Sanna Sonninen

Sanna Sonninen is a Master Mariner and a Master of Sciences in Maritime Engineering and has worked onboard Finnish merchant ships for ten years. Since then she has worked as a research scientist and a project manager at the Technical Research Centre of Finland and as a Development Manager and Director at the Finnish Maritime Administration.
After the reorganization of the Finnish transport authorities in 2010 she worked as a Head of Department and as a Director at the Finnish Transport Safety Agency.
At present she holds the position of Pilotage Director at the state owned pilotage company Finnpilot Pilotage.

Autonomous vessels in Finland

Technology and solutions for commercially viable concepts of autonomous ships and remote control of ship operations are developed and tested by various companies and consortiums. Even some full-scale demonstrations on these concepts have been conducted. These demonstrations with e.g. small ferries, a tug, ship machinery and waterborne transportation platform are excellent showcasing and, even with the limited information available provide some lessons to be learned. However, in the public discussion on the autonomous shipping development the various levels of autonomy or remote operation are often mixed.

When trying to find feasible solutions for remote pilotage it is important to understand the difference between an autonomous ship, remote operated ship and remote piloted ship. To understand how the complex task of piloting a ship could be successfully accomplished without the pilot being physically onboard and operating as a part of bridge team one must analyze the different functions of pilotage.

What are the requirements, challenges and limitations for succeeding in providing remote pilotage even to a very selected segment of pilotage service customers? In Finland these questions are being considered as the Finnish Pilotage Act already enables the remote pilotage experiments. But a number of issues need to be solved before these experiments become a reality.