



Department
for Transport

Control Period 3 Stations Review

Stakeholder Workshop 24 July 2019





The plan for today

Timing	Agenda	Presenter	To Cover Consultation Question
11.00 to 11.05	1. Welcome and Introduction	Arthur Borkwood	
11.05 to 11.15	2. Purpose of the Workshop	Stuart Nicholls	
PART A – LCR Approval			
11.15 to 11.45	3. Asset Management	GHD & DfT	Q2
11.45 to 12.00	4. Compliance	GHD & DfT	Q1, Q6
12.00 to 12.15	5. HS1 Supplementary Submission 26 June 2019	HS1	
12.15 to 13.00	6. Open Discussion	All	
13.00 to 13.45	7. Lunch		
PART B – Other Considerations			
13.45 to 14.30	8. Risk, Contingency and Efficiency	GHD & DfT	Q7
14.30 to 15.30	9. Long Term Charge and Annuity	Alistair Bickley	Q4, Q5
15.30 to 15.45	10. Station Enhancements	Stuart/GHD	Q3
15.45 to 16.00	11. Summary of discussion and any final comments	Arthur/Stuart	Q8
16.00	12. Close		



Purpose of the workshop – Stuart Nicholls, DfT

- ▶ To discuss the draft conclusions the Department outlined in its Draft Decision (published on 2 July 2019)
- ▶ To bring up any feedback on the draft conclusions and updated technical report circulated prior to this meeting
- ▶ To feed into the final determination by the Department on the stations review due to be published on 31 August 2019



Role of the DfT as Regulator of Stations Review

- ▶ Under the terms of the HS1 Station Leases, the Department is required to approve the LCRs for each of HS1 Ltd's five-year control periods.
 - ▶ whether HS1 Ltd has had regard to, and fulfilled, the requirements and obligations upon it by virtue of the HS1 Station Leases with respect to a stations periodic review; and
 - ▶ whether there are any deficiencies within the LCRs with respect to those areas listed in the HS1 Station Leases



Stations Review Draft Decision

- ▶ HS1 Ltd Final Submission 31 May 2019
- ▶ Supplemental information received 26 June 2019
- ▶ Draft Decision published 2 July 2019
- ▶ Consultation extended to 11 August 2019 (23:45)
- ▶ Bi-laterals with Eurostar; Southeastern, East Midlands, HS1 Ltd (and any other stakeholders who requests a bilateral meeting)
- ▶ Final Decision published 31 August 2019



PART A – LCR Approval

DfT – GHD – HS1



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Asset Management

DfT - GHD

Control Period 3 Review Stations

Asset Management Technical Advisor to DfT

24 July 2019





Will Auton
Principal Consultant
Business Consulting
GHD



Grant Richardson
Technical Director
Initiate Consulting
Ltd



Richard Golding
Director
Gleeds Cost
Management Ltd



Steve Mitchell
Principal Consultant
Asset Management
GHD



Richard Aitken
Associate
Advisory
Steer



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02	Asset Management	06	Efficiencies
03	Renewals workbank	07	Compliance
04	Direct and indirect costs	08	Recommendations
		09	Questions

