Guidelines for Breakout Sessions
on
Maritime Autonomous Surface Ships (MASS)

November 26, 2020

The main objective of the workshop is to extend current research and address any gaps. The ultimate goal is to enable implementation of MASS in Canadian waters in an economical and safe manner. During the workshop, National Research Council Canada (NRC) researchers have presented the MASS projects they are working on. The panelists have provided their suggestions on follow-on projects. The purpose of this breakout sessions is to identify projects that extend and complement current efforts.

It is recognized that the process of implementing MASS to any advanced degree would represent a fundamental change. In this regard the focus of the NRC projects is technological. Important aspects such as infrastructure, national and international regulation, standards etc., which would be critical to any implementation of MASS, are outside the scope of this Workshop.

In order to provide some structure to the breakout discussions the deliberations will be considered in five categories. The NRC projects, summarized in the Workshop, are generally in Categories 2 – 5. Category 1 is a general category to allow participants to make recommendations that do not fall naturally in Categories 2 – 5.

1. General
2. Sensors and situational awareness
3. Decision support systems
4. Canadian environment and impact on MASS
5. MASS operations in ice

Questions

1. General

a. Are there important technology-related subject areas that fall outside Categories 2-5? If so, what are these?

b. What projects are recommended for consideration?

2. Sensors and situational awareness

a.   What are the gaps in the current NRC program?

b. What projects could be devised to usefully extend the work currently underway?

c. What other projects are recommended in this technology category that would contribute to the advancement of MASS in Canada?

3. Decision support systems

a. What are the gaps in the current NRC program?

b.   What projects could be devised to usefully extend the work currently underway?

c. What other projects are recommended in this technology category that would contribute to the advancement of MASS in Canada?

4. Canadian environment and impact on MASS

a. What are the gaps in the current NRC program?

b.   What projects could be devised to usefully extend the work currently underway?

c. What other projects are recommended in this technology category that would contribute to the advancement of MASS in Canada?

5. MASS operations in ice

a. What are the gaps in the current NRC program?

b.   What projects could be devised to usefully extend the work currently underway?

c. What other projects are recommended in this technology category that would contribute to the advancement of MASS in Canada?