network Rail was able to reduce costs significantly from its initial, immature estimates, once it engaged the supply chain. We estimate that the actual expenditure on digital signalling in CP7 should be closer to the costs achieved on ECDP in CP6, which would result in a circa 15% reduction in expenditure in CP7.	£0.26 billion	<£0.01 billion
High Output Plant [£0.04 billion]	Network Rail's CP7 plans have not been able to leverage efficiency from High Output Plant. Although opportunities remain, to date the regions have elected not to use the service in CP7. We propose to remove CP7 expenditure for overhaul of High Output plant (£0.04 billion). Network Rail must also consider the best way of delivering a service in CP8 noting required volumes, service reliability, staff competence, equipment obsolescence, purchase lead times and value for money.	£0.03 billion	<£0.01 billion

Expenditure item [total expenditure]	Rationale for adjustment	Potential reduction in expenditure	
		England & Wales	**Scotland**
Route Services projects [£4.2 billion]	In CP6 we completed a technology adoption Targeted Assurance Review, which raised concerns about scope creep and lack of adoption of technology projects. We propose a pre-efficient cost challenge of circa £0.1 billion to Route Services renewals expenditure on technology projects. This challenge is to encourage better scope definition and control between Route Services and Network Rail's regions, to improve delivery and adoption.	£0.09 billion	£0.01 billion
Project Reach [£0.14 billion]	Our assessment is that Project Reach represents a lower priority for use of OSMR funding in CP7 than other core asset renewals. However, we note Network Rail's commitment to Project Reach and we anticipate that other options for releasing expenditure may be preferable.	£0.14 billion	N/A
Total		circa £0.8 billion	circa £0.02 billion

PR23 implementation timeline

Consultation on drafting changes to access contracts – **issued 11 July**

Letters about bespoke provisions **(due by end July)**

ORR's **final determination** published

Review notices

Notices of agreement

Review Implementation Notices

Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar

Draft Schedule 4 and 8 parameters shared with operators for review

Final Schedule 4 and 8 parameters lists shared with operators for review

Draft charges price lists shared with operators for review

Network Rail provides draft Access Charge Supplements

Operators to decide whether or not to opt out of Schedule 4

Network Rail publishes final price lists

orr.gov.uk

49

Weblinks to additional draft determination information

- Periodic review 2023: draft determination
- PR23 draft determination: executive summary - England & Wales
- PR23 draft determination: overview - England & Wales
- PR23 draft determination: consolidated list of decisions, proposals and actions - England & Wales and Scotland
- PR23 draft determination: settlement document for the Eastern region
- PR23 draft determination: settlement document for the Southern region
- PR23 draft determination: settlement document for the North West & Central region
- PR23 draft determination: settlement document for the Wales & Western region
- PR23 draft determination: settlement document for the System Operator
- PR23 draft determination: supporting document – health and safety
- PR23 draft determination: supporting document – outcomes
- PR23 draft determination: supporting document – sustainable and efficient costs
- PR23 draft determination: supporting document – National Functions
- PR23 draft determination: supporting document – other income
- PR23 draft determination: policy position – financial framework
- PR23 draft determination: policy position – access charges
- PR23 draft determination: policy position – schedules 4 and 8 incentives regimes
- PR23 draft determination: policy position – managing change

PR23 draft determination consultation response proforma