The Gourock-Dunoon question, EU Article 82 and its implications for Scottish ferry services

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Abstract

The Gourock-Dunoon question can be summarised as; how can fair competition and the public interest be pursued and preserved on ferry services between Gourock and Dunoon? It is a simple question but complicated by the existence of two operators on the route, one private and the other publicly owned. The paper draws on this example to argue that the Scottish government policy of self-funding Scottish port authorities runs the danger of possible breaches of EU Article 82 and that this could impact adversely on other ferry services in Scotland. The paper proposes solutions that could help alleviate these dangers.

I Introduction and background

A story, quite possibly apocryphal, is attributed to Benjamin Disraeli who reportedly claimed that only three people had ever understood the Schleswig-Holstein question. One was dead, one was a professor who had gone mad, and the third was Disraeli himself who had quite forgotten the answer (Rowley-Conwy, 2006).

The “Gourock-Dunoon question” has pursued and frustrated a series of transport ministers for coming up to four decades. As far as is known, no-one has forgotten the answer or taken it to the grave with them. As to the mental state of this professor, I can only refer readers to the succession of transport ministers who received my submissions on this matter politely and patiently. They are in a much better position to judge that issue than I am.

The basic Gourock-Dunoon question can be expressed as; how can fair competition and the public interest be pursued and preserved on ferry services between Gourock and Dunoon?

It is a question that can be phrased simply, but the issues surrounding it are far more complex and have wider significance for the whole Scottish ferry network. We also need to consider why the problem may be important and relevant in the present context. That consideration falls into two parts: economic significance, and significance in the context of the financing of the Scottish ferry services. We discuss these issues below.

However, I also have four other analyses of Scottish ferry policy in general and Gourock-Dunoon in particular previously published in this Commentary (Kay, 1999, 2009, 2010, 2011). All are available online so I will avoid trampling over old ground as far as possible though most of the arguments in these analyses are still as fresh today as when the articles were published.

I note in passing that I argued in invited evidence to the Scottish Parliament in 2005 that it would be possible to run Scottish ferry services as state owned services (and without the need for tendering) as long as they complied with EU law under the Altmark conditions (see Kay, 2009 and 2010).

However, the then Scottish Executive rejected these arguments on the basis of civil servant advice insisting that the Altmark criteria were not applicable to ferry services in Scotland.

The tendering process went ahead and in May 2008 the European Commission announced an investigation into alleged State aid for Scottish ferry services on the basis that it turns out Altmark *was* applicable to Scottish ferry services – which, as I say, I had identified as an escape route from tendering but which the Scottish Executive's civil servants had denied existed. In fact, the then European Transport Commissioner Jacques Barrot had already confirmed in 2007 that Altmark was indeed applicable to Scottish ferry services (Ross, 2015).

More recently, reports suggest the Teckal exemption (BBC News, 2017) may mean that the CalMac network and other routes such as Gourock-Dunoon may be considered for provision by an in-house operator without the needs to tender. It is also clear EU State aid and competition rules will still apply here, and we discuss below some of the devils hiding in the detail.

The 2005-08 Altmark saga and its effects have been summarised by Ross (2015). Whether the then Scottish Executive in 2005 could have fashioned an alternative to tendering under Altmark is a moot point – it would have required a commitment on the part of those in charge, and a willingness and ability to leverage and work with external competences not available to them in-house.

These issues still have relevance today, both in terms of substance but also in terms of process. There are echoes of the Altmark debate and outcome in the submissions I have made to Transport Scotland and the Scottish government on the issues below for more than three years. We shall start by looking at the economic significance of the Gourock-Dunoon route in the Scottish context

II The economic significance of Gourock-Dunoon

Gourock and Dunoon are two communities on the Firth of Clyde about 5 miles apart and with populations of about 11,000 and 13,000 respectively. They are connected by two ferry services. One is a subsidised town-centre to town-centre foot passenger service operated by Argyll Ferries, a subsidiary of publicly owned David MacBrayne. The other is a vehicle-carrying service operated by private operator Western Ferries. It is generally recognised and accepted by interested parties that any future vehicle-carrying service on the town-centre to town-centre route would have to be unsubsidised given the proximity of the private operator Western Ferries

Gourock and Dunoon have importance as local centres in their own right, but their real significance lies in the wider geographical context in which they are set. In that respect they can be viewed as the mirror image of South Queensferry and North Queensferry on the Firth of Forth. The two Queensferry communities served as crucial ferry hubs for road traffic up and down the east coast of Scotland until the completion of the Forth Road Bridge in 1964. The Gourock-Dunoon ferries today play strategic and economic roles similar to those of the road and rail bridges on the Firth of Forth, though of course the Clyde has lesser population densities to the north compared to the Forth.