Scope of CP3 Stations Review



CP2 Outcome
Approach to CP3



Asset
Management
Documentation



Treatment of
Long Life Assets



Cost Efficiencies
Benchmarking



Enhancements
Framework



Lifecycle Reports
Obligations of the
HS1 Lease



Lifecycle Cost
Models
Long Term
Charge

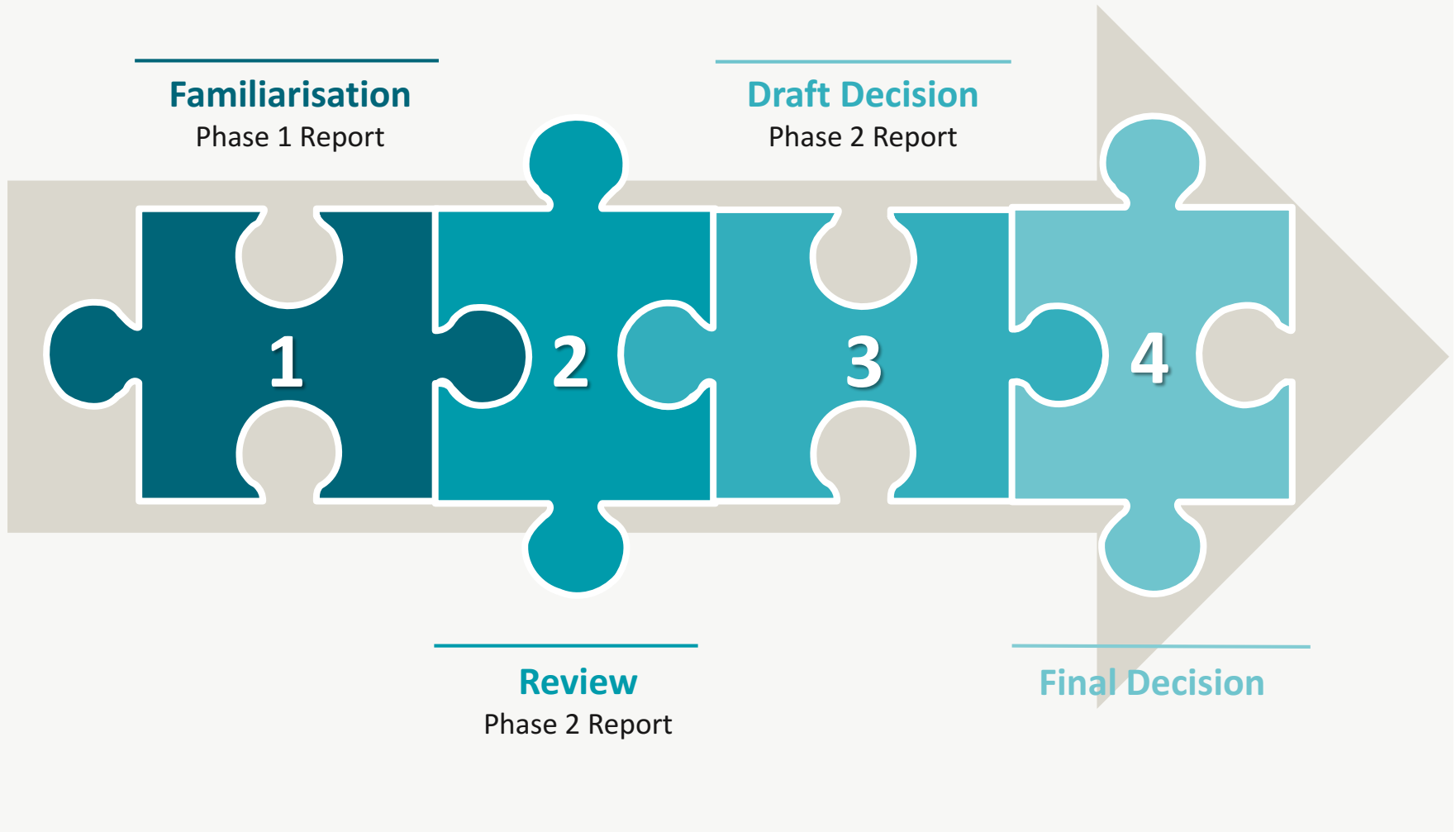


Lessons and
changes to
periodic review
framework

CP3 Regulatory Timeline



Assurance approach



Asset management - GHD

Asset Management Journey

HS1 is on an asset management journey. HS1 intend to have an ISO 55000 compliant asset management system working in practice during CP3-CP4.

Top down influence

HS1 are in the process of developing their asset management strategic documentation. The developments over CP2 are currently influencers on CP3 decision making, but are not directly driving decisions. For example, asset criticality work has identified lifts and escalators as being the most important asset group to operations, and so additional effort has been applied to the approach for their renewal and the renewal lifecycles.

CP3 Approach – Bottom up development

The approach for CP3 has primarily been an iteration of the models used for CP2, rather than being driven by the new generation of strategic asset management documentation.

Renewals workbank

Approach has largely been the same as for CP2 other than:

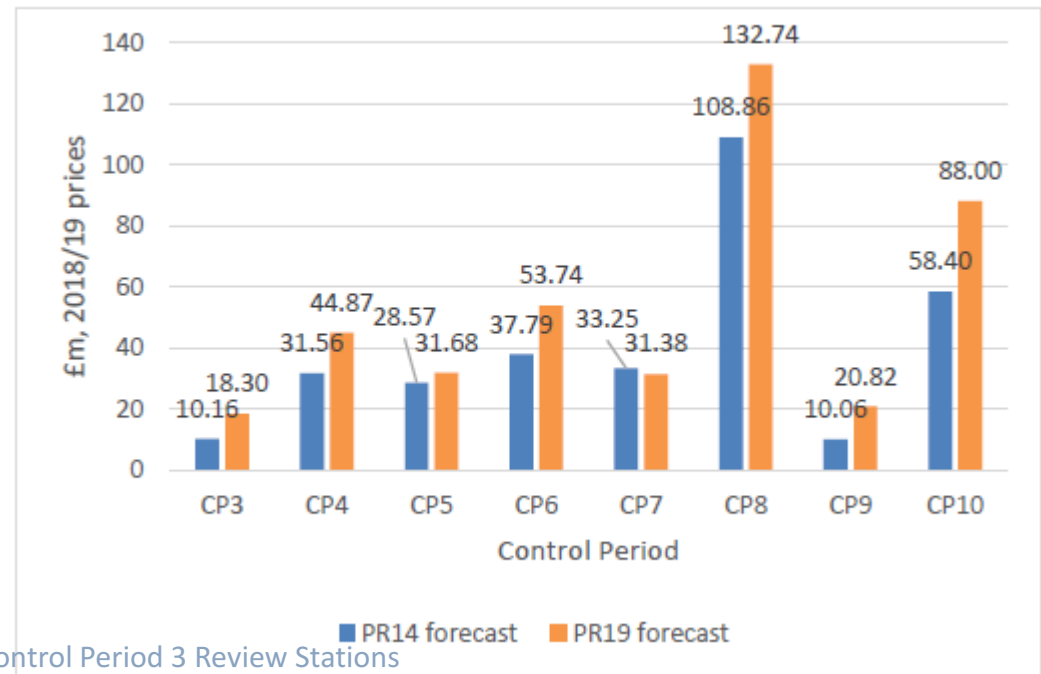
- Lift and escalator acceleration – consulted on with TOCs (asset criticality)
- Minor works and assets shifted to be dealt with as Qx (maintenance)
- Rollup of assets to system level

