

# JOINT LIGHT TACTICAL VEHICLE



Joint Light Tactical Vehicle (JLTV)

## Program Background

The Joint Light Tactical Vehicle (JLTV) is an ACAT IC Army-Marine Corps defense acquisition program that introduces a new generation tactical wheeled vehicle to replace a portion of the services' High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleet. The program's goal is to develop a new family of multi-mission light tactical vehicles with superior crew protection and performance compared to the current HMMWV fleet. The JLTV family of vehicles will balance critical weight and transportability constraints against performance, protection, and payload requirements, while ensuring an affordable solution for the Army and Marine Corps.

The development of the JLTV reinforces the services' approach to interoperable platforms that provide expeditionary and protected maneuver capabilities to forces that HMMWVs currently support. JLTV will improve payload efficiency through state-of-the-art chassis engineering, enabling the vehicles to be deployed with the appropriate level of force protection through the use of scalable armor solutions. The JLTV program will strive to minimize maintenance costs through increased reliability, and better fuel efficiency. JLTVs can be configured to support multiple mission packages derived from two base vehicle configurations: the four-door Combat Tactical Vehicle and two-door Combat Support Vehicle. Commonality of components, maintenance procedures, and training among all vehicle

configurations will also minimize total ownership costs

## Program Status

The JLTV program is currently in the Production and Deployment Phase. On 25 August 2015, Mr. Frank Kendall, former Under Secretary of Defense for Acquisition Technology and Logistics (USD AT&L) approved the Milestone C decision authorizing the program to enter into the Production and Deployment Phase and to proceed into Low Rate Initial Production (LRIP). A production contract that included LRIP quantities was awarded to Oshkosh Defense that same day. The first LRIP test vehicle was delivered in September 2016. Production qualification and reliability qualification testing began during the 1st quarter of Fiscal Year 17 (FY17), live fire test events began during the 2nd quarter FY17 and the Multi-service Operational Test and Evaluation (MOT&E) is still on schedule to begin during the 2nd quarter FY18. The Marine Corps is scheduled to achieve its Initial Operational Capability (IOC) during the 1st quarter of FY20. The Marine Corps will reach Full Operational Capability (FOC) by the 4th quarter of FY22.

## JLTV's Top Technical Issues

### 1. Weight/Protection

The JLTV design meets competing requirements for a balanced solution of protection, payload, and performance. Although the JLTV armor system meets the functional requirements, reductions in weight and improvements in vehicle protection are desired. The program office is seeking lower weight, affordable survivability solutions for both the transparent and opaque armor systems, and is interested in evaluating active protection solutions.

### 2. Vehicle Network Architecture

The JLTV design was configured to support modularity and interoperability with existing and future combat enablers provided by other program managers throughout the DoD.

Essential to this modularity and interoperability is the ability to provide an affordable vehicle network architecture that supports sharing of data resources for on-board systems. The vehicle network architecture delivers shared processing, common user interface screens, GPS data, remote radio control, electronic warfare system control, and weapon systems employment through the use of a network switch that can adapt to multiple vehicle configurations, thus avoiding future payload challenges. The improved vehicle network solution must be scalable, interoperable, and forward-leaning in order to meet affordability constraints and the need for ever-increasing processing power. Therefore, the Marine Corps is seeking a low cost /affordable network switch which will provide a technically viable solution to provide for "plug-n-play" of additional C4 hosted solutions. Furthermore, solutions to remote radio control and growth in computer processing power in conjunction with expanded software (USMC-specific applications) capabilities are desired.

### 3. JLTV-Close Combat Weapons Carrier (CCWC) Missile Reloading Improvement

The JLTV Close Combat Weapons Carrier (CCWC) is the mission package configuration for employment of the TOW/SABER system. The system design includes a securable rear cargo box capable of accommodating TOW/SABER weapon system components, missiles, and loading/reloading capabilities in accordance with JLTV system specifications. The program office is interested in solutions that will continue to improve the CCWC loading/reloading capabilities to enhance the warfighter's ability to employ, engage, and redeploy the TOW/SABER system safely.



## JLTV

**Description:** JLTV focuses on procuring a family of light tactical vehicles for combat mission roles, providing increased survivability, mobility, payload and reliability over the current family of HMMWVs. JLTVs will provide a high level of scalable protection, improved sustainment and net-ready maneuver platforms which are tactically mobile across all terrain.

