# COWD (A)

- Cost of work done reconciles back to the £387.2m reported in PD review P7 2010/11.
- The £86.5m references the **Entitlement for work done (BB+S)** Dennis Murray's view of the value calculated against the early September £172.5m certified (£118.4m **Certified to Date BB+S** excludes both SDS and CAF values). Both the £118.4m and £86.5m exclude CAF and SDS figures.
- The **Infrastructure (BB+S)** figure of £110.0m is the total BB+S COWD figure taken from the accounts in period 7. The -£8.4m is a balancing figure which represents the -£14.4m prepayment element offset against Infraco related cost accruals. Note: the £3.2m phase 1b payment figure is not included in the £110.0m
- **Total BSC** £161.4m includes all COWD for BB+S including the £46.4m per DM's valuation/ Certified to CAF, plus £5.0m post novation design changes (SMcG noted that this related to £4.986m in the accounts).
- Other Costs are £225.8m COWD. Specifically these costs relate to £87.6m for Utilities and Other Infrastructure costs (made up from all other non-BSC T19 codes and CUS Utilities/ SUC's & betterment related costs), £70.2m for Project Costs (breakdown available), £32.3m for Design Pre Nov incl Ph1b and Utilities, £32.5m Other Costs Incl Land and £3.2m Ph1b Payment to BSC. The Phase 1b Payment to BSC is separately identified as this is not part of the Certification or changes, and relates to a different element of the tie /BSC contract.

### Continue as is – w/Silver Bullet (B)

- This is the previously prepared Option 3C (March-10) and is included specifically to allow comparison to the most recent cost estimates tabled. Option 3C is not now a viable option for time or cost due to BSC behaviour and therefore £639.9m is not a viable **Net Outturn Cost**. In this view Open for revenue service for the full Tram opening was assumed at October 2012. Note: Pitchfork was based upon the Change Register(s) and QS view extant back in March 2010. This view presented should not move around by more than a few £m +/\_ but we need to keep an eye on reconciliation to the current reported QS view.
- Construction Works Price (BB+S) is made up from: CWP £238.6m, less Provisional Sums (-£3.1m), less Picardy Place Utilities saving assumption (£-3.0m), Plus VE Contingency (+£1.2m)
- Existing Change Princes Street (£9.0m) included for estimated value of PSSA at time of 3C
- Existing Change Other. This is made up from previous pitchfork figures of BDDI (£14.1m); Ground Conditions (£9.9m); Client & Other Changes (£11.5m). All of these changes relate to March-10 when the estimate of pitchfork 1 was pulled together.
- Existing Prolongation (£21.0m) view provided breakdown in DM e-mail of 16/03/10. The prolongation included EoT1 as a total Delay calculation.
- Further On Street Change (£21.1m). Primarily assumes that there would be no premium for an OSSA if implemented in a similar way to the PSSA. On street scope changes (+£9.9m); on street D&D (+£8.2m); Risk RE OSSA Credit (+£3m)
- Further Allowance for Risks and Delay (£20.4m) made up from: 4 month delay (+£4.0m) plus further delay allowance (+£12.1m), plus VE deliverability (+£4.3m). Note: further VE which will not be delivered over and above the £1.2m included in the CWP above (+£4.3m). Therefore total undelivered VE is £5.5m of the -£12.6m total allowed in the Original budget.
- Infrastructure (BB+S) (£340.5m) is a function of all of the figures above.
- **Total BSC** (£404.0m). This cost is the BB+S cost plus the contractual values for CAF (+£58.5m) and post Novation design (+£5.0m)

- Other Costs (£235.9m). The main items to note in relation to this category are that Utilities and Other Infrastructure costs (£78.7m) allowed in the Option 3C is short of the £89.9m forecast in the P7 PD review report. This is due to significant movements in utilities forecasts where budgets have been transferred from MUDFA to Infraco – a full reconciliation of these movements is available on the 'Util & Other Infra' tab of the Financials Update081110 excel document. The Pre-Novation design cost allowed (£28.7m) has a shortfall against the latest view £32.3m due to SDS costs included in Infraco being omitted from 3C.

# Continue as is - BSC Obstinacy (C)

- Due to the nature of the latest commercial engagement it is unlikely if the BSC Obstinacy route is a viable commercial/ project completion option at all. The BSC Obstinacy route would provide little or no commercial certainty to the Project at this point in time. For that reason, we have taken the view that completion to Haymarket would be Dec-13, and the rest of the phase 1a route Dec-15. Key differences from Option 3C to BSC Obstinacy include:
- Existing Change Other This has increased from £35.5m from Option 3C (Mar-10) to the latest QS view (£45.3m) for the same categories. This delta reflects movements in the Infraco Change register.
- Further allowance for risks and delay (£150.0m) in comparison to the view of Option 3C (£20.4m) detailed above. The further allowance for risks and delay is a very large number because at the current point in time, continuing with BSC brings little or no certainty to the programme. The allowance here is made up from: 3yrs BSC prelims (+£80.0m), on-street Premium (+£40.0m), movement to top-end of on-street design (+£30.0m).
- Design Post Novation (SDS) (£14.0m). The Obstinacy view assumes that we will pay for the design costs included in the Carlisle notes as opposed to the £5.0m element of the post novation contract. -Project Costs (£109.5m) as opposed to the Option 3C view of £91.5m. Assumes £0.5m per month PM costs for 3 years. This cost could potentially be light as we are likely to continue to incur high levels of DRP related cost if we continued to tough it out issue by issue with BSC.

# Carlisle tie price (D)

- Assumes an Airport to Haymarket Oct-12 finish date, and to St Andrews Square by Dec-13. The Carlisle **tie** price assumes that we construct the remaining elements in two year increments to FOTW (Dec-15) and Newhaven (Dec-17). Note: Reconciliations to the **tie** Carlisle offer for 'Part A' as SMcG 'HANDOVER Cost Estimates e-mail Carlisle **tie** Price' of 7/11
- **Estimated for work done (BB+S)** (£241.8m) includes our view of the costs split to Haymarket per the Carlisle offer, which was initially based upon the **tie** QS view. This includes a value of £16.5m for risks and delay.
- **Design Post Novation (SDS)** (£14.0m). The Carlisle view assumes that we will pay for the design costs included in the Carlisle notes to complete the full design as opposed to the view of £5.0m for phase 1a.
- **Total New Procurement** (£93.9m) splits the **tie** QS view across the on-street sections from Haymarket to St Andrews Square; St Andrews Square to FOTW; FOTW through to Newhaven. This view also allows for an additional £20.0m risk allowance for new procurement or market

uncertainties in procurement and subsequent retained risk. The final amount would be an output from a formal QRA.

- Other Costs – Project costs (£95.2m) differ by £1m versus the anticipated split of 'T & reprocure now' costs. This includes £72.7m Project costs and £21.5m post-Termination costs. To go through detail of Project Costs tab with SMcG and assumptions around staffing. Post 'T' costs appear to be quite light and are currently only a high level view. These will only be more certain once we have a resource plan for the next 9-months and can forecast according to this plan.

## - Carlisle BSC price (E)

Assumes an Airport to Haymarket Jun-13 finish date, and to St Andrews Square by Dec-13. The Carlisle **tie** price assumes that we construct the remaining elements in two year increments to FOTW (Dec-15) and Newhaven (Dec-17).

- **Estimated for work done (BB+S)** (£373.9m) includes BSC's view of the costs split to Haymarket per the Carlisle offer. The BB element of this offer was £215.3m and £118.8m for SDS. The BSC offer excluding risk is £333.9m vs. the **tie** Carlisle offer of £225.3m (excl risk). The BSC Carlisle offer view includes a value of £40.0m for risks and delay against the **tie** Carlisle offer of £16.5m because it is our view that the 'GMP' was caveated to take the risk away from BSC as opposed to being a Guaranteed Maximum Price. On the whole the **tie** Carlisle offer was £241.8m vs. BSC's offer of £333.9m, plus our view of £40.0m additional delay risk (£373.9m).
- Vehicles (CAF) and Design Post Novation (SDS) CAF ( $\pm 60.8$ m) including storage costs from BSC & SDS ( $\pm 15.9$ m) as per revised proposal date 12/09/10. These BSC and CAF figures were included in the BSC Carlisle original offer.
- Total New Procurement (£112.9m) splits the tie QS view across the on-street sections from Haymarket to St Andrews Square; St Andrews Square to FOTW; FOTW through to Newhaven. In addition to the tie view, a further £9m has been allowed for systems costs from HYM to Waverley Bridge (these costs were excluded from the BSC offer). This view also allows for an additional £30.0m for market uncertainties in procurement and subsequent retained risk. As per the tie view (£20.0m), the final amount would be an output from a formal QRA.

# Terminate & Reprocure Now - win litigation (F)

Completion dates again assume that Airport to Haymarket will be Dec-12. With a 'T' scenario this could be optimistic. Subsequent completion dates are St Andrews Square (Dec-13), FOTW (Dec-15), Newhaven (Dec-17).

- Entitlement for work done (BB+S) and Certified to Date (BB+S) are derived from the latest VOWD calculations by Dennis Murray and Certificate (£86.5m and £118.4m per this version).
- **Bond Call (BB+S)** assumes that we call the bonds in-line with the procedures required (-£25m). Bonds are against ANZ and Deutsche bank (Both London based). We need to decide whether or not to write to the bondsman to change our signatory authorities before calling the bonds.
- Interim works during Reprocure (£20.0m) This is a ballpark number which will require some revisiting. This figure assumes that it its legal, honest and decent to engage with existing sub-contracts to continue and complete some essential works, and that CEC are happy with exposure (i.e. we are not going to cancel the project). We (tie/CEC) assume there will be works which it will be good value

for money to complete just now (especially at Depot and other bits off-street) between termination and new procurement. This should be a key consideration when we are looking at the 9-month spend profile after 'T'.

- Reinstate/remedial during Reprocure (£3.0m) £3.0m is a ballpark figure. This number can be firmed-up by CEC/tie following a walk through of the site, with the aim of highlighting the scope of re-instatement works required. It will also be important to look at the costs/ benefit balance of re-instatement and then further works if the Tram is definitely going to proceed in certain areas.
- New Procurement Costs (£255.0m). This is a high level view at the moment. The figure will require to be verified with some detailed engineering and commercial input. The costs are dependent upon final design, packaging, public sector risk, phasing/programme and market conditions. This figure is calculated as: Carlisle tie price (£241.8m); + Carlisle new procurement (+£93.9m); Value of work done by BSC to date (-£86.5m); +Assumed value of work done between term and new procurement (+£20m); + Value of work done by BSC not of value to new contractors £25m (c 25%). Note: this £25m may be avoidable to an extent by tie /CEC agreeing with the incoming contractors to take all of the risk on pre-existing structures.
- Vehicles Lease/ Sale recoveries (-£10.5m) This view assumes that our best option is to take CAF contract back in-house and then lease surplus vehicles (with maintenance). Those Trams that we don't need for the Airport to SAS (10 of) for 10 yrs at a yield of 7.5% pa: i.e. £150k per tram per year for 7 years. This also assumes that we take the trams back after 7 years to operate the full Ph1a service line to Newhaven. Note: Pricing is subject to proper professional advice and negotiation. The Option to sell the Trams is also a possibility. Both options would need TS's endorsement to proceed.
- Redesign (£15m) assumes that we have a full redesign. This is a high-side estimate, but it would be another figure which would be useful to have verification / commercial input.
- **Risk allowance on new procurement** (£25.0m). This is an allowance for market uncertainties in procurement and subsequent retained risk. The allowance would be very sensitive to any VE of final design. The final figure would be an output from a formal QRA. This is a block figure, with little science it may be useful to have an external opinion on market rates although final design and VE will not be known at the time of decision making.
- Securing sites (£2.0m). This is a block allowance figure for security on sites.
- Our litigation and professional fees (£30.0m). This figure is as intimated by A Fitchie to SMcG and his view of circa 6 lawyers in preparation of 2 years litigation of costs to our account.
- Third Party termination costs (£10.0m) are those costs which we could be due to third parties as a result of terminating the contract (and wouldn't get any contribution for).
- **Project costs & project costs Post termination** (£94.2m) split by Project costs (£72.7m) and post termination (£21.5m). There is a full breakdown of this view on SMcG's sheet. This number will not be firmed up until we have a clear PM profile verified by the senior team.
- Recovery 75% of Costs from BSC (-£88.8m). This takes the view that we will recover costs from BSC for the difference between our AFC (Option3C and the final cost). i.e. The difference between gross outturn costs under this option and the gross outturn costs under the Pitchfork option @ 75% assumed recovery rate (£758.3m-£639.9m= -£118.4mx75% = -£88.8m. Note: This estimate should be reviewed by those with a knowledge and experience of litigation outcomes.

### Lose litigation (G)

All lose litigation construction end-dates are identical to those of the 'win scenario'. The key

differences to note to the 'win view' is that this scenario assumes that we pay for BSC loss of profits, BSC litigation costs, and that we don't recover the incremental cost of the breach of contract from BSC.

- **BSC loss of profits** (£35.0m). This figure is a basic calculation of £200mx17.5% profit. The number is fairly unscientific. It may be worth getting a commercial opinion on whether or not this is in the right ballpark/ a reasonable view to take.
- **BSC litigation costs** (£30.0m). The view assumes that BSC's litigation costs are taken by **tie** and are of the same magnitude as the costs estimated per our legal advisors high level view.
- Recovery (£nil). No recovery from BSC is tie lose litigation.

## Settle out of court (H)

The settle out of court option assumes the same completion dates as 'win'. Key cost differences of the 'settle' versus 'win' and 'lose' scenarios are that there is an assumed 'settlement premium' with BSC here. Settling out of court would drive little or no legal litigation costs (the settlement premium would include the legal element of this cost). Although there is assumed to be no 'loss of profits' payment in this scenario, BSC would look for some of the 'premium' to cover an element of their 'lost profit'.

- **Settlement Premium** (£35.0m). This is a highly uncertain figure, and a plug view of what BSC would walk away for. The assumption made is that BSC would want the bond call back plus something further for their trouble. This figure is particularly hard to prove from a VFM perspective, except against additional costs which we might avoid (uncertain litigation, protracted uncertainty as to financial outcome). This is a figure which we should consider closely – what do we think a VFM settlement figure might be when taking account of the risk factors of other options available? BSC will no doubt be taking their view on their/ our risk at key decision points.

# Terminate & Postpone - Reprocure after winning Litigation (J)

The option to Terminate and Postpone carries on with the majority of the 'Terminate and reprocure' option assumptions. Key to note are that mothballing the project for two years moves any completion dates as follows: to Haymarket (Dec-14); St Andrews Square (Dec-15); FOTW (Dec-17); Newhaven (Dec-19). Postponing the project for a couple of years would result in more comprehensive re-instatement and remedial works, and the risk of an additional indexed cost of completing the job in the future (as opposed to now). Furthermore, some additional project management costs might be incurred due to the stretched timeline (plan to mitigate).

- Reinstate materials during reprocure (£10.0m). This is a plugged figure, but if we assume that nothing will take place until mitigation, then it is assumed that we will incur more cost to re-instate. It might be worthwhile getting an engineering view on this if mothballing the project is a viable option.
- New procurement costs (£317.0m). This option assumes that the £20m interim works and £255m for new procurement are delayed. It is assumed that the indexation cost is 7.5% per annum for two years (£275.0m x 1.1556 = £317.0m).
- Vehicles sale/ recoveries (-£13.5m). The increment from 'reprocure now' (-£3.5m) is for an additional 2 year lease income for the planned 10 trams to lease out. This also assumes that 17

trams do nothing for a considerable period of time (the delay period).

- **Risk allowance on new procurement** (£29.0m). This is an allowance for market uncertainties in procurement and subsequent retained risk. The allowance would be very sensitive to any VE resulting from the final design. This figure may be worthwhile revisiting in some more detail if this is taken to be a viable option. This figure is derived from the £25.0m 'reprocure now' figure, indexed for two years.
- **Project costs post termination** (£26.5m). This option assumes an additional two years of prolongation and escalation costs. The increment is £5.0m on the 'post termination' costs for 'reprocure now' and is a ballpark figure.
- Recovery 75% of Costs from BSC (-£88.8m). The assumption is that this figure is identical to that which we would incur for continuing now. This presumes that in court BSC could not be held liable for CEC's decision to wait for two years before re-starting the project. i.e. CEC take the cost of money to their account.

## Cancel after losing litigation (K)

This option is self explanatory, with no project completion dates assumed. Key points to note are that it is assumed that **tie**/ CEC would take all legal costs and BSC lost profit is to our account. There is also the additional political risk for CEC of the Scottish government getting no asset after spending almost all of the agreed funding. The big uncertain numbers here would again relate to the BSC claim and the costs of reinstatement.

- Reinstatement following cancellation (£40.0m). This is a plugged figure. If this really was an option, then much more science would be required. The £40m would be to get the city back into the condition and could cover big ticket items such as pulling down bridges over Network Rail and reinstatement of the guided busway etc.