This importance is reflected in Scottish transport statistics. The private operator on the Gourock-Dunoon route (Western Ferries) was the busiest in Scotland in terms of passengers and vehicles in 2014 when it carried 1,347,200 passengers, 590,000 cars and 37,900 commercial vehicles and buses (Transport Scotland, 2015, p145). In that same year, Caledonian MacBrayne had 46 per cent and Western Ferries 24 per cent of vehicle carryings nationwide in Scotland. Western's share of national traffic was fully attributable to its carryings on the Gourock-Dunoon route alone (Transport Scotland, 2015, p144).

The question we now turn to is; why is Gourock-Dunoon also significant in the current context? The roots of what is turning out to be a present-day twist on the Gourock-Dunoon problem were laid in August 2012 when it was revealed that Transport Scotland had identified five routes in Scotland which could be considered for separate tender (in some quarters this was argued to be a step towards privatisation). Four of these routes were used by CalMac: Ardrossan to Brodick, Wemyss Bay to Rothesay, Oban to Craignure, and Largs to Cumbrae. These four routes (and in turn the harbours served) consistently figure in Scottish Transport Statistics as high frequency traffic and collectively they represent a substantial proportion of the CalMac network whether measured by revenue or volume of traffic. State-owned Caledonian Maritime Assets Ltd (CMAL) owns the Oban, Brodick, Wemyss Bay, Largs and Cumbrae harbours. Argyll and Bute Council own the Rothesay and Craignure harbours. Ardrossan harbour is owned by Clydeport. When the plans to open up the bundle and tender these routes separately were made public in 2012 there were threats of strike action alleging lack of assurances on pensions and working conditions (Daily Record, 2012)

It is not clear why Transport Scotland had intended to tender some frequently used CalMac services individually at this point, but the European Commission certainly in its various investigations of Scottish ferry services down the years has consistently made it clear that these services had to be administered in ways that were consistent with EU State aid and competition rules, and the Commission also made clear they saw competitive tendering as the normal mechanism to achieve this. The Commission had also made clear (including in their 2008 State aid investigation) that bundling of routes as in the CalMac tender could run the danger of concealing anti-competitive and discriminatory behaviour.

"… some interested parties are of the view that the bundling of all routes, with the exception of the route between Gourock and Dunoon, unduly and significantly restrained competition during the tender … The Commission will need to assess the impact of the bundling on the tender procedure; if it were to conclude that such bundling was not justifiable, then the Commission would consider that the contract has not been awarded through a really open and non-discriminatory public procurement procedure." (CEC 2008, para 11)

At the same time, various Scottish administrations down the years had emphasised their preference, and in some cases their intentions, to keep CalMac and its services under public ownership. But the problem for each successive Scottish administration over the past 17 years is that you cannot guarantee continued public ownership of these services in perpetuity under fairly conducted competitive tendering. It is simply not possible to square that circle.

A few months after the public announcement of Transport Scotland's plans for tendering selected routes separately, a new CMAL system of port charges were introduced in April 2013. As we note below, this has major implications for the current financing and governance debate in the context of EU State aid and competition rules.

III The CMAL pricing system

In December 2012, Transport Scotland published the Scottish Government's Scottish Ferry Services: Ferries Plan (2013-2022) outlining its intentions over the next the next twenty years. It included looking at self-funding for harbour authorities such that:

"Self-funding would require each harbour authority (whether CMAL, independent harbour trusts, local authorities or private ports) to plan their forward investment and ensure that harbour dues (for all users, not just ferry operators) were set at a level that enabled funds for planned capital works to be built up and/or for loans for such works to be paid off" (Transport Scotland, 2012, p.11).

