

907-276-3241

February 6, 2015

Dan Hull, Chairman North Pacific Fishery Management Council

Re: 2016 Pre Implementation EM equipment purchase

Dear Chairman Hull and Members of the Council:

The purchase of EM equipment is a substantial investment and brings up policy issues that will influence the development of the North Pacific EM program:

1) Multiple Service Providers

Currently, the "wiring", sensors, cameras, and control units which form a shipboard EM system are unique to each EM service provider. Thus, once you purchase an EM system and "wire" a boat, there will be a substantial loss of investment to change to a different EM system. If only one "standard" EM system is purchased for the Pre Implementation phase in 2016, the vendor of that system will have a significant competitive advantage long into the future due to the installed base of its systems. Similarly, once investments are made into a "standard" EM system, alternative systems like the stereo camera will have a tougher time competing in "cost effectiveness" due to the installed standard systems.

There are arguments for having a single EM system and service provider. With one service provider it may be easier to exchange equipment as envisioned in a fully "plug and play" design. There may also be certain economies of scale.

I would argue, however, that at this stage in EM development for the North Pacific, it would be disadvantageous to both industry and the agencies to make a substantial investment in only one standard EM system. The formative stage of an EM program is the time to let multiple mousetraps, approaches, and ideas blossom. Saltwater's introduction of digital cameras in 2012 and our initiation of data review in the field with a tight feedback loop to skippers during the Cooperative Research Plan (CRP) of 2014 are just two examples of precedent setting innovations that come from a second provider and another approach.

The 2016 Pre Implementation period is a natural time to start setting standards for systems not picking or giving a preference to a particular mousetrap. According to the Statement of Work provided in the Request for Proposals, the contract which covers the standard system research to be done under the CRP in 2015 should be complete by the end of this year. Thus, 2016 could be a natural time to test performance standards

2) Standard Formats

Currently, there are no standards for formats of EM video and sensor data files. In the absence of standards the purchase of any EM provider's shipboard system locks-in the purchaser to that EM provider's formats unless they are willing to abandon their investment. Furthermore, without standards any agency tasked with assimilating and analyzing data from more than one vendor's system will be presented with a significant challenge in maintaining software that is compatible with the output of the different EM systems. Open standard formats for video and sensor data would allow review software and consolidated EM databases that could operate on data from all participating provider's shipboard systems.

What to Do?

I would suggest that the Council support ALFA's proposal for EM equipment purchase with the proviso that it require the establishment of standards for video and sensor data file formats and allow for multiple service providers. To make the field effort as efficient as possible, this could be done by designating a service provider by geographic area or port as was done with the 2014 Cooperative Research work. (Saltwater Inc. provided EM services in Homer and Archipelago provided services in Sitka.) We believe that more than one service provider will help inform further refinements of standards and requirements as the EM programs in the North Pacific progress and will foster opportunities for competition and cost control in the future.

Thank you for considering these comments.

Best Regards,

Nancy Munro

Nancy Munro President Saltwater Inc