



Fig 1. The underwater vehicle towing a surface buoy (left) and a graphical model of a software component (right)

evaluate the performance of SODM and other to evaluate the performance of the NNB algorithm. Conclusions of these trials are presented in next number or journal RIAI and in international conferences [6].

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RENEWABLE ENERGY SUPPLY TO SHIPS AT PORT

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Abstract. Maritime industry requires the environmentally friendly operation of ships. This fact has significant importance when the ships call at port and especially in those cities whose basins are near to urban centres. This work presents a study about supplying electrical energy from renewable sources when the ships call. This approach is called Onshore Power Supply. Then, an empirical application for the Cartagena Port is presented. In this particular case, the facility

has dual character, with both solar and wind energy farms. The facility is sized basing on port traffic data of three years. Furthermore, the greenhouse gases reduction obtained with the application of this approach on the basins of the Cartagena Port is estimated.

Keywords: Onshore power supply, ports, renewable energies.