From 1st April 2013, CMAL abandoned the pier dues discount scheme for frequent users and moved to a non-negotiable scheme in which the pier dues were directly proportionate to the usage of a pier. The result was that the charges are more closely related to the fare box revenues of the ferry operator than they are to the costs of providing services of the port operator and was consistent with CMAL's Strategic Plan 2012-2022 (CMAL 2012) which had the ambition of "making ports and harbours self-funding"[1]. This was followed by another strategic plan (CMAL 2014) which did not mention self-funding as such but makes clear that CMAL was following the investment priorities set out in the Transport Scotland (2012) ferry plan - which of course was based around self-funding.

In principle, self-funding can sound an innocuous and reasonable proposition. However, as I have argued in a series of communications to CMAL and Transport Scotland since November 2013, there are sound reasons to argue that self-funding a harbour authorities network can almost inevitably lead to breaches of EU Article 82. The problem breaks down into two parts, harbour authority port revenue and harbour authority port costs. We can demonstrate this with a simple illustrative case.

An illustrative case

Suppose we have a harbour authority with a small network of four ports, A, B, C and D each serving separate markets. The four ports each cost the harbour authority £1 million pounds a year to operate and maintain. All the ports are used by similar vehicle-carrying ferries and the same network-wide charge is payable each time a vessel arrives at any of the four ports. A, B and C ports all have the same amount of usage by ferries over the course of a year, but Port D is used five times more frequently than any one of the other ports. You adjust the network charge until the network is self-financing. What revenue will you get from each of the ports?

The answer is £500,000 revenue for each of ports A, B and C, and £2.5million for Port D. The network-wide revenue of £4million is just enough to cover the network-wide costs of £4 million[2]. Port A, B, and Cs' losses are cross-subsidised by Port Ds high frequency, high revenue – and highly profitable - business. In fact, Port D's gross profit margin is 150%.

Established EU case law suggests that the starting point from the perspective of the application of EU Article 82 would be to look at Port D as a business in its own right. Two 2004 cases CEC (2004a and b) looked at the issue of whether a port authority was indulging in unfair pricing practices under Article 82 of the EC Treaty which prohibits the abuse by one or more undertakings of a dominant position within the common market or in substantial part

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[1] *Both strategic plans were originally publicly available on the internet. But as of February 17th 2017 there was no mention of them on the CMAL website publications page. The section titled "Corporate Plan and Strategic Plan" just has a 3-year corporate plan which does not mention self-funding. Both strategic plans are available from me on request.*

[2] *In practice, the port authority would likely be allowed to make a "reasonable profit" over and above covering its costs.*

of it. "Abuse" would amount to "directly or indirectly imposing unfair purchase or selling prices or unfair trading conditions".

It was determined that the relevant market was the market for the provision of port services and facilities in the specific port transporting passengers and/or vehicles on the route in question (CEC 2004a)

Further, the cases based their definition of what could constitute excessive or unfair pricing on a European Court of Justice ruling which judged that the amount of excess could be determined by looking at the profit margin resulting from the difference between the selling price of the product in question and its cost of production.

The Court also determined that whether a price charged was both excessive and unfair could be determined by looking whether the charge imposed was either unfair in itself or when compared to competing products.[3]

If we refer back to our illustrative case above, any operator using Port D who wished to argue the case that the charges levied at Port D were both excessive and unfair would start by pointing to a profit margin of 150% being made by the port authority at that port, with the surpluses being used to prop up loss-making businesses at Ports A, B and C.

It could be argued that Ports A, B and C should be maintained and their loss making supported for social reasons and the needs of local communities. That point could be fully conceded by the user of Port D, but the counterargument would be that if there were public interest reasons for maintaining ports A, B and C, then they should be subsidised from the public purse, not cross-subsidised through arguably excessive and unfair charges on a user of Port D in the distinct and separate market served by Port D.

In our illustrative case, highly profitable port activity is used by a self-funding harbour authority to support loss-making ports serving separate markets in the rest of its network. In the next section we look at whether these issues are likely to arise in a real world Scottish context, starting with CMAL.

IV Implications of CMAL's self-funding pricing regime

We consider the likely profit and loss implications of CMAL's self-funding regime by treating each port as serving a separate and distinct market and look at the revenue and cost considerations in turn.

