



FOI - 202300355045

Request to provide

- I am asking for copies of the email correspondence (including attachments) that Transport Scotland has had with CMAL and CalMac Ferries regarding the time charter of the MV Alfred from Pentland Ferries, and any such correspondence between Transport Scotland and Pentland Ferries on the same matter, within the timeframe 1 Jan 2023 – 23 March 2023.

Annex E - Service Model Options paper



MV Alfred

Service Model Options paper

28 February 2023

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1 Purpose and Introduction

- 1.1 To improve service resilience across the CHFS network, CalMac has been asked by Transport Scotland (TS) to explore charter vessel options. Initially, this was MV Pentalina however, Pentland Ferries (PF) have offered MV Alfred instead.
- 1.2 The purpose of this paper is to provide Transport Scotland with further information regarding deployment and cascade options. This paper will also outline any assumptions made in the formation of any conclusions.

2 Background

- 2.1 Predominantly the charter of MV Alfred is for resilience purposes, whilst CalMac are in agreement with the principle of a relief vessel, this was however envisioned to be at a time when new vessels are introduced, and the existing capacity challenges are addressed. Therefore, CalMac are looking to maximise both the resilience and capacity relief benefits across the network with the introduction of MV Pentalina and need to determine potential vessel deployment options throughout the charter of the vessel.
- 2.2 Additional sailing options are being explored to overcome the risks and concerns associated with service operational risk of MV Alfred effectively sitting “tied up” and not being utilised out with periods of disruption.

3 Assumptions

- 3.1 The following assumptions have been made in preparation of the report:
 - MV Alfred has a carrying capacity of 98 PCUs and 230 passengers
 - For the purposes of demand analysis, baseline is pre covid levels
 - Berth fit assessment completed solely on drawings and are subject to berth trials
 - {redacted}
 - As the vessel is ‘single-ended’, a minimum turnaround time of approximately 45 minutes would be needed
 - MV Alfred is unable to operate any existing timetables
 - MV Alfred is appropriately certificated for operations on the CHFS network
 - The vessel owner/operator will be responsible for delivery of the service and maintenance of the vessel
 - No retail offering onboard vessel unlike majority of existing CalMac major fleet
 - MV Alfred will have Dangerous Goods exemptions as per other major vessel in CalMac fleet
 - MV Alfred will be able to ship low flashpoint goods
 - Harbour authorities will support berthing requirements
 - No stakeholder engagement has been carried out to date
- 3.2 If any of these assumptions prove false, the recommendations of this report require to be reassessed.

4 Risks

- 4.1 The following key risks have been identified when considering deployment of MV Pentalina:
 - Vessel design/capability is not optimised to operate to any of the existing ports or delivery any of the existing timetabled services, as such there is no optimal deployment solution. To minimise the impact of this, CalMac will only seek to deploy the vessel on a limited number of routes across the network. However, it should be recognised that timetable and service levels will need to be adapted to accommodate the deployment of this vessel.
 - {redacted} the 4-metre significant wave height with max speed of 17 knots at 1616 tonne displacement restriction stated as operational limits on the vessel’s passenger certificate. However, the service plan recommended seeks to minimise the impact of these limitations



by retaining the current deployment plan and utilising MV Alfred during periods of vessel breakdown/unavailability and to provide additional services on a turn up and go basis.

- The vessel will predominantly be used to provide resilience cover, as such will be deployed on an ad hoc basis, {redacted} However, the proposed deployment plan recommends unbookable turn up and go services, which will ensure the vessel is regularly operated even if not required for resilience purposes.

5 Deployment Recommendation

- 5.1 The vessel has never operated or completed berthing trials on any of CHFS routes. From Berth fit assessment completed on drawings, subject to berthing trials, an assessment of ramp/linkspan interface an overview of ports the vessel can operate to has been prepared (see Appendix 1).
- 5.2 The two key routes the vessel could be deployed on are the Arran and Islay routes (although Islay service could not operate to and from Kennacraig).
- 5.3 Subject to berth availability, the intention would be to base the vessel in Campbeltown, avoiding disruption at already constrained ports. The vessel would be on standby ready to deploy, allowing easy repositioning to either of the two key routes. This would see benefits arising from the opportunity to deploy the vessel directly or relief benefits this brings through the cascade of MVs Caledonian Isles, Isle of Arran or Hebridean Isles.
- 5.4 Direct deployment of MV Alfred and tying up another vessel to be the relief vessel, is not as beneficial. While MV Alfred has greater vehicle carrying capacity to MV Isle of Arran and MV Hebridean Isles and similar to MV Caledonian Isles, the capacity offered would be reduced due to increased turnaround times, passage times and additionally the limitation of operating day. This would likely see a reduction in capacity overall and may also result in resilience challenges.
- 5.5 Deployment options will be revised once berth trials are completed, ramp modifications will be assessed to enhance deployment options and overcome expected ramp restrictions.