Increased renewal activity of same assets through to CP10, the impact is not just on CP3

CP3 renewals workload (£18.3m)
is considered to be deliverable

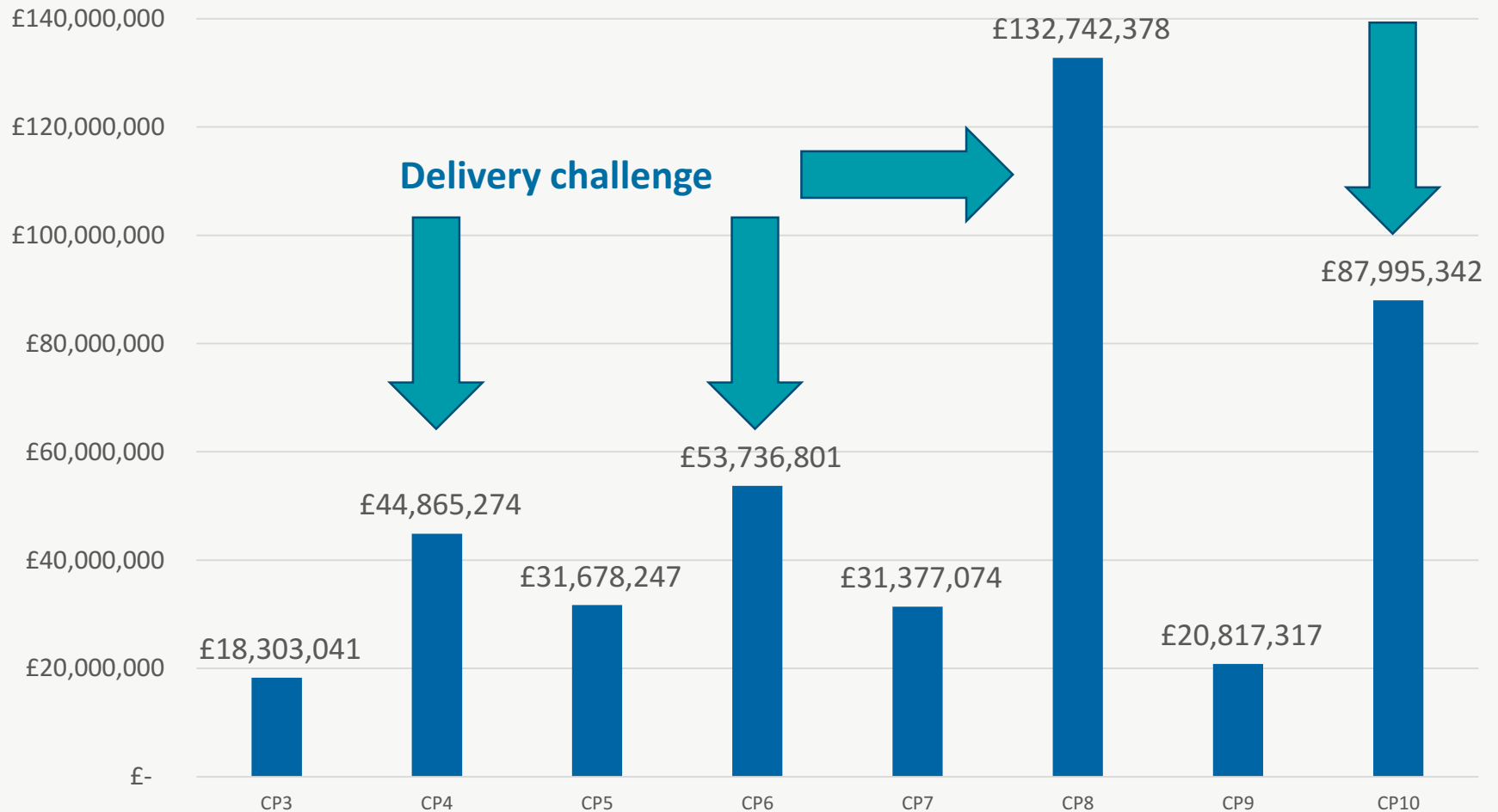
This does not consider assets beyond this time horizon and therefore amasses no savings in the bank for these assets. e.g. St Pancras roof

Figure 9: Renewals costs to 2060, comparison with PR14 estimate



Control Period forward workbank

LCC Model Renewal Costs (smoothed)



Assurance of renewals workbank

Asset Volumes

The activities, materials and quantum of work have not been rechecked since the models were first created 10 years prior to this review.