[3] *The Commission issued a short summary by Lamalle et al (2004) on the implications of the rulings.*

First on CMAL's *revenue* side, there are 24 CMAL-owned harbours including Gourock (which is used by Argyll Ferries passenger-only service). However, Gourock alone has more sailings per year than the total sailings for ten of these other CMAL ports (Castlebay, Coll, Colonsay, Kennacraig, Kilchoan, Lochboisdale, Port Ellen, Tarbert, Tiree and Tobermory).[4] Just five of the CMAL ports (Gourock, Colintraive, Cumbrae, Largs, and Rhubodach) account for 61% of the sailings on the network.[5] Clearly some ports would involve larger vessels and so higher access charges per sailings, but equally clearly this serves to illustrate the high degree of skewness in terms of usage at individual CMAL port facilities.[6]

Second, on CMAL's *cost* side, almost all CMAL's costs are fixed costs, there are no significant variable costs attributable to actual usage of their facilities. This reflects CMAL's responsibilities as an asset manager, ferry operations are the operator's responsibility with the operator and its employees typically also responsible for managing sailings at piers. The general principle is that the nature of CMAL's business and its remit means almost all its costs of providing services to users are fixed costs largely unaffected by frequency of sailings of volume of traffic from its ports and harbours, whether schedules are half-hourly, hourly, daily or weekly. This is consistent with what the Commission found in its investigation of port charges under Article 82 in the cases brought by the ferry operators Scandlines and Sundbusserne where it said; "It should be noted that most of the costs of the port are fixed costs and that the variable costs (i.e. costs that would vary with the number of calls by the ferry operators or the number of passengers/vehicles transported on board the ferries) are minor" (CEC, 2004a p.27).

This highly skewed nature of operator economic activity on the network combined with the (mostly) fixed costs of operating ports means that some ports would likely be highly profitable while others would be major loss makers. CMAL's self-financing regime means the latter would be largely financed by the former. This extreme skewness can be argued to be consistent with a prima facie case that the CMAL port pricing formula would almost inevitably lead to the issues under Article 82 as discussed in the previous section. In the next section we look at Gourock-Dunoon as example to see whether that would happen in practice.

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[4] *Harbour access data supplied by CMAL for April 11 to March 2012 and published timetables. The CMAL figures probably somewhat understate the frequency of the Gourock sailings, the more frequent the Argyll Ferries service only started in June 2011*

[5] *Ibid*

[6] *Scottish Transport Statistics indicates a similar pattern of highly skewed volumes in terms of vehicles and passengers carried through individual ports,*

V The Gourock-Dunoon market and CMAL's system of charges

Gourock-Dunoon would be a useful indicative case simply on the basis of its economic importance. In addition, a recent Scottish Government commissioned MVA report (2013) on the route also gives precise measures for port charges that would be imposed for a vehicle-passenger service using CMAL and council facilities, and detailed costs of port operation are available through different sources. It is also subject to separate tender, unlike the two largest tenders (Clyde and Hebrides and Northern Isles) whose routes are bundled.

If excessive/unfair pricing can be argued here, then there are a number of CalMac routes using CMAL harbours which exhibit similar features to Gourock-Dunoon in terms of its being a high frequency and/or high value route. These are the type of routes referred to above that were briefly considered for separate tender by Transport Scotland in 2012.

The MVA report was commissioned to investigate whether a commercial (unsubsidised) vehicle-carrying service could be viable in the Gourock-Dunoon market where it would face competition from the unsubsidised operator, Western Ferries (the latter owns its own ports).

As far as port revenues to the harbour authority are concerned, the MVA report calculated that a frequent (half-hourly) two vessel vehicle-passenger service between Gourock and Dunoon would face annual port charges of about £2m at Gourock and a slightly lower amount at Dunoon (the latter owned by Argyll and Bute Council). However, that last figure has to be regarded as contingent since the Council has since been reviewing its harbour charge system for its extensive network of ports. At the same time, it will be recalled that the Scottish Ferry Plan indicated that it expected self-funding to be adopted by most harbour authorities, including councils.

As far as port costs for the harbour authority are concerned, the Scandlines and Sundbusserne cases (CEC, 2004a and b) cited the United Brands case and noted a number of methodologies in general and with specific reference to EU port charges to assess possible excessive pricing under EU Article 82**.** I used three of these methodologies as alternative ways of assessing the costs to CMAL of running the port of Gourock, drawing on publicly available information, information provided by CMAL, and Freedom of Information requests.

