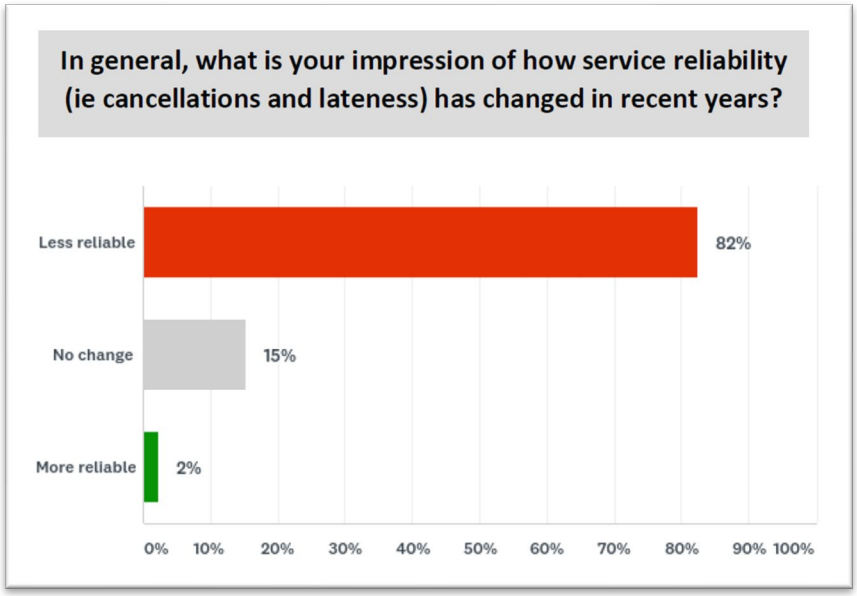
Declining weather reliability of CalMac ferry services

Mull & Iona Ferry Committee

20/02/2023

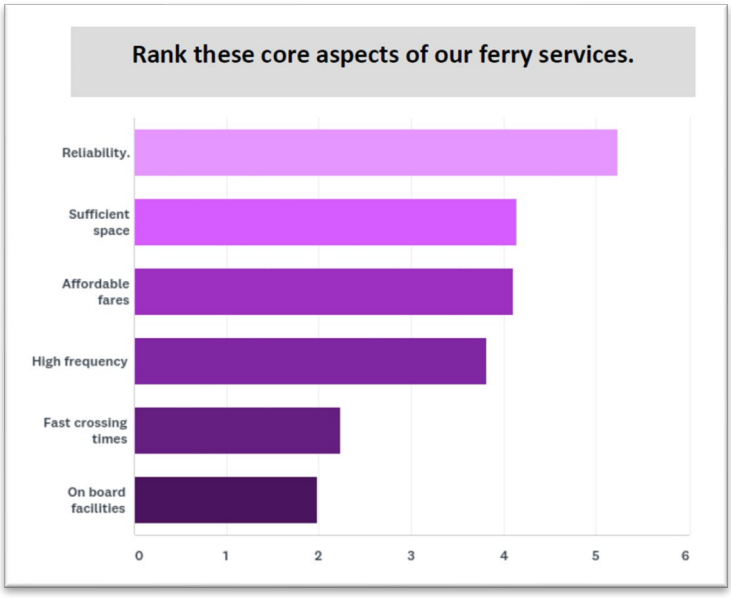
It is widely recognised and commented upon in the Hebrides that CalMac ferry services are becoming less reliable in the winter months. Most people who have lived on our islands for more than 15 years will recognise the decline in reliability over that period.

In 2019 we conducted a users' survey, with 672 respondents from Mull and Iona (around 20% of the entire population). I have attached it to this email as a separate evidence submission, and will reference relevant parts in this and other submissions.



To the right you will see that the overwhelming majority of islanders share that perception that the service is becoming less reliable.

Reliability is also the most important aspect of the service. **Therefore, the aspect of the service that passengers rank as most important is seen to be worsening**. This is alarming to islanders, and it should be very alarming to the operator and to government.



We have attempted to engage CalMac in dialogue around this topic. Robbie Drummond's predecessor as Managing Director responded to us by asserting that the weather was 'getting worse', and that should account for any and all deterioration. He could not offer any **evidence** of chronic weather deterioration however.