It would be a reasonable expectation of the regulator to expect these are validated and confirmed to be accurate.

Asset lives

Pell Frischmann and 4Way Consulting have undertaken a review of asset lives.

Asset lives shortened for Lifts and escalators and split by major components

Lives checked and appear reasonable to the Reviewer

Asset criticality

Asset criticality is a work in progress

Lifts and Escalators determined as most critical assets in stations

Further work required to fully link workbank and planning to asset criticality

Direct and Indirect Costs

Standard On Costs

72% | 55.5%

HS1 CP3 | NR CP6

Risk and Contingency

Applied as an overlay in the LTC Model.

Expected risk to be associated with the works rather than the charge.

LCC Models

Cash flow model - unit rates and renewal cycles.
Fit with LTC model.

Assurance

Unit rates for direct costs have been first line assured by Pell Frischmann.

These appear reasonable with no major outliers.

Benchmarking

HS1 are at the high end of the range for on costs as compared to the ORR Network Rail CP6 settlement.

HS1 have benchmarked against new build capital works. Renewals programmes are considered more a appropriate benchmark

Risk and contingency

Comparison to Network Rail

- ORR's Final Determination for Network Rail included a 10.7% allowance for risk over a £21bn maintenance and renewals portfolio
- HS1 CP3 Risk allowance weighted average at 13.9% across a much smaller portfolio

Approach

- Risk overlay applied in LTC model
- We would have expected the approach to be derived based on the asset portfolio utilising a risk workshop and QCRA approach.
- Uncertainty reports include uncertainty factors for the scope and quantum of works. Given 10 years of operation, this would appear to be overly conservative.

13.9% | 10.7%
HS1 CP3 | NR CP6



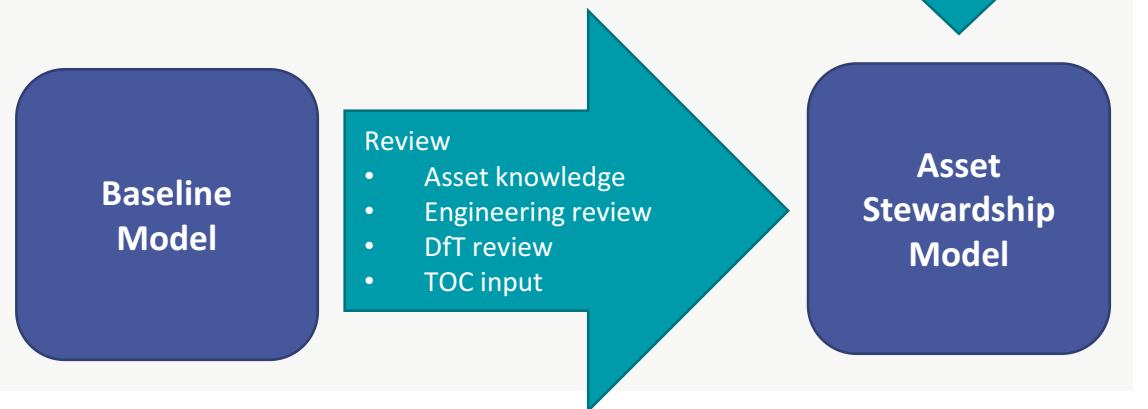
Approach differs to our expectations, but the end result is comparable to benchmarks

Efficiencies

- CP2 review resulted in a 0.6% p.a. overlay to the baseline however no efficiency plan was ever produced in CP2.
- The Reviewer has not seen any evidence to demonstrate that this efficiency overlay was too high or too low.
- HS1 are demonstrating that they are buying at current market prices, but this is not an efficiency.
- No efficiencies have been applied to the overhead costs, only comparative benchmarking of contractors pricing through competitive tender.