These methodologies produced a range of cost estimates, the highest of which was £650,000 a year. Even if this top end estimate was adopted, it suggested a profit margin of over 200% for CMAL if a frequent vehicle-passenger service was to be reintroduced on the route. The MVA figures suggested that these charges would severely impact on the net revenue stream and adversely affect the commercial risks for any operator wishing to enter this market with a vehicle-carrying service. It could also arguably lead to breaches of Article 82, most obviously in deterring such market entry.

By extension, these same issues should also apply to the high frequency/high value routes on the CalMac network where CMAL and Argyll and Bute Council are the dominant harbour authorities. We would expect that network charges imposed by the harbour authorities self-funding their respective networks would reduce or eliminate the possibility of commercial unsubsidised vehicle carrying on these routes. This in turn might diminish arguments that the CalMac network could be partially unbundled by selecting some routes for separate tender, such as the ones that were briefly considered for these purposes in 2012.

I submitted my analysis in writing to the then Managing Director of CMAL and the leader of Argyll and Bute Council in November 2013, and since then have had meetings with the CMAL MD and his two successors. However, to date these meetings have not led to any satisfactory conclusion. Questions still relate to the object and the effect of harbour authorities self-funding regime under Article 82. As to what its object was, we can grant good intentions and put down any adverse outcomes to unintended consequences. But what matters here are the actual effects.

These effects may be judged potentially severe under Article 82. Interested parties (which can include operators, local businesses and communities) may have grounds for claiming that the general impact of Scottish government's policy of harbour authorities self-funding is to lead to excessive port pricing on popular high value/frequency routes and protect existing Scottish ferry operators by unfairly deterring market entry from other EU operators. The specific operators most obviously at risk of claims of unfair protection are CalMac Ferries, Argyll Ferries and Western Ferries (the latter two on the Gourock-Dunoon route).

It might further be argued that CalMac route-bundling facilitates potential abuse of this nature by reducing the transparency of costs and revenue streams associated with each route market. This is a non-trivial danger given (as noted above) the concerns expressed by the Commission down the years as to the potential market distortion effects of route bundling.

Finally, it should be noted that in the view of some interested parties, the issue of excessive port charges may already have had an impact in deterring potential operators from pursuing an interest in the Gourock-Dunoon route after Expressions of Interest were invited recently by Transport Scotland.

VI Conclusions and possible remedies

Notwithstanding the issues outlined above, there are some straightforward remedies that can – and should - be applied to resolve the issues raised by the Scottish government's policy that port authorities in Scotland self-fund their port networks by way of cross-subsidies and the competition issues these raise under Article 82. These remedies include that:

(1) As a prerequisite, that these issues be recognised at ministerial level of the Scottish Government and that action needs to be taken to resolve them.

(2) The Scottish Government should identify a well-established and generally accepted methodology to assess the cost of operating and maintaining individual ports (including accounting for shared overheads and costs).

(3) The chosen methodology should be adopted to assess the individual costs of ports operated and maintained by those harbour authorities likely to be affected by the above issues.

(4) The results should be made publicly available.

(5) It would still be possible for harbour authorities like CMAL and Argyll and Bute Council to operate a network-wide system of port charges. However, that system should incorporate an annual system of volume-dependent ex ante discounts or ex post rebates to ensure that the port authority makes no more than a reasonable profit at individual ports.

(6) There are likely to be public interest arguments for supporting loss making ports from public funds for social reasons (as in our illustrative case above).

There are two points that should be emphasised about switching from a self-funding port network pricing regime to an 'ex ante discount / ex post rebate' one. First, its adoption may not actually lead to pressure to unbundle high frequency/value routes. Underlying profitability of any of such routes is certainly likely to have been eroded by the rise in costs associated with self-funding regimes, but their profitability is also likely to have been squeezed from the other direction by the imposition of Road Equivalent Tariff (RET) on route revenue streams. However, while it has been argued here that self-funding leads to questionable outcomes under Article 82, RET has been applied to these routes for well-articulated and legitimate social reasons. That being the case, these routes may still be commercially unprofitable even after a fair system of port charges is set up.