6 Service model

6.1 Service Plan – Winter Deployment Options

- 6.1.1 There are limited deployment options for deployment in winter as the Campbeltown service doesn't operate and the Arran service has single vessel service. Therefore, CalMac's recommendation is that the vessel is a resilience vessel and deployed on an as required basis.
- 6.1.2 There may be an opportunity for MV Alfred to provide overhaul cover and this would free up another existing vessel to provide relief. When the vessel is first available, network trials will be completed to ascertain fit at ports. This will ensure we have complete understanding of where the vessel can be deployed to support the network to recover or withstand disruption.
- 6.1.3 Subject to demand it would also be beneficial to deploy MV Alfred to Ardrossan – Brodick during periods of lower utilisation to allow MV Caledonian Isles to complete network trials. This would support future resilience and wider network deployment assessments.
- 6.1.4 Whilst we don't see the demand challenges across the network, there are some unique routes such as Islay where demand is high across the winter period (particularly when single vessel service is operating). As such the provision of an unbookable turn up and go service for Islay, as recommended in summer may be beneficial (See Appendix 2). Appetite for this will be gauged when we undertake consultation with the community.
- 6.1.5 Vessel owners PF require notice if there is a requirement to move the vessel to an alternative route which will impact the speed of redeployment. As such any deployment considerations would be assessed as per normal disruption process, incorporating any lead times.

6.2 Service Plan – Summer deployment options

- 6.2.1 The vessel will primarily be used for resilience purposes and provide relief benefits across the network.



- 6.2.2 As noted previously, due to delays in new vessels being introduced into service there are demand challenges across the network. To overcome the risk associated with public perception of MV Alfred effectively “tied up” and not being utilised out with periods of disruption, options for deployment have been explored:
- Ardrossan (Irish Berth) – Campbeltown – (Thursday – Sunday) freeing up MV Isle of Arran to deliver more Arran services.
 - Campbeltown¹ – Port Askaig – one return per day could be operated on days Campbeltown not being served.
- 6.2.3 Both routes are facing capacity constraints and due to the ambition for MV Alfred to be reserved as a resilience vessel, it won’t be possible to provide support to both communities seven days a week. An assessment of utilisation data suggests Islay is more constrained and as such any additional services should be prioritised for this route (See Appendix 2 for data).
- 6.2.4 The proposed service model for Islay is a freight, turn up and go service. This would be most beneficial to be delivered on Tuesdays, Wednesdays, and Thursdays (see Appendix 3) to alleviate the capacity constraints experienced during the summer season.
- 6.2.5 Engagement with community groups hasn’t been undertaken due to the sensitive commercial discussions ongoing. As such, appetite for travel to Campbeltown rather than Kennacraig has not been carried out. Recognising this would effectively double the passage time with additional onward travel required, a solution may need to be explored to incentivise customers to travel on this route to address the extra travel time and the fact that the sailings would not be guaranteed.
- 6.2.6 There is an alternative option to operate Troon – Port Askaig, however as noted above this would not permit the operation of a return service, only one leg could be provided per day. While Arran has a lower utilisation than Islay this is still constrained as such if this solution wouldn’t work for Islay customers, a turn up and go service may be more attractive and therefore utilised more by Arran freight customers.
- 6.3 Additional capacity provided during the Uig Closure periods
- 6.3.1 TS have requested consideration as to what additional support could be provided during the Uig harbour closure periods, through deployment of MV Alfred or through cascade. Cascade of another vessel may not provide sufficient capacity as operating MV Alfred on Arran route may not be able to maintain the timetable and therefore would be a reduction in service levels. Operating on Islay route as second vessel would also not provide sufficient capacity as the vessel would require operating from Campbeltown limiting service to a single return journey per day.
- 6.3.2 There are limited direct deployment options, options that have been explored are outlined in Appendix 4.
- 6.3.3 If we were to deploy MV Alfred to provide additional support during Uig Harbour closure, Ullapool to Tarbert would be the recommended direct deployment. However, currently the existing service plan to support the closure is meeting demands and we will continue to monitor and review to determine if MV Alfred deployment is required.

7 Conclusion

- 7.1 CalMac continues to welcome and support any new tonnage to the fleet, recognising that there is no optimal solution for the deployment for MV Alfred. It is recommended that primarily the vessel is used for resilience purposes and capacity relief benefits are realised through additional, non-bookable sailings during the summer and potentially winter serving the Islay route.