“Reasonable expectation of a regulator to see a plan that includes actions to improve efficient delivery of renewals”

Applying an efficiency in CP3 at a comparable rate to CP2 alongside an efficiency plan would support continuous improvement



Long Term Charge

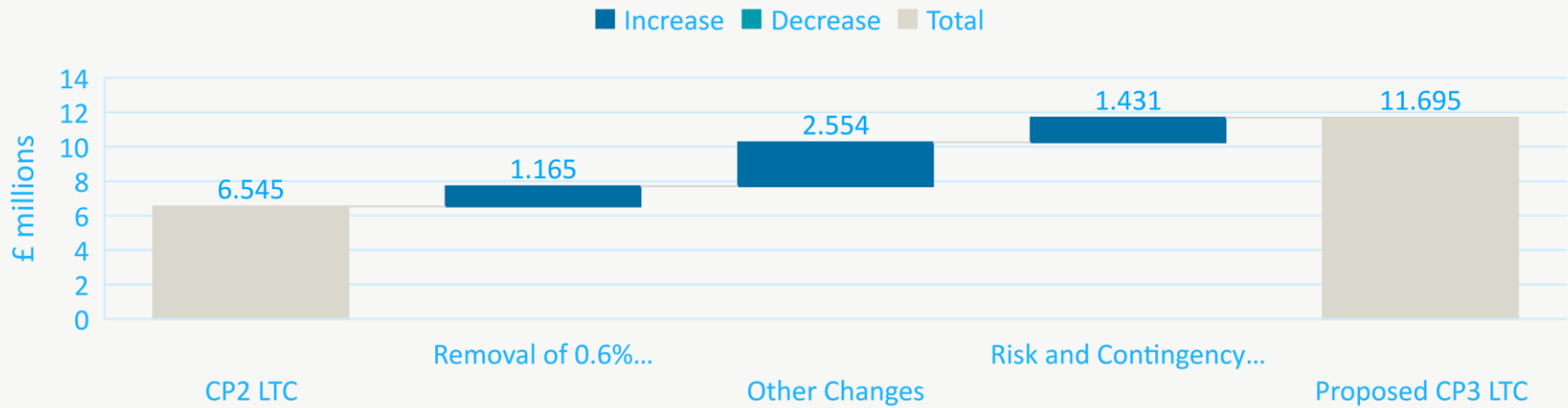


Table 23: CP3 v CP2 LTC (£million, 2018/19 prices)

Station	CP2	CP3 consultation	CP3 submission (and alternative options)		
	CP2 LTC	Direct and on-costs only	Base proposal	Option 1	Option 2
St Pancras	4.282	6.594	7.612	6.716	4.181
Stratford	0.770	1.415	1.558	1.442	0.861
Ebbsfleet	0.731	1.487	1.659	1.505	0.750
Ashford	0.763	0.767	0.866	0.777	0.870
Total	6.545	10.264	11.695	10.440	6.662
Increase from CP2	-	57%	79%	59%	2%

Increase of £5.15m per annum from CP2 to CP3:

- An 18% increase from the removal of the CP2 efficiency overlay; and
- A 61% increase from other changes to the renewals programme
- Base proposal supports funding the forward workbank



Asset Stewardship – DfT Draft Decision

- ▶ The Department is minded to conclude that the intention to move to a 40-year rolling asset stewardship and LTC model remains appropriate, and should be formalised ahead of CP4
- ▶ HS1 are adopting an approach to asset management which is to be consistent with the international standard ISO55000, which is considered best practice.
- ▶ Our initial view is that there is no need to alter the definition for asset handback condition, assuming the AMS set out by HS1 Ltd is fully implemented, as this will drive efficiencies[;], more accurate cost inputs and provide more surety on asset condition and renewals.
- ▶ As the AMS matures through each CP review[,] the greater the assurance that the renewal plans support handback of assets in a state ‘good and substantial repair’ will be met.
- ▶ A 40-year rolling view of asset stewardship would help mitigate any cost shocks in future control periods and at the end of the current concession.



Question 2: Consultees are invited to provide comments on the draft conclusion that the definition of asset condition at handback should be retained, and that focus is placed on asset monitoring.



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Compliance

DfT - GHD

Compliance

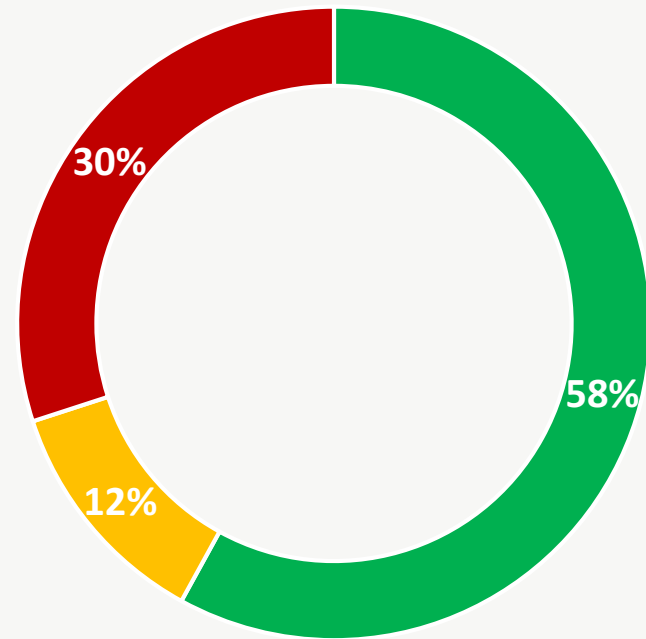
Technical Advisor's assessment against lease obligations:

- 34 compliant
- 7 partial compliances
- 18 non-compliances

Overall view of GHD is that there are no non-compliances which would prevent agreement with the DfT approving the LCR.

