

Gourock – Dunoon Ferry Service Future Contract

Allocation of common costs

1. The 2009 EC Decision includes the provision that:

“the winning bidder will be allowed to provide an unrestricted commercial vehicle transport service, subject to appropriate accountancy measures and audit monitoring to prevent cross subsidisation from the passenger service to the commercial vehicle service”¹; and that

“this tender for a passenger-only public service contract for the Gourock-Dunoon route includes clear provisions for avoiding over compensation and explicit safeguards against anti-competitive behaviour and cross-subsidisation, including the obligation to consult publicly interested parties on major changes to the public service remit. A formal requirement for a separation of accounts and appropriate provisions for cost allocation are also required.”²

2. Almost all the costs associated with a future vehicle-passenger service are common costs – that is, they will be shared by the 2 portions of the service. The main common costs are³:

- Vessel costs (including charter, insurance and maintenance)
- Staffing costs (crew, shoreside and admin)
- Fuel
- Berthing dues

3. Responsibility for setting out “clear provisions for avoiding over compensation and explicit safeguards against anti-competitive behaviour and cross-subsidisation” and “appropriate provisions for cost allocation” rests with the Scottish Ministers.

Methodologies explored

4. Exchanges between Transport Scotland and European Commission officials have explored potential options for a cost allocation methodology based on:

- Incremental costs (from the MVA study)
- Available capacity
- Revenue
- Passenger numbers

¹ EC Decision paragraph 153

² EC Decision paragraph 309

³ See MVA Report table 4.2. The one significant cost that is not a common cost is pier dues as these are paid to the harbour authorities per person and per vehicle and the costs can be allocated to the passenger or vehicle portion accordingly. Dues paid per driver and vehicle passenger would be allocated to the vehicle portion as only foot passengers can be subsidised as through the contract for a “passenger service”.

5. Two versions of the 'Revenue' methodology have been looked at – the only difference is that one version only considered revenue from users whereas the other includes revenue received as grant from Transport Scotland for the carriage of foot passengers.

6. Details on each of these methodologies is included in an Annex to this paper. In summary, based on the cost and revenue information in the MVA report⁴ and the forecast market share of 56%, the 5 models would produce the following percentage allocations of common costs:

| Methodology | Passenger portion | Vehicle portion |
|-------------------------|--------------------------|------------------------|
| Incremental cost | 63% | 37% |
| Available capacity | 72% | 28% |
| Revenue (users only) | 17% | 83% |
| Revenue (users + grant) | 47% | 53% |
| Passenger numbers | 33% | 67% |

7. The impact on the total costs of the vehicle portion of the service is set out below, again assuming scenario 2. In all cases the revenues (for the 15 year period of the study) are those set out in the MVA report:

- Foot passenger revenue (users) - £12,848,000
- Foot passenger revenue (grant) - £44,795,000
- Vehicle/passenger revenue - £64,074,000
- Total costs - £109,950,000
- Of which common costs - £88,198,000

8. The second and third columns in the table below show the costs allocated to the vehicle portion of the service, assuming 56% market share, and how this compares to the forecast vehicle portion revenue. The fourth and fifth columns show the market share that the vehicle portion would need to achieve in order to cover its costs.

| Methodology | Costs (£000s) | Costs vs revenue (£000s) | Market share breakeven | Costs at breakeven point (£000s) |
|-------------------------|---------------|--------------------------|------------------------|----------------------------------|
| Incremental cost | 55,298 | - 8,776 | 42% | 47,796 |
| Available capacity | 51,217 | - 12,857 | 35% | 35,963 |
| Revenue (users) | 93,107 | + 29,033 | 113% | 129,454 |
| Revenue (users + grant) | 69,894 | + 5,820 | 74% | 84,731 |
| Passenger numbers | 80,496 | + 16,422 | 97% | 110,750 |

⁴ Tables 7.10 and 7.11; Scenario 2 – 'Gradual Recovery'

9. Neither the 'Revenue' nor 'Passenger numbers' methodologies would enable a commercially viable vehicle ferry operation on the town centre route. These methodologies allocate a rising share of the common costs to the vehicle portion as the vehicle portion's share of the service increases. It takes a very high market share for the additional revenues to cover the additional costs.

10. If costs were to change from those used by the MVA study then this would affect the figures set out above. For all the methodologies, reduced costs would increase the potential commercial viability of a vehicle-carrying service.

11. The "available capacity" or "incremental costs" methodologies use a clear and consistent measure which is necessary to meet the Commission's requirement that *"all bidders are bidding on the same basis, and ... all bidders are able to fully grasp their obligations with regard to a vehicle service, in terms of cost allocation..."*. However, the main weakness of these approaches is the limited connection between the cost allocated to each portion and the forecast or actual usage of each portion.

