From: David Crawley

**Sent:** 10 January 2008 17:12

To: Matthew Crosse

Cc:Damian Sharp; Tony Glazebrook; Andy Steel - TSSSubject:RE: Getting the paperwork straight before financial close.

Matthew,

See my comments below.

Ultimately, given the constraint of time and the complete lack of incentive for SDS to agree to any of the points below I think the most practical way forward is to assess the risk inherent in these points and where it is acceptably low retain it for **tie**. This assessment has effectively already been done. This then sidesteps the conflict, cost and expense of time which may then result in achieving a 'perfect' risk transfer where that perfection carries little additional value. BBS should not care particularly whether it is SDS or **tie** who warrant that particular circumstances apply. The mechanism of retaining risk for **tie** should be attempted by small changes to specification / requirements rather than a straightforward letter stating that this is so. Any Steel is already working on this through the ER's.

David

From: Matthew Crosse Sent: 10 January 2008 15:15

To: David Crawley

Cc: Damian Sharp; Tony Glazebrook

**Subject:** Getting the paperwork straight before financial close.

## David

Three areas where we should have the paperwork absolutely straight with SDS are the tram length, the DKE and the tram weight. This is so that the BBS/CAF design assumptions relating to integration with the emerging SDS infrastructure design are valid. If we don't do this, there is a risk of a claim downstream from either BBS/CAF or a counter claim from SDS (if BBS/CAF pursue SDS directly).

The longer CAF tram length needs to be formally advised through a cost neutral change order. My
understanding is that the depot and tram stops etc can accommodate the longer length. If we don't issue a
change order we need a letter from SDS confirming that the longer length is taken into account in their
design.

Andy Steel has already assessed this item and rightly concludes that we should not alter the Tramstop lengths as the practical impact is so small. We need to inform SDS formally of the actual tram length. In doing so we will point out to them that they have already redesigned the depot to accommodate this length. We should not ask for any agreement that the greater tram length will have no impact on their design but rather remain silent on the matter. We will ensure that the ER's do not specify platform lengths. If SDS reply that their infrastructure cannot be confirmed as accommodating the longer tram length without further lengthy assessment we have the option at that stage of telling them that **tie** retains this risk.

**DAMIAN** – please formally advise SDS of the actual tram length and note the points above.

We need to advise SDS of the DKE (if not done so already) and receive some sort of confirmation from SDS that the CAF tram DKE has been considered in the design of the infrastructure.

This seems to be the wrong way round! It is CAF/BBS who have to tell us that the tram conforms to what SDS have designed. SDS cannot advise us of anything on this subject other than to confirm they have designed to our specification. We already know that with the exception of door bottoms there is no real issue in practice. Door bottoms are always a problem everywhere and CAF/Siemens are more than competent enough to sort the problem out. Roger Jones is checking that the ER's do not reference a particular DKE which may confuse matters for us – we just need the tram to fit whatever is built and what is built to be as specified.

3. Likewise we need to advise SDS of the weights and seek confirmation that the slightly heavier tare weight and axle loads of the CAF tram can be safely tolerated; or to ask for their justification as to why it can't be tolerated.

The way forward is to modify the ER's to reflect the following (Andy Steel has already done this). The tram is designed by a combination of its tare weight and a theoretical maximum passenger load. The infrastructure is designed by a combination of the tram tare weight and a practical maximum number of passengers (where this is less than the theoretical figure). We believe this will allow the infrastructure as designed to accommodate the tram that is being offered. No action is required of SDS. If SDS claim that they would not have used this approach (despite everyone else doing so) we should warrant that we accept this approach as competent (and thereby take the risk).

Can consider and advise in the next couple of days please.

## Thanks

## Matthew

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