GHD's view is that areas considered to need improvement could be either addressed as an update to the submission or be incorporated into an agreed delivery plan for CP3, as highlighted in the Draft Decision.

Compliance with Lease



■ Compliant

■ Partial Compliance

■ Not Compliant

Recommendations

- Update of Life Cycle Reports to make consistent with Life Cycle Cost models and supporting documentation
- Preparation and approval of an outline delivery plan for CP3 within a defined period of the determination of funding
- Development of a cost efficiency plan for CP3 with monitoring by DfT and stakeholders
- Completion of lessons learned exercise for CP3 and incorporation into CP4 periodic planning process
- Systematic tracking and closeout of agreed actions from CP2 and CP3 Periodic Reviews including any non or partial compliances
- Review the material quantities and scope with the aim to refine the Life Cycle Cost models
- Confirm the validity of differences between the infrastructure and stations financial assumptions
- Comprehensive audit of the LCC and LTC models for consistency and flow of information throughout the models
- Agree and document the principles that constitute a station asset renewal



Department's Initial View on Compliance

- ▶ Adoption of ISO55000 has amended the suite of documentation planned to be produced by HS1, which will potentially create inconsistencies with requirements stated in the clauses of the HS1 Lease
- ▶ Undertake a lessons learned exercise with a formal action plan to be taken forward between the Department and HS1 Ltd with agreed outputs and timescales.
- ▶ **We are minded to agree that the areas of non-compliance identified by GHD are not material to DfT decision to approve the LCRs**
- ▶ The Department and GHD will review the final LCRs and responses to the consultation and will work with HS1 Ltd to produce a revised compliance matrix to be published alongside the Department's decision.
- ▶ It is proposed the action plan will be monitored by the Department as part of ongoing concession management at monthly progress meetings with HS1 Ltd, with updates reported to the quarterly station asset review meetings.



Department's Initial View on Compliance

- ▶ Recognition that the Station Leases developed in 2003 no longer represent current asset management processes.
- ▶ It is suggested that a mapping exercise is undertaken and guidance is provided for the assessment of the Schedule 10 and Annex 1 obligations to describe how the LCR requirements are discharged under the new asset management approach.
- ▶ For example, meeting the clause in principle (as opposed to adopting a strict interpretation of the clause) may ease both the development of the submission and review.
- ▶ It is proposed this will be agreed between DfT and HS1 Ltd ahead of CP4



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HS1 Supplementary submission 26 June 2019

HS1 Ltd

HS1 stations Draft Determination – Stakeholder workshop

24 July 2019



Contents

1. Views on Draft Determination's key points
2. HS1 Lease compliance (GHD reports)

1. HS1 view on the Draft Determination

- HS1 intends to respond fully to the DfT's Draft Determination by the new deadline of 11 August 2019.
- Our main observations:
 - We welcome DfT's recognition of HS1's improving asset management maturity, but recognise we have further to achieve during CP3.
 - HS1 is pleased that GHD has found our proposed renewals volumes and costs and contingency levels are appropriate.
 - We note that GHD has identified areas of what it sees as technical non-compliances with the HS1 Lease, but that these are not material and should not prevent DfT from formally approving the LCRs.
 - We agree with GHD's recommendation that interpretation and guidance is provided for the assessment of the HS1 Lease obligations in future – in our view, the drafting of the Lease (2003) has not kept pace with regulatory and asset management practice.
 - On the key structural charging questions – retail and Thameslink contributions to LTC – we support DfT's position.
 - We do not consider the proposed 0.6% efficiency overlay is appropriately evidence-based (e.g. on relevant station renewal cost benchmarks in the UK or abroad).
 - The DfT's preferred 'buffer' option is strong on affordability, but we need DfT to confirm – as landlord and regulator – that it is consistent with the Concession Agreement requirements.

2. HS1 Lease compliance

- As DfT has made clear to stakeholders, HS1's asset management documents supporting our CP3 plans were formally submitted on 26 June 2019.
- This followed the feedback in GHD's Phase 2 report, which we received in early May and didn't have sufficient time to reflect in the 31 May 2019 submission.
- Subsequently, we received GHD's Phase 3 report on 19 July 2019.
- Based on our initial review, we note many previously-identified technical compliance issues have been resolved.
- The remaining recommendations are subject to discussion today, and further follow-up.