Current CalMac management have responded more fully to our contact on this topic, but the response appears to have focussed on a) refuting that there is decline at all; and b) citing external factors as being the cause of any decline – such as tighter regulation, a litigious environment and fear of prosecution on the part of Masters.

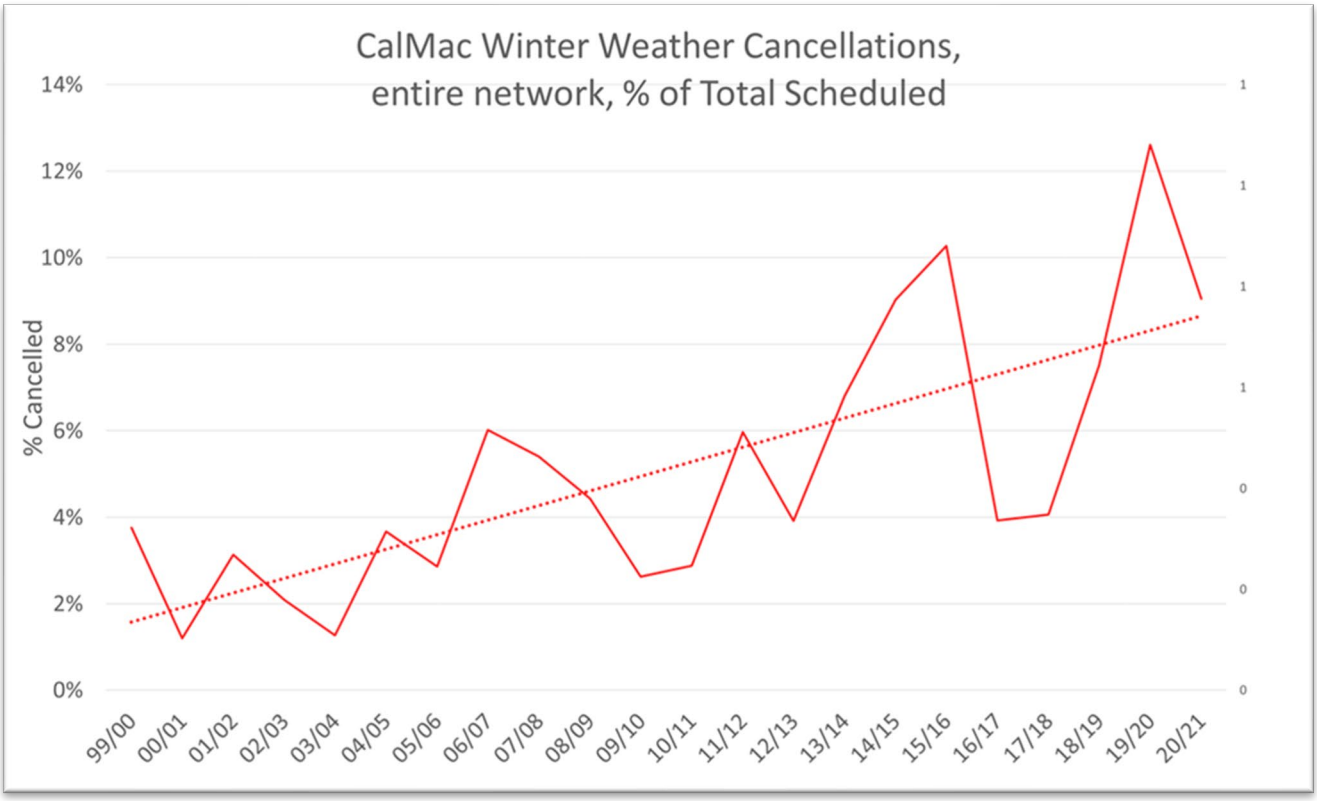
We agree that the causes of declining reliability are very complex, but we do not agree that CalMac management have no agency in it. It is also very frustrating that the company refuse to even acknowledge that the problem exists, and on occasion propagate anecdote that the weather is 'unprecedented', rather than engage on the evidence.

CalMac do not present cancellation statistics in a form that enables the chronic multi-year decline in reliability to be easily seen. The data presented as written evidence to this committee is an example.