## ACATID / LRIP

## Key Events

- 2QFY17: PMO begins visits to MEFs (JLTV Road Show)
- 3QFY17: Logistics Demo
- 2QFY18: Multi-service Operational Test & Evaluation (MOT&E)
- 1QFY19: Full Rate Production (FRP) Decision (MDA)
- 2QFY19: USMC Fielding Decision
- 1QFY20: USMC Initial Operational Capability
- 4QFY22: USMC Full Operational Capability

### Program Status/Issues/Concerns

- Option Year 2 was awarded for \$44.994M FY17 PMC, \$1.855M FY16 PMC, and \$6.308M FY16 RDT&E (test support).

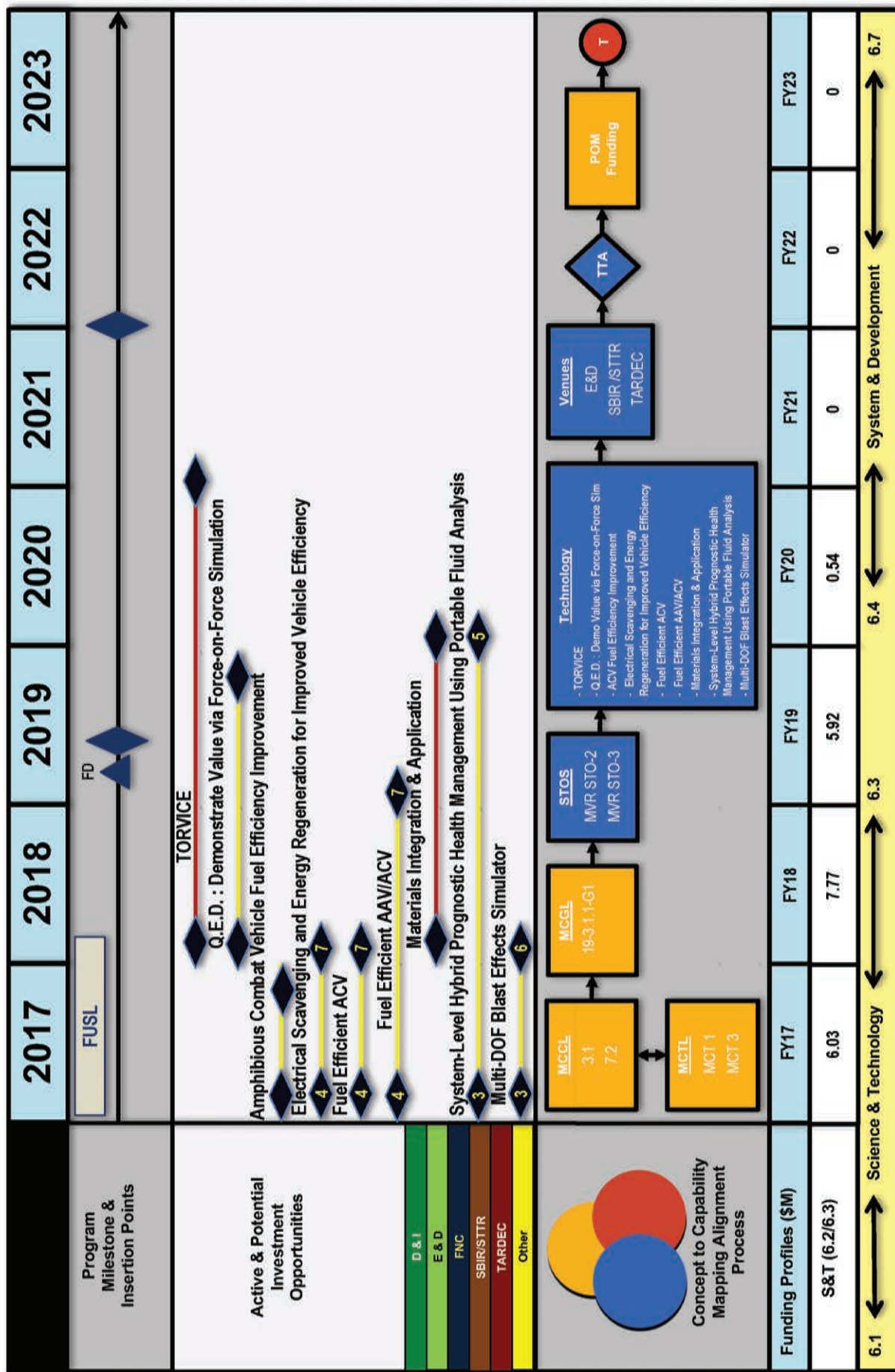


- **Integration / Interdependencies:** Interdependencies identified in regard to components include: CSDU, GPS, intercom system, NOTM and GPK for TO

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