



## *Sea Air Space Symposium*

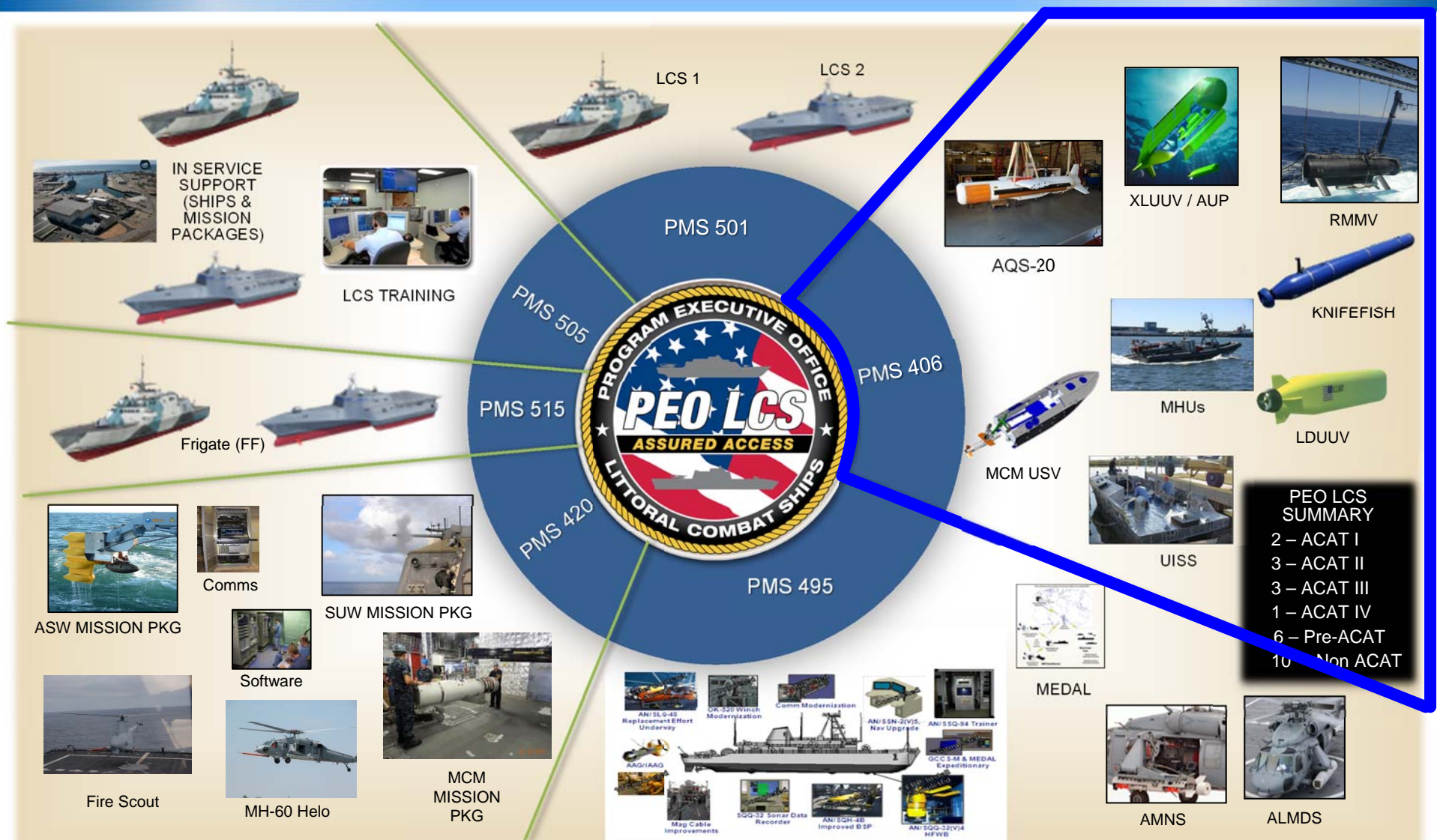
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# PEO LCS Portfolio