2. HS1 Lease compliance

- In responding to GHD's Phase 3 report recommendations, HS1:
 - Considers there is limited value in further iteration/transposition of content between the asset management documents.
 - Agrees with GHD's recommendation that interpretation and guidance is provided for the assessment of the HS1 Lease obligations in future. This would address a number of the recommendations (1-3, 7)
 - Recognises our pricing model is now due to be refreshed, after 10 years of use, which we will do in CP3 (recommendations 9-11)
 - Re-states our commitment to provide a CP3 delivery plan, inclusive of our approach to driving efficiencies (recommendations 6 and 8).
 - Welcomes further discussion with DfT and stakeholders on CP3 commitments to be included in the Final Determination.

Questions?



Question 1: Consultees are invited to comment on HS1 Ltd's obligations under the HS1 Station Leases, the extent to which these obligations are currently met and the proposed process by the Department to seek assurance of continuous improvement against an agreed action plan

Question 6: Consultees are invited to provide their comment on HS1 Ltd's asset stewardship proposals, the underpinning asset management documentation and HS1 Ltd's compliance with its asset stewardship and life cycle purpose.



Open Discussion

Stakeholder views



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Lunch





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PART B: Other Considerations



Risk, Contingency and Efficiency

DfT - GHD



Risk and contingency mark up to LCC costs

- ▶ HS1 has applied a risk and contingency mark up to the LCC costs based on work by Pell Freschmann (see below)
- ▶ For CP3 the Weighted Average is 13.9%. Although having some reservations with the approach, GHD considered the 13.9% to be reasonable given the CP6 NR determination had a 10.7% allowance for risk over a much larger asset base

Table 1: Risk and Contingency Allowance Profile

Station	CP3-4	CP5-6	CP7-8	CP9-10
St Pancras	15%	15%	10%	20%
Stratford	15%	15%	10%	5%
Ebbsfleet	10%	15%	10%	10%
Ashford	10%	10%	15%	10%

- ▶ Do stakeholders think the risk / contingency mark up is reasonable?



Cost efficiency

- ▶ HS1 removed the 0.6% per annum cost efficiency applied at CP2
- ▶ GHD recommended that in the absence of evidence that the 0.6% per annum efficiency is either too high or too low, that efficiency be applied at the same or comparable level to CP2. GHD also recommended that HS1 develop a cost efficiency plan for CP3, DfT is minded to support this as it will support achievement of the per annum cost efficiency in CP3.
- ▶ DfT is proposing to add back the 0.6% per annum cost efficiency



Question 7: Consultees are invited to comment on the proposal to reinstate the efficiency overlay, and at what level it should be set; also, provide any further views on how efficiency could be applied more effectively.



Long Term Charge and Annuity

DfT



LCC model input to LTC

- ▶ LCC model costs are based upon material X unit price arising upon each renewal occurrence in a time based asset lifecycle:
 - ▶ LCC asset lifecycle (i.e. renewal occurrences) were reviewed by Pell Frischmann and 4Way Consulting and are considered reasonable by GHD. In particular the frequency of work on lifts and escalators has increased. However, GHD has identified two activities in the St Pancras that have not been input into the LTC model with a cost of c£2m over the 40 year period. DfT proposes to adjust the LTC model to include these.
 - ▶ LCC material quantities and scope for each renewal occurrence have not been changed or assured since they were first created in c.2010. This will be updated at subsequent control period reviews as evidence is gathered from material usage at actual renewals
 - ▶ LCC unit rates were assured by Pell Frischmann and GHD consider them to be reasonable given a review against their data bases.
- ▶ The Review has identified errors in the St. Pancras LCC model that may result in a change to renewals costs, requiring clarification from HS1.