12. This connection is integral to the 'Revenue' and 'Passenger number' methodologies but these approaches would be more difficult to manage in practice. Any change in the balance of usage between foot passengers and vehicle users would impact on the costs of both the subsidised and unsubsidised portions, requiring the operator and Transport Scotland to regularly review the cost allocation and the subsidy requirement.

Views of the European Commission

13. It has not been possible to agree a way forward with the Commission, but discussions have provided an indication of their concerns how they might approach a future complaint on this issue. In particular the EC have noted that:

- they have "strong reservations"⁵ about the 'Available Capacity' methodology in use by Cowal Ferries during the period of the Commission's investigation at the end of which the EC concluded that *"there are no clear provisions for avoiding over compensation, no explicit safeguards against anti-competitive behaviour or cross-subsidisation and no formal requirement for the separation of accounts or provisions for cost allocation"*⁶.
- *"the cost allocation methodology... should clearly specify the basis on which each common cost is to be shared between the vehicle and passenger elements"*⁷.
- the 'Available Capacity' and 'Incremental Costs' methodologies *"do not seem to exclude the possibility of cross-subsidisation, since the only effective control on the operator's behaviour (and crucially on the pricing policy for the vehicle element) would be the necessity to cover the costs of the vehicle service by vehicle revenue. After those costs are covered, there seemingly be no*

⁵ Letter 2 September 2014

⁶ EC Decision paragraph 307

⁷ Letter 2 September 2014

disincentive to the operator competing for a large proportion or all of the vehicle traffic market using a cross-subsidy from the passenger service”⁸.

- The ‘Revenue’ and ‘Passenger Numbers’ methodologies “*provide some control against a vehicle pricing policy employing a cross-subsidy from the passenger service*” and “*set a de facto minimum price that the operator can charge for the carriage of vehicles*”⁹.

Next steps

14. This will need further work ahead of the next procurement exercise. The methodologies favoured by the Commission would be likely to rule out a commercial vehicle-carrying service based on the assumptions and estimates included in the MVA report. Our preferred approach – the incremental cost methodology – has some limitations and does not in its current form find favour with the Commission. It could potentially be developed to address the issues identified, or alternative methodologies can be considered.

Transport Scotland
April 2015

⁸ Letter 12 February 2015

⁹ Letter 12 February 2015

Cost Allocation Methodologies

The incremental approach

1. The incremental approach used by MVA for their study and report identifies the costs of providing a (contracted and subsidised) passenger-only service and the additional costs of providing a (commercial and unsubsidised) vehicle-carrying service utilising the same vessels, crew, fuel, harbours etc. The same approach could be used as the basis for a cost allocation methodology.

2. We have developed an approach based on the MVA report but aggregating cost items to produce a more simplistic model. The cost allocations in this model are:

| Common cost | Passenger portion | Vehicle portion |
|--------------------------------|--------------------------|------------------------|
| Vessels | 54% | 46% |
| Crew | 97.5% | 2.5% |
| Berthing dues | 44% | 56% |
| Staff costs and management fee | 100% | 0 |
| Fuel | 74% | 26% |
| Overall | 67% | 33% |

The incremental cost approach lends itself to the allocation of common costs being:

- Fact-based
- Simple to apply
- Transparent
- Straightforward to monitor and control

3. Potential bidders would be able to calculate – based on their own assumptions and evidence on costs – how these common costs would be allocated and therefore what impact this would have on the costs of the passenger portion. The common cost allocations could not be manipulated in the event that the vehicle-carrying service does not meet its revenue or cost expectations. This ensures that a loss-making vehicle service cannot be cross-subsidised by the passenger service – and in any event, as the level of passenger subsidy will have been fixed through a competitive tendering exercise, there would be no “spare” subsidy with which to do this.

4. There are however some limitations to this approach:

- The figures used by MVA do not represent how, in practice, certain cost items would be “used” by foot passenger and vehicle users. For example, the MVA report estimated that vehicle drivers/passengers would account for around 2/3 of the total passenger numbers but under this cost allocation methodology:

- 2.5% of crew costs would be allocated to the vehicle service and 97.5% to the foot passenger service;
- 100% of 'staff costs and overheads' and 'management fees' would be allocated to the foot passenger service.

This creates a “free-rider” problem and does not reflect the reality of what (for example) crew would actually be doing.

- It does not fully address the requirement in the EC Decision for “*safeguards against anti-competitive behaviour and cross-subsidisation*” as (like the ‘available capacity’ model, see below) it “fixes” the costs allocated between the passenger and vehicle portions and, therefore, once those costs are covered, there is no financial constraint¹⁰ on the operator using reduced vehicle fares to pursue a very large share of the market which would undermine the viability of the current Western Ferries vehicle ferry service. As the cost allocations are fixed, even if the operator took 100% of the market they would still be contractually entitled to c.£3m pa in public subsidy, at which point it would be hard to argue that the vehicle portion was not being cross-subsidised by the passenger portion.