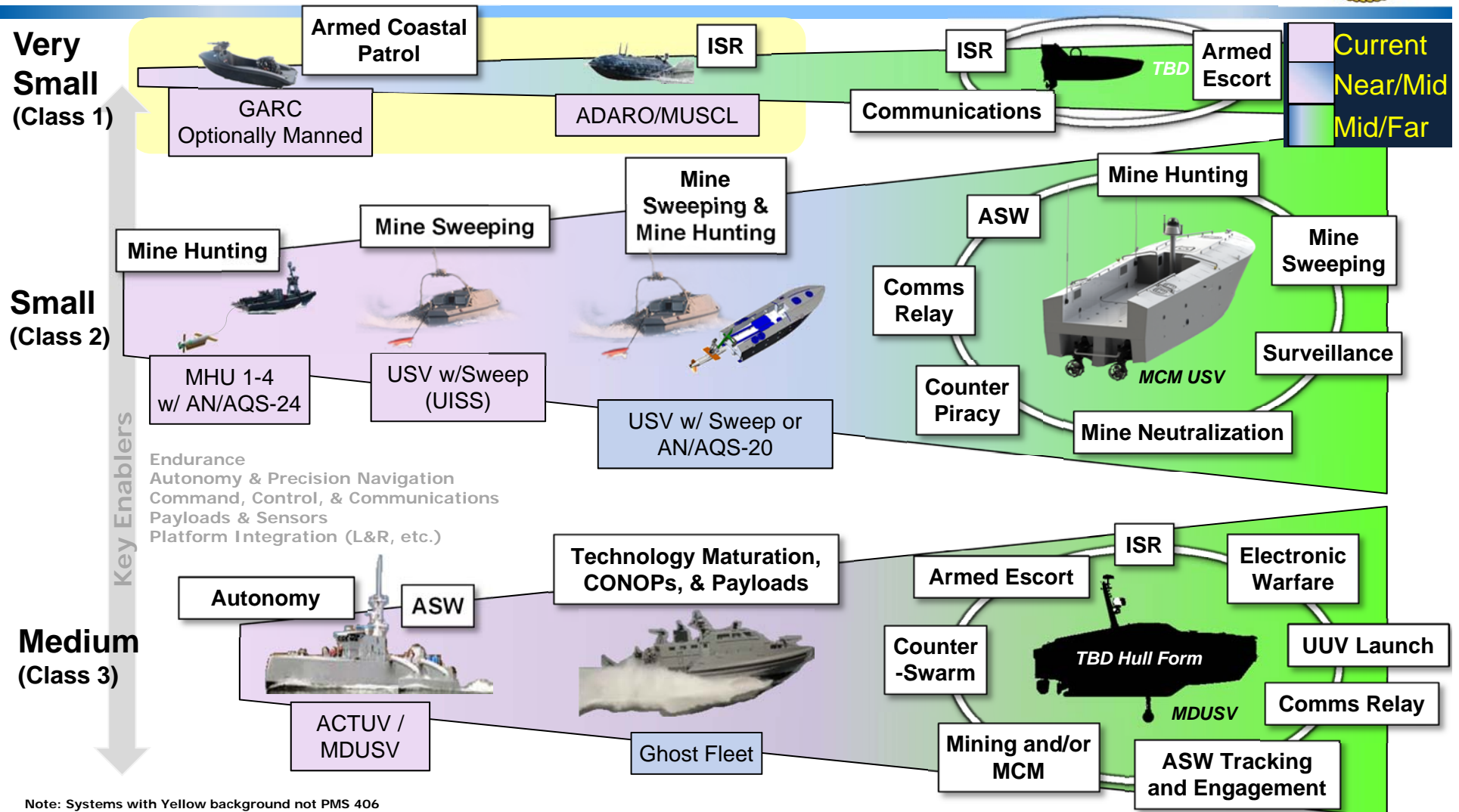
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# USV Systems Vision

