ANNEX A: ASSET MANAGEMENT APPROACH EXPLANATORY STATEMENT

1. Introduction

This document has been prepared to further explain HS1's approach to stations asset management, and the preparation of our renewals plans for CP3 (2020-2025) and out to 2060.

It responds to the Department for Transport's (DfT) review, assisted by GHD, of our Long Term Charge (LTC) plans for HS1's stations. Specifically, it addresses findings presented in DfT's letter of 9 May 2019, and discussed further with DfT and GHD on 24 May 2019.

A key challenge identified in the review is to clarify the link between HS1's over-arching asset management strategies and plans, and the build-up of the renewals work bank.

HS1 acknowledges earlier drafts of key asset management documents did not clearly delineate current practice (i.e. the approach we took to developing our renewals plans) from our aspirational future state (i.e. where we as a company want to get to in terms of asset management maturity). This led to confusion about how the high-level strategies informed development of the plans.

We have clarified our approach in the supporting documents – namely, the Stations Strategic Asset Management Plan (Stations SAMP), the Strategic Asset Statements (SASs), and Life Cycle Reports (LCRs). These are provided in **Annex C**.

To summarise our approach to renewals in Periodic Review 19 (PR19), we have conducted a 'bottom-up' assessment of asset renewal needs, guided by asset management objectives and criticality analysis agreed with operators. This has been supported by independent expert technical advice. Where possible, we have sought to align our plans with the parallel development of our asset management documentation and systems.

However, our renewals plans have not been fully developed 'top-down' from our asset management strategy strategies, through to specific planned renewals interventions. This is a level of maturity we are developing, and aim to have in place for CP4 (alongside other improvements, including improved linkage between operations, maintenance and renewals decision-making).

As part of PR19, HS1 provided its formal submission to the DfT on 31 May 2019, following a public consultation earlier in 2019. This document, and the revised asset management documents, should be read as an addendum to that submission.

2. Our approach

Our overall approach is explained in Part 2 of our Stations LTC submission, on pages 26-46. Key elements of this approached are summarised and expanded below.

The broad process we followed in developing our renewals plans involved using Life Cycle Cost (LCC) models approved by DfT in PR14 as our starting point. We did not consider it an efficient use of resources or sound asset management practice to 'start from scratch'. We then updated the LCC models based on operator feedback and expert consultancy advice.

2.1. Updates to LCC models

As set out in our 31 May stations submission, the process for updating the LCC models included:

- Aligned the models with the 4th edition of the Building Cost Information System (BCIS);
- Assigned a unique reference number (URN) to each component in each station model;
- Revised the asset hierarchy in the models from component level to system level;
- Reviewed the renewal cycles in each model; and
- Reviewed the direct and indirect costs in each model.

Of these updates, the material factors driving our proposed LTC are the renewal cycle review and the updates to direct and indirect costs. The process we conducted is explained on pages 39-41 of our 31 May stations submission. The key aspects were:

- Discipline specialists from Pell Frischmann and 4way Consulting undertook an assurance review of renewal cycles in the LCC models;
- NR(HS) and Mitie reviewed current condition and performance to identify works likely to be required within the next seven years (to the end of CP3). They engaged with their subcontractors for specific asset types and worked with us to ensure the renewals plan reflected the works identified;
- AMCL developed an initial asset criticality model (in the Stations SAMP) through stakeholder engagement; and
- Train operators provided input into operational criticality for specific asset groups through review sessions;
- Pell Frischmann employed Network Infrastructure Consultants to carry out a cost validation of the rates in the LCC models. This was a high-level cost review; costs were not assessed against detailed drawings or specifications; and
- Network Infrastructure Consultants also reviewed the indirect cost rates in the LCC models (preliminaries, management fee, design, risk/contingency etc.).

In our February consultation, we set out our LTC proposals based on direct and on-costs only, noting that further work was required before establishing the basis of contingency to be applied.

Subsequently, we included contingency amounts recommended by Pell Frischmann and Network Infrastructure Consultants. The contingency amounts were established per station and per 10-year period. This means that the contingency applied at each station is specific to the planned renewals programme at the station, not imposed as an overall figure top-down. Our proposals in the 31 May stations submission include this contingency provision.

2.2. Updates to asset management documentation

In response to the findings in DfT's letter of 9 May, a significant number of updates have been made to HS1's asset management documentation. While the documents have been edited, we confirm that these changes do not represent a material change to HS1's asset management approach. The changes are summarised in **Annex B**, with the documents attached at **Annex C**.

In general, we have sought to be more precise in describing the asset management approach we have taken, summarised here, while clearly indicating where our aspirational future state is being explained.

We welcome further engagement on these documents as part of the DfT's ongoing review in PR19.