We have analysed weather related cancellations over a 22 year period, using CalMac's own data and wind recordings from the Met Office. I attach a spreadsheet that we have been maintaining for several years now, and below are some key extracts. Across the network as a whole, the number of weather-related cancellations in comparable winters has increased **by around a factor of ten**. In the graphs below the cancellations are expressed as a percentage of scheduled sailings (thereby removing any distortion caused by the increased number of services operated).

The winter of 2019/20 was a record for the number weather-related cancellations, with 4,664 sailings cancelled due to 'weather', or **more than 8% of all sailings** on a network-wide basis. Some services had up to **27%** of all their sailings cancelled due to 'weather' in that winter.

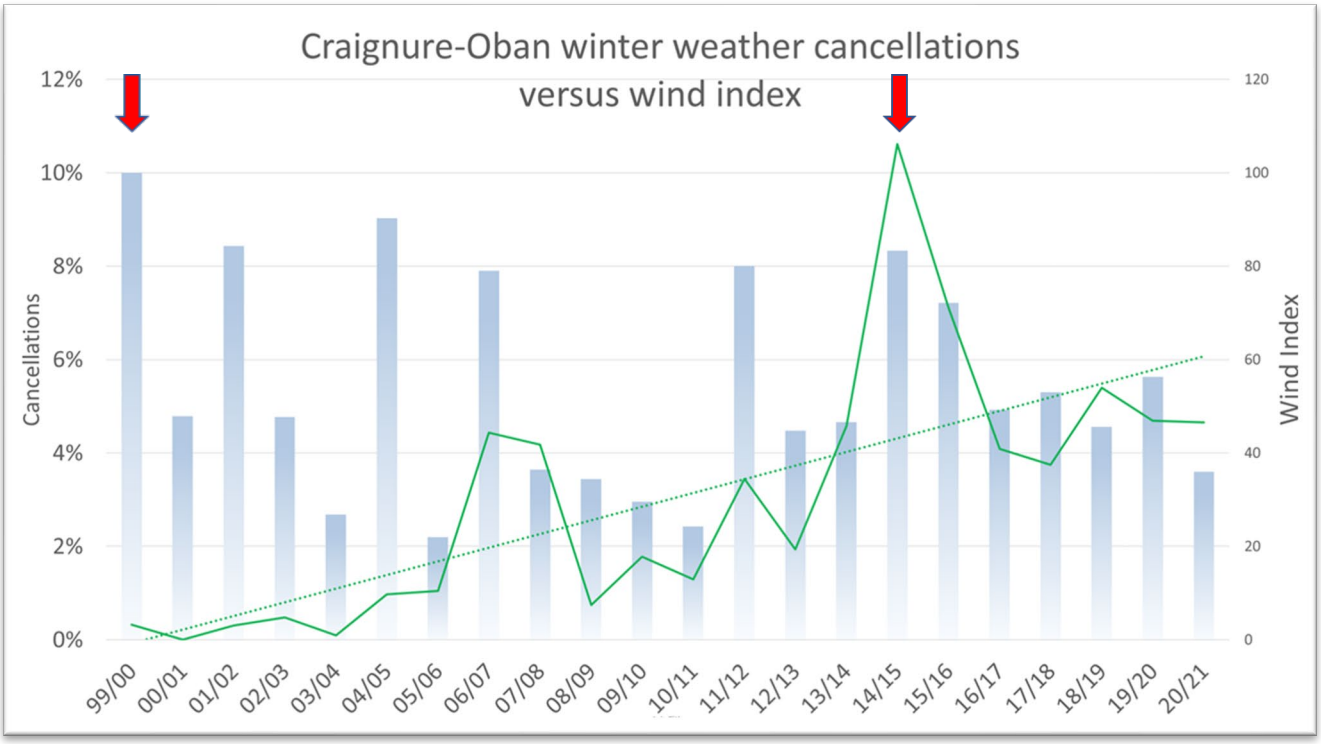
All the graphs below have been drawn from data provided by CalMac under FOI, together with data purchased from the Met Office. The entire data set is available to view in the attached spreadsheet.



For island residents, the fragility and unreliability of the service in winter is becoming such a negative influence on the quality of island life, that it is **becoming a driver of depopulation**. People are finding island life more difficult, more frustrating and more restrictive because they can no longer rely on the ferry service like they once could. The issue is no more impactful and critical than on the education of our children. According to data compiled by Iona Community Council, High School students from Iona who attend high school in Oban missed **30%** of their classes between October and December 2021 as a result of weather-related ferry cancellations.