Troon- Port Askaig, not considered due increased passage time meaning only one leg could be delivered within crew operating day.



- 7.2 During winter periods there is an opportunity to continue to build on the berth fit assessments by carrying out further network trials to establish deployment options and supporting release of MV Caledonian Isles for berthing trials. This would be welcomed by CalMac and allow CalMac to best serve island communities.



8 Appendices

8.1 Appendix 1 – MV Alfred Berth Fit Assessment on Existing Routes

8.1.1 RAG has been used to provide visible status of berth fit/deployment options:

8.1.2 Red indicates vessel unable to operate to existing infrastructure, amber indicates fit is expected but will be constrained and green indicates vessel could be deployed with current ramp configuration.

Route/ RAG	Vessel/ Berth Fit	Details
Ardrossan (Irish Berth) – Brodick	Yes	Ardrossan (IB) and Brodick ramp interface appears unrestricted.
Troon – Brodick	Yes	Troon and Brodick ramp interface appear unrestricted.
Campbeltown – Port Askaig	Yes (Ramp restricted)	Campbeltown and Port Askaig ramp significantly overhangs the linkspan, may be constrained.
Troon – Port Askaig	Yes (Ramp restricted)	Port Askaig ramp significantly overhangs the linkspan, may be constrained.
Oban No.2 – Port Askaig	Yes (Ramp restricted)	Oban deployment discounted on the basis of existing service constraints. Port Askaig ramp significantly overhangs the linkspan
Oban – Craignure	No	Oban deployment discounted on the basis of existing service constraints. No fit at Oban or Craignure.
Stornoway – Ullapool	Yes	Ullapool ramp interface appear unrestricted, Stornoway possible fouls outer linkspan support.
Kennacraig – Port Askaig/ Port Ellen	No	No fit at Kennacraig or Port Ellen. Port Askaig ramp significantly overhangs the linkspan.
Oban – Coll/Tiree	No	Oban deployment discounted on the basis of existing service constraints. No fit at Oban, Coll and Tiree would be restricted to domestic sized vehicles.
Port Askaig – Oban/ Colonsay	No	Oban deployment discounted on the basis of existing service constraints. No fit at Oban or Colonsay. Port Askaig ramp significantly overhangs the linkspan
Oban – Castlebay/ Lochboisdale	No	Oban deployment discounted on the basis of existing service constraints. Oban, Castlebay and Lochboisdale no fit.
Uig – Lochmaddy/ Tarbert	No	No fit at Uig, Lochmaddy and Tarbert would be restricted to domestic sized.
Wemyss Bay – Rothesay	n/a	Berth fit assessment not conducted as no benefit from deploying on this route.



8.2 Appendix 2 - Assessment of Islay V Arran PCU Utilisation

{redacted}

8.3 Appendix 3 – Islay days per week heatmap PCU Utilisation % to demonstrate peak days (weeks 14-43 summer period)

{redacted}



8.4 Appendix 4 – Additional capacity provided during the Uig Closure periods deployment options

- Ullapool – Lochmaddy
 - Overnight berth could not be supported mainland or island based
 - Route is much more exposed than current route, weather performance to be determined.
 - Ramp for Lochmaddy would restrict to domestic sized vehicles
- Ullapool – Stornoway
 - Limited benefit as MV Loch Seaforth and MV Arrow (if chartered for second closure) available to deliver services, MV Loch Seaforth cannot be deployed on any alternative routes
 - Stornoway ramp possibly fouls outer linkspan support
- Tarbert – Lochmaddy
 - Ramp for Lochmaddy and Tarbert would restrict to domestic sized vehicles
 - Would be beneficial if MV Hebrides suffered technical disruption
- Oban – Lochboisdale/ Lochmaddy
 - Due to increase in passage return journey could not be achieved as would exceed crew HoR
 - Oban and Lochboisdale no fit
 - Lochmaddy ramp would restrict to domestic sized vehicles
 - Oban berth availability and marshalling capacity are already constrained. CalMac would not recommend introducing any additional services to Oban to ensure acceptable safety standards are maintained
- Ullapool – Tarbert
 - Berth trials not conducted; desktop study suggests acceptable vessel fit at Ullapool
 - Tarbert ramp would restrict to domestic sized vehicles
 - Vessel would berth overnight at Tarbert
 - May be resilience challenges as route more exposed
 - Reinstatement of Tarbert to mainland service
 - Due to Uig closure arrangements in place, demand expected to be low
 - Onward journey for North Uist would not align