WPS (Web Processing Service) is an OGC (Open Geospatial Consortium) standard that defines how geospatial algorithms are accessed in a SOA (Service Oriented Architecture) environment. Service providers can encode both simple and more sophisticated algorithms within a WPS wrapper and publish them as web services. These services are not only useful individually but may be used to build complex processing chains (workflows) that can solve complex data analysis and/or scientific problems. At present, workflow design and execution systems are not widely available via a web interface.

As part of its aim to produce a European Marine Information System (EUMIS) the NETMAR project has developed a WebGUI service editor, based on HTML5 and the WireIt! Javascript API, that allows users to build workflows using these services. The workflow editor uses a standard WSDL (Web Service Description Language) document describing the WPS services and will display available services to the user; these services may be combined using the GUI to produce a workflow as required. The workflow is saved as XML and may be run by a standard orchestration server (in this case Taverna) or published itself as a WPS service.

This paper will show how existing standards and tools were used to provide the framework for the workflow editor and demonstrate how existing WPS services may be made available to the editor. Examples of workflows will be shown in a real world context.