The graph above might suggest that the *weather* is getting worse. But that is not the case. Yes, the weather is changing – our winters may be wetter and warmer, but are they windier? That's the only thing that matters when it comes to ferry cancellations. So far as we are aware, we are the only people to have made an analysis of long-term winter weather trends against winter cancellations, and the conclusion we have drawn is **not** that our winters are getting windier, but that **our ferry service is becoming less resilient to windy conditions**.

In the spreadsheet attached you will see a 'wind index', which is a measure of the prevalence and severity of winter winds, as measured by the Met Office at Dunstaffnage (the nearest station to Mull). The chart below plots the wind index (Blue columns) against cancellations on the Craignure-Oban service (green line)



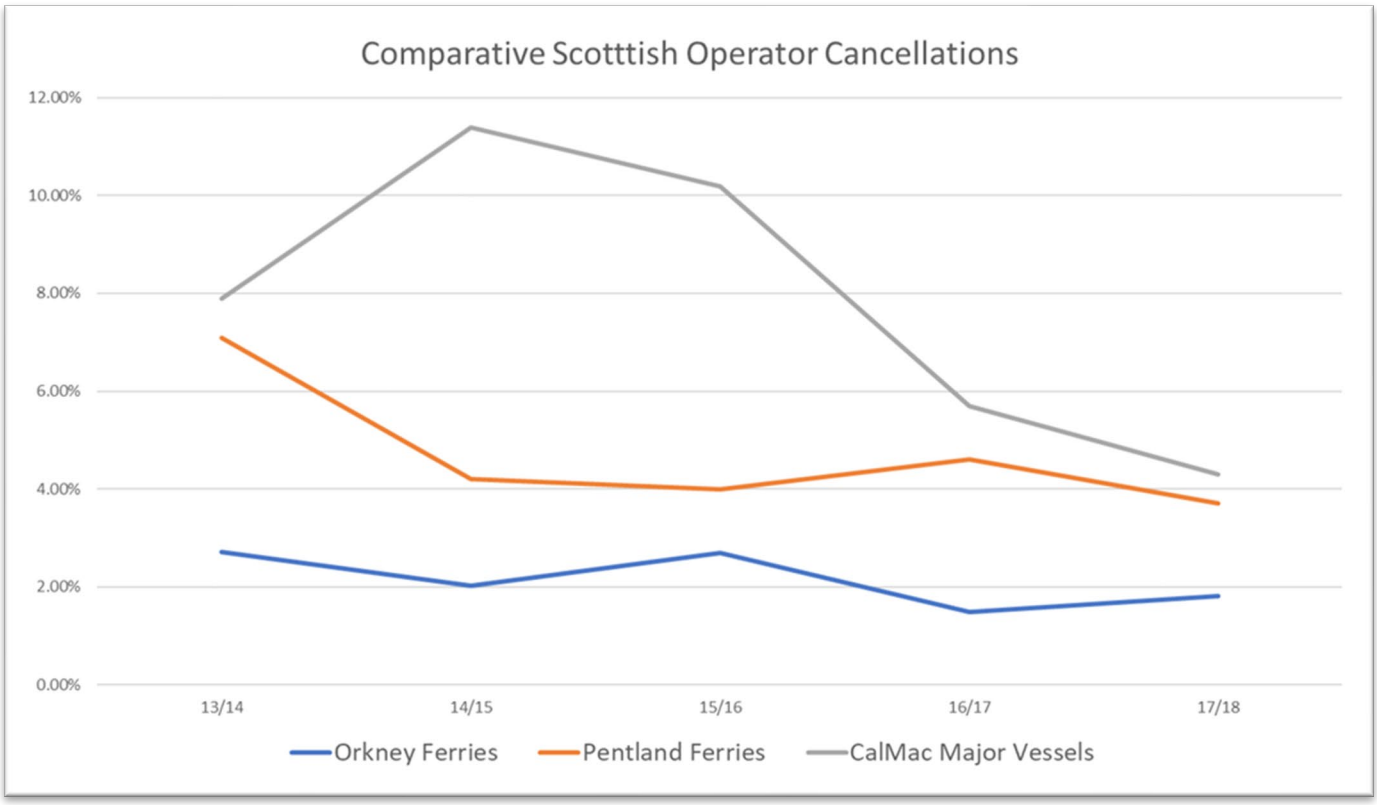
As can be seen, in each winter with a high wind index the cancellation response becomes progressively higher. This is most starkly shown by a comparison between the winters of 99/00 and 14/15 (highlighted by red arrows). These were both similarly windy winters, yet only 0.3% of sailings were cancelled in 99/00 and 10.6% were cancelled in 14/15. **That's an increase by a factor of THIRTY FIVE**. The service is more and more vulnerable to poor weather – it's an empirical fact.