## Enhanced, Efficient Capabilities

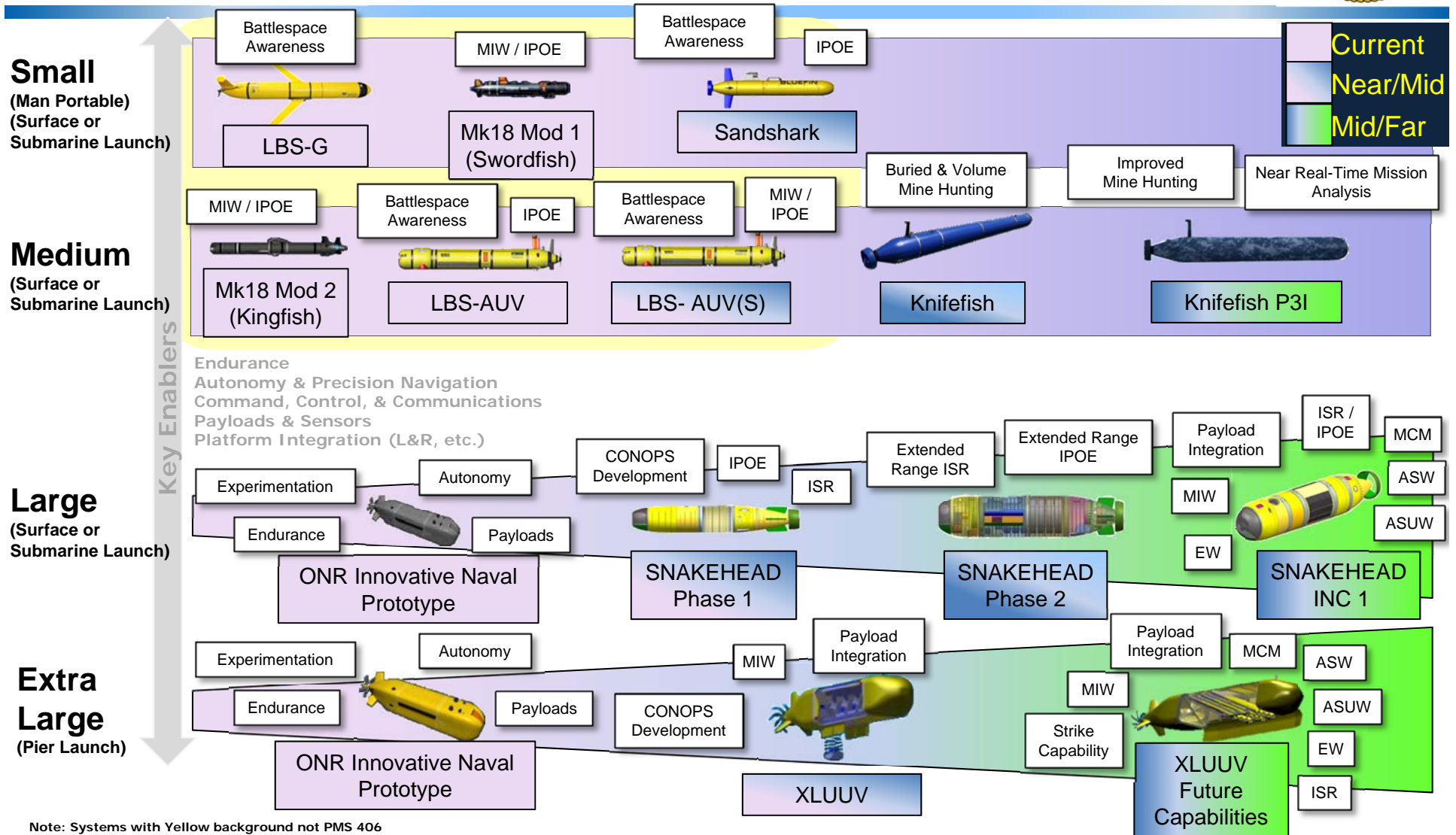


**Efficient, Executable Progression of Capabilities onto Common USV Hull Forms**



# UUV Systems Vision

## Enhanced, Efficient Capabilities



**Efficient, Executable Progression of Capabilities through Various UUV Systems**

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# Examples of Systems



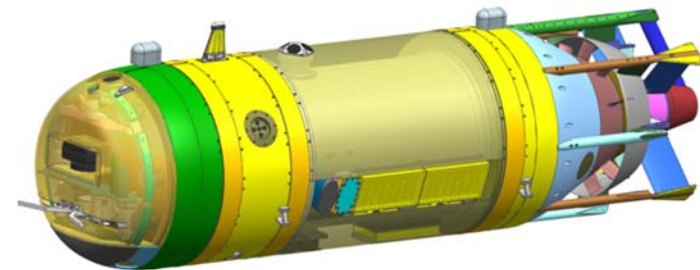
Mine Hunting Units (MHU)



Unmanned Influence Sweep System (UISS)



Knifefish  
UUV



Snakehead LDUUV





# Summary



- LCS is the first ship class designed and built from the keel up to support unmanned systems
  - Unmanned Systems key to success of LCS and its mission packages
  - Modularity allows inclusion of latest and greatest technology as systems evolve
- Unmanned systems are growing
  - Key enabler for both LCS & Undersea Enterprise
  - Expand the Navy's warfighting capability by relieving the burden of existing mission tasks and introducing new possibilities
- Incremental approach to delivering capability
  - Leverage and improve enabling technologies

**Unmanned Systems are Vital Part of Future Navy Force**



*Questions?*



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# Acronym List

|              |  |
|--------------|--|
| • ACTUV      | Autonomous Continuous Trail Unmanned Vehicle                     |
| • ASW        | Anti-Submarine Warfare   |
| • ASuW       | Anti-Surface Warfare   |
| • EW         | Electronic Warfare   |
| • IPOE       | Initial Preparation of Operational Environment                   |
| • ISR        | Intelligence, Surveillance, & Reconnaissance                     |
| • LBS-G      | Littoral Battlespace - Glider                                    |
| • LBS-AUV    | Littoral Battlespace – Autonomous Underwater Vehicle             |
| • LBS-AUV(S) | Littoral Battlespace – Autonomous Underwater Vehicle (Submarine) |
| • MCM        | Mine Countermeasures   |
| • MDUSV      | Medium Displacement USV  |
| • MHU        | Mine Hunting Unit  |
| • MIW        | Mine Integration Warfare   |
| • MUSCL      | Modular Unmanned Surface Craft, Littoral                         |
| • P3I        | Pre-Planned Product Improvement                                  |
| • USV        | Unmanned Surface Vehicle   |
| • UUV        | Unmanned Undersea Vehicle  |

**Unmanned Systems are Vital Part of Future Navy Force**