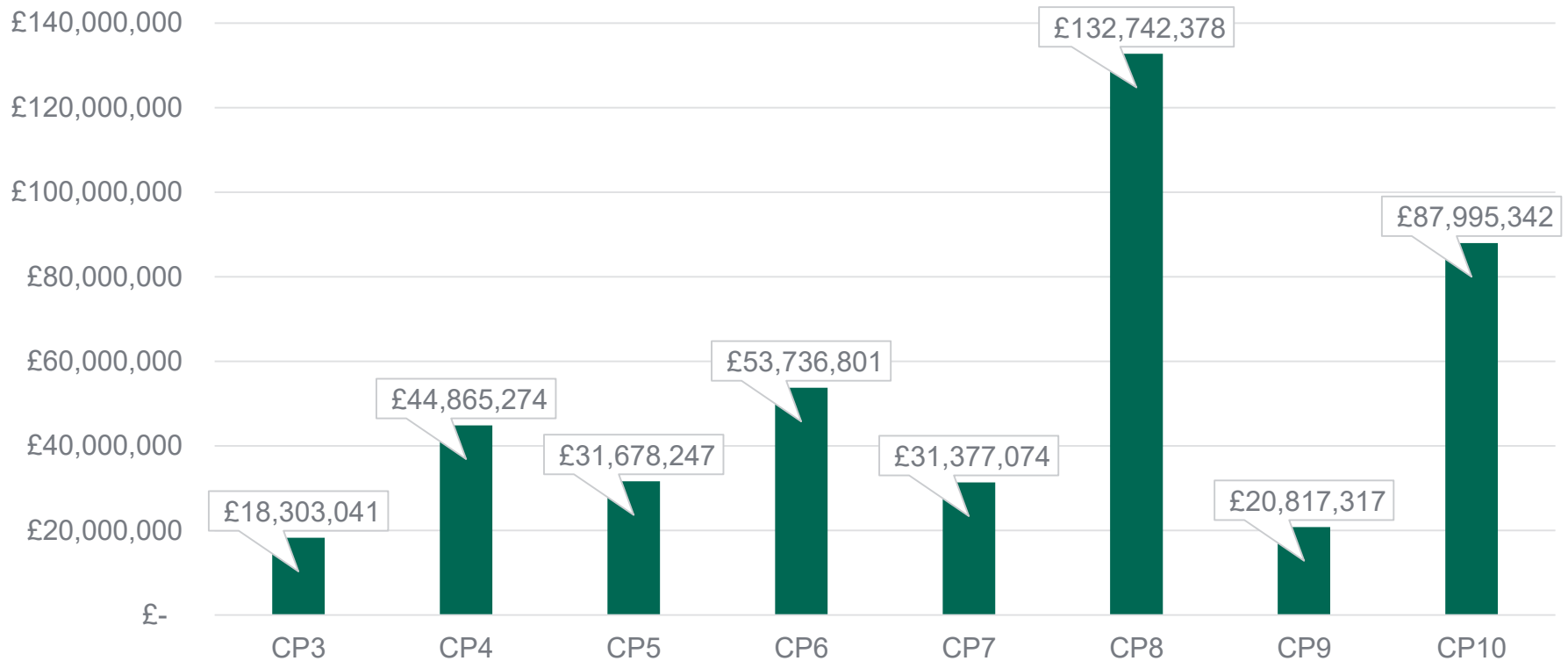
Annuity options

- ▶ HS1 suggested three different options for calculating the annuity underlying the LTC:
 - CP2 approach of using 40 years of LCC costs including risk / contingency mark ups across full 40 years
 - A 'buffer' approach of using 40 years of LCC costs but with risk / contingency marks up applied to the first 10 years only
 - An approach using 20 years of LCC costs and risk / contingency mark up
- ▶ DfT considers a 20 year approach to not make adequate provision for higher projected costs (CP3 to CP6 = £149m vs £273m for CP7-10). See LCC estimated cost slide.
- ▶ DfT appreciates that placing money on low return escrow bank balances and investments is an inefficient use of capital and as cost estimates beyond 10 years are uncertain, that it is reasonable on efficiency grounds to only apply the risk / contingency to the first 10 years. DfT is proposing to adopt the buffer approach.



Estimated LCC costs (from HS1 Submission)

LCC Model Renewal Costs (smoothed)





Return from escrow bank deposits and investments

- ▶ Important element of asset stewardship
- ▶ Improvement in modelling from CP2 to CP3
- ▶ The estimated return of 1.22% on the 80% of escrow money invested is based upon implied rates from yield curves supplied by PMC Treasury
- ▶ DfT believes HS1 are taking a conservative approach to forecast rates and are exploring further options
- ▶ DfT requested an update to the model run to take account of latest market projections



Question 4: Consultees are invited to comment on how a modification of the annuity calculation can seek to ensure there are sufficient funds in the station escrow accounts to deliver the maintenance and renewals required to meet the asset stewardship obligations.

Question 5: Consultees are invited to comment on whether they are willing to accept lower customer experience and service quality outputs from critical assets such as lifts and escalators to reduce charges.



Station Enhancements

DfT - GHD



Station Enhancements

- ▶ Need for a clearer framework should the need arise for future enhancement works
- ▶ The Department concludes that the principle of user pays should continue for the short term, and agree with HS1 Ltd's approach to consult on changes to the Network Statement that clarify the policy on station enhancements, their approach, charging principles, approvals process, and how they would seek to resolve any disputes
- ▶ The Department will continue to work with HS1 Ltd to develop longer term options for a station enhancements framework on the HS1 network, which would require amendment to the Concession Agreement





Question 3: Consultees are invited to provide their comment on how the processes described in this section are applied to station enhancements on the HS1 network, or on alternative proposals.



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Summary of discussion and any final comments

DfT



Question 8: Consultees are asked to provide any other comments which they may have which are not covered by the other questions contained within this consultation document.



Consultation deadline:

No later than 23:45 on Sunday 11 August 2019.

Please send your formal response to the consultation and draft conclusions to Simon.Pinney@dft.gov.uk or Sam.Hart@dft.gov.uk



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Thank you for coming