

R&D Planning for the Technology of Maritime Autonomous Surface Ship in Korea

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Abstract

There are increasing interests being generated by the deployment of Maritime Autonomous Surface Ship(MASS) around the world. European countries have been initiating MASS interests with early research projects such as MUNIN(Maritime Unmanned Navigation through Intelligence in Networks, 2012~2016), AAWA(Advanced Autonomous Waterborne Applications Initiative) by Rolls Royce. Japanese Shipping company and government started SSAP(Smart Ship Application Platform) project and aims to launch 250 self-navigating cargo ships by 2025. China are also starting the projects for smart autonomous surface ship and sea test bed. Korean Ship building and shipping industries are having a hard time because of cold global economy. This presentation introduces a Korean national R&D programs for a Smart and Autonomous Surface Ship planned by ministry of trade, industry and energy(MOTIE) and ministry of Oceans and Fisheries(MOF). The R&D programs consist of 5 core technologies, which contain 31 R&D programs. The important products would be an advanced sensor system, autonomous navigation system, autonomous engine system, MASS sea trial center, and MASS operation technology. The planned R&D programs are under detail evaluation with KISTEP(Korea Institute of Science & Technology Evaluation and Planning).

Keywords: *MASS, autonomous ship, advanced sensor system, automatic navigation, economic sail*

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