

## **Workshop Track Common Threads – Summary**

The six topics of : Port Harbor Emergency. Management, Comprehensive Port Security, Alternative Energy, Manned/Unmanned Systems Interoperability, Sensor Fusion, and STEM were offered in three different 1-hour time slots. Each Cluster participant had the opportunity to attend 3 of the 6 Workshop Tracks. Participants were encouraged to attend 2 of the 3 in areas that were not their area of expertise in order to do ‘outside the box’ innovative thinking. The third, and last, session was encouraged to be where your area of expertise or interest exists. This enabled the bringing of ideas, concerns and thoughts for cooperative ways forward from other sessions.

One of the overarching themes discovered through the workshop sessions was the ‘inter-dependence’ of the technical parts to the ultimate end user. The need to listen to the requirements of the Commercial, First Responder and Military end user creates a better more focused and useful tool. Whether it is the need for sensor data to be turned into information, or a specific robotic platform to host a sensor the ‘inter-dependence’ of sensors on platforms and the subsequent data that leads to decision-making became very obvious through the workshops. The workshops also showed us that having a robust local testing environment would benefit business and the end user through ‘real environment’ spiral development that would put working solutions in their hands on an expedited schedule.

Inter-dependence and multiple uses of products and Intellectual Property for end users quickly became apparent as a common thread in the workshops. Breaking down the barriers of communication between agencies, streamlining of command and control and the secure sharing of information were determined to potentially lead to reduction in duplication and cost. When an application for Port Security can also be an interoperable robotic solution that could utilize alternative energy for power, and then with minor modification be used for NOAA or as a Marine Biological observation tool you create savings that benefits all clients. Inter-dependence and re-adaptation of technology were noted in all technical sessions.

Workshop results showed that we have much improvement to make in utilization of existing Intellectual Property that exists within Universities, Federal Labs and small businesses. Collaboration between these entities and the support of this collaboration as the IP moves into a small business was something that the participants determined was critical and would assist in the sustainability of the Cluster.

The STEM sessions showed us how we could benefit from not just active student internships in business, but also teacher internships. Collaborative partnerships with industry and the educational system will yield a more responsive workforce. If our STEM initiatives do not enable the skills and the technologies that business is using our workforce comes to industry unprepared. Every employer benefits from a robust STEM program that results in a strong technical and problem-solving workforce.

In summary – The workshop showed that recognition of the interdependence of the technologies currently existing that can be ‘re-used’ in multiple ways to supply answers to the requirements of the end user potentially gives a jump start to this Cluster. Sustainable economic results are achievable through the collaboration of Large-small business partnerships, small business consortiums, and partnering with Universities, Federal Labs and those who have the IP.

Not reinventing the wheel for each end user, but being opportunistic about the re-use and re-adaptation of technology will assist in the sustainability of the Cluster. Re-adaptation and interdependence that look at systems of systems integration will require collaboration among all stake-holders to achieve maximum results and success.