The problem of declining winter reliability is not related to changes in weather patterns. It is also clear that the problem is network-wide, and therefore cannot be entirely attributed to route-specific factors (such as the ageing of particular piers or vessels).

Perhaps therefore, some of the causes might be 'institutional'. Among the potential causes that we believe should be investigated are:

- Crew training, in particular Masters. Are they being given appropriate training, is performance being adequately monitored, supported and improved, and is best practice being followed?
- Do Masters have the necessary management support to enable them to make the best decisions? For example – do they balance risks correctly, and is delivering a scheduled service prioritised over (say) the risk of minor cosmetic damage to the vessel?
- Are there any perverse incentives (either real or perceived) at play? At crew level that might be the risk to one's career if a marginal decision results in a heavy landing or a passenger falling over in heavy seas. At company level that might be that cancellation results in no direct financial penalty. Rather, it results in saved fuel and pier dues. For islanders who rely on the service, the priority should be to maintain the service – even if on occasion that results in an uncomfortable crossing.

None of these three points should be inferred as criticism of individual Masters or CalMac staff. We know that all staff sincerely regret cancellations, and the front-line staff in particular have to deal with the difficult customer consequences. However, these are difficult questions that CalMac has to ask of itself, and to identify whether, despite the best intentions of individual members of staff, there is an un-intended institutional failing at play.
The graph below demonstrates that CalMac does not fare as well as comparable operators for whom we have been able to gather some data, albeit partial.



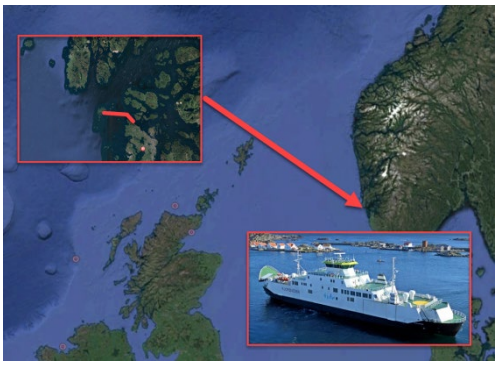
Whilst winter weather-related cancellation rates on CalMac routes peaked at over 12% on CalMac's major vessel routes in the winter of 2019/20, cancellation rates on Norwegian services are a fraction of 1%. We have isolated particular Norwegian routes that are comparable with Scottish services, in terms of exposure, sea conditions and length:

Mortavika-Arsvågen
2018 Scheduled sailings: 30,268
EU Class C route (the same as Oban – Craignure)

Cancelled due to bad weather: 64
Weather cancellation rate: 0.21%

Mekjarvik-Kvitsøy
2018 Scheduled: 6,832
EU Class C route (the same as Oban – Craignure)

Cancelled due to bad weather: 8
Weather cancellation rate: 0.12%



Finally – another Norwegian comparison.

The arrival of the Loch Frisa to the Craignure – Oban service in 2022 has provided a useful counterpoint to the performance of the rest of CalMac's major vessel fleet. The Loch Frisa was formerly the 'Utne', and follows established ferry design norms for the country. Despite being very small, she has demonstrated remarkable resilience during periods of poor weather.
In contrast to the slab-sided superstructures of CalMac vessels, the Loch Frisa has a low profile, with little superfluous superstructure to catch the wind. She is also highly manoeuvrable, able to deploy 100% of thrust in 360 degrees from a rotating azipod at each end of the vessel. These twin attributes make her much more capable of sailing in windy conditions. Future CalMac ferry designs should place weather resilience higher up the priority list, and could learn a great deal from Norwegian best-practice.