Second, the irony is that harbour-authorities' self-funding is unlikely to have any significant net effect on the public purse, either compared to systems past or the one proposed here. The major impact of self-funding is that any increased port revenue to CMAL (and any other port authority) in terms of increased port charges just has to be met in the form of increased subsidy at these ports for CalMac to enable it to continue its scheduled and contracted operations (effectively tapping publicly-owned Peter to pay publicly-owned Paul). Indeed if the potential losses in harbour fees from deterring a potential vehicle service at Gourock-Dunoon are factored in, self-funding could actually lead to a net loss to the public purse.

Finally, I am optimistic in principle that simple solutions compliant with EU law could be applied here and move things forward to a solution to the Gourock-Dunoon question. I am however a realist (based on some years of experience), and in practice we can expect this 'can' to be kicked down the road until the potential problems warned about here become actual problems.

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References

(Note: all online links below were accessible as of 17 February 2017)

BBC News (2017) Scottish ferry services 'could be nationalised', BBC online 2nd February http://www.bbc.com/news/uk-scotland-glasgow-west-38838230)

CEC (2008) State aid C 16/08 (ex NN 35/07 and NN 105/05); Subsidies to *CalMac* and *NorthLink* for maritime transport services in Scotland http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:126:0016:0042:EN:PDF

CEC (2004a) Case COMP/A.36.568/D3, Scandlines Sverige AB v Port of Helsingborg http://ec.europa.eu/competition/antitrust/cases/dec_docs/36568/36568_44_4.pdf

CEC (2004b) Case COMP/A.36.570/D3, Sundbusserne v Port of Helsingborg http://ec.europa.eu/competition/antitrust/cases/dec_docs/36570/36570_39_5.pdf

CMAL (2012) Strategic Plan 2012-2022, Gourock, CMAL.

CMAL (2014) Strategic Plan 2014-2024, Gourock, CMAL.

Daily Record (2012) Ferry workers ballot on possible strike action over services being privatised 1st August (http://www.dailyrecord.co.uk/news/scottish-news/calmac-ferry-workers-could-strike-1200496

Kay, N. M. (1999) Sustainable competition? Ferries and competition on the Clyde. *Fraser of Allander Economic Commentary*, 24 (3). pp. 52-61 (http://strathprints.strath.ac.uk/52624/

Kay N. M. (2009) Scottish Ferry Policy. *Fraser of Allander Economic Commentary* 32 (3) pp. 46-58 (http://www.strath.ac.uk/media/departments/economics/fairse/backissues/Fraser_of_Allander_Economic_Commentary_Vol_32,_No_3[1].pdf

Kay, N. M. (2010) Scottish ferry policy and the Commission decision *Fraser of Allander Economic Commentary* 33 (3) 61-66 (https://pure.strath.ac.uk/portal/files/30699112/FEC_33_3_2010_KayN.pdf

Kay, N. M. (2011) The governance of Scottish ferry services*. Fraser of Allander Economic Commentary*, 35 (1). pp. 46-52. ISSN 2046-5378 (http://strathprints.strath.ac.uk/46850/

Lamalle, M, Lindstrom-Rossi, L., and A. C. Teixeirae (2004) Two important rejection decisions on excessive pricing in the port sector, *Competition Policy Newsletter*, Brussels, European Commission, http://ec.europa.eu/competition/publications/cpn/2004_3_40.pdf

MVA (2013) *Gourock-Dunoon Ferry Service – Feasibility Study of a Future Passenger and Vehicle Service with the Vehicle Portion being non-Subsidised*: Final Report for Transport Scotland, MVA Consultancy.

Ross, D. (2015) Inside Track: Folly of failing to listen to ferry tendering alternatives, *The Herald*, 8th July 2015, see https://www.pressreader.com/uk/the-herald/20150708/281968901355218

Rowley-Conwy, P. (2006). The Concept of Prehistory and the Invention of the Terms Prehistoric' and Prehistorian': the Scandinavian Origin, 1833—1850. *European Journal of Archaeology*, *9*(1), 103-130.

Transport Scotland (2012) *Scottish Ferry Services: Ferries Plan (2013-2022),* Glasgow, Transport Scotland. (http://www.transport.gov.scot/sites/default/files/documents/rrd_reports/uploaded_reports/j254579/j254579.pdf

Transport Scotland (2015) *Scottish Transport Statistics,* National Statistics publication No. 34, Glasgow, Transport Scotland. (http://www.transport.gov.scot/sites/default/files/documents/rrd_reports/uploaded_reports/j415388/j415388.pdf