Available capacity

5. This methodology was used by the Cowal Ferries service until June 2011¹¹. It works by:

- Establishing the total passenger-carrying capacity of the service as defined by the vessel’s passenger certification
- Establishing the proportion of this capacity that is available for the carriage of vehicles:
 - the car-carrying capacity is defined by the size of the vehicle deck
 - this is reduced by 5 to allow for one commercial vehicle (CV)
 - each car is assumed to carry an average of 2 people
- the remaining capacity is therefore available to the passenger-carrying portion
- common costs are therefore allocated between the passenger and vehicle portions of the service in accordance with this available capacity.

6. The exact percentage of common costs to be allocated to each service portion would therefore depend on the passenger certification and vehicle-carrying capacity of the new vessels – this will not be known until these vessels are put forward by the successful bidder. However, we can use the assumptions set out in the MVA report to generate a worked example:

¹⁰ Vehicle deck capacity and service frequency would act as a constraint on aggressive competitive behaviour

¹¹ See EC Decision paragraph 41, table 2 for how the costs were allocated between the passenger and vehicle portions of the Cowal Ferries service.

- Passenger capacity of 250
- Car capacity of 40 – adjusted to 35 to allow for one CV
- 35 x 2 persons per car = available capacity for 70 vehicle passengers
- 250 – 70 = available capacity for 180 foot passengers
- Available capacity of 72% for the passenger-carrying portion (180/250)
- Available capacity of 28% for the vehicle-carrying portion (70/250).

7. This approach may not therefore be suitable when new vessels are being considered as the proportion of costs allocated to each portion of the service could be artificially increased or decreased by the operator raising or lowering the passenger certification. In addition, it is now common practice for ferry services to have more than one passenger certification reflecting e.g. seasonal variations which enable operators to crew vessels more efficiently. This would complicate the calculation of common costs (though not an insurmountable obstacle).

Revenue

8. This approach, and the ‘passenger numbers’ methodology below, are based on the principle that common costs should be allocated in line with demand. Demand would be represented either by revenue or by passenger numbers. This would work as follows:

- The operator would forecast numbers of foot passengers, vehicles and vehicle passengers – something they would be doing in any case for their bid and their own assessment of the viability of a vehicle-carrying service;
- The operator would then allocate common costs to reflect the revenue split between the foot passenger and vehicle portions;
- There would need to be an annual reconciliation to confirm the actual carryings and an adjustment made to the cost allocation.

9. As the relative costs of each portion of the service could vary over time, this would have implications for the costs of the subsidised as well as the non-subsidised portion:

- If the balance of revenue moved towards the passenger service then the costs for providing the contracted service would increase and the operator would have a reasonable expectation that these cost increases would be eligible for additional subsidy. This would require a much more flexible contract than is at present in place or the service and would risk overpayment and potential cross-subsidy.
- If the balance of revenue moved towards the vehicle service then the costs of the vehicle-carrying portion would rise. This could affect the viability of the vehicle service, even if it had performed to plan.

10. We have used the revenue estimates from tables 7.10 and 7.11 of the MVA report to calculate that the common costs would be allocated:

- 17% to the passenger portion
- 83% to the vehicle portion

11. This reflects the facts that 2/3 of the passengers are forecast to arrive in vehicles and the revenue per vehicle is also much higher than the revenue per passenger.

12. This is based solely on revenue earned from users. However, if the subsidy grant is included in the foot passenger revenue (a rational approach) then this leads to a different allocation of common costs:

- 47% to the passenger portion
- 53% to the vehicle portion

13. Assuming 56% market share, this methodology would not enable a vehicle carrying service to cover its share of the common costs (on the basis of the figures contained in the MVA report).

Passenger numbers

14. By linking the allocation of common costs to the split between numbers of passengers arriving on foot or by vehicle, this methodology has some similarities in principle to the “available capacity” methodology but in this case it is based on actual rather than potential use of the vessels.

15. In application it has similarities to the “revenue” methodology above:

- The operator would plan on the basis of forecast passenger numbers arriving by foot and in vehicles;
- The allocation of common costs would reflect the numerical split between foot and vehicle passengers.

16. We can use the assumptions on passenger numbers estimated as part of the MVA study to generate a worked example. This uses extrapolations from Table 5.1:

| | Passenger portion | Vehicle portion | Total |
|-------------------|-------------------|-----------------|-----------|
| Passenger numbers | 372,182 | 744,058 | 1,116,240 |
| Percentage | 33% | 67% | 100% |

17. This methodology is arguably simpler to monitor than the “revenue” methodology as passenger numbers can be independently verified by reference to harbour authority records whereas revenue splits can only be provided by the operator itself (and are therefore potentially at risk of manipulation).

18. Allocating 67% of the common costs to the vehicle portion – assuming a 56% market share – does not allow the vehicle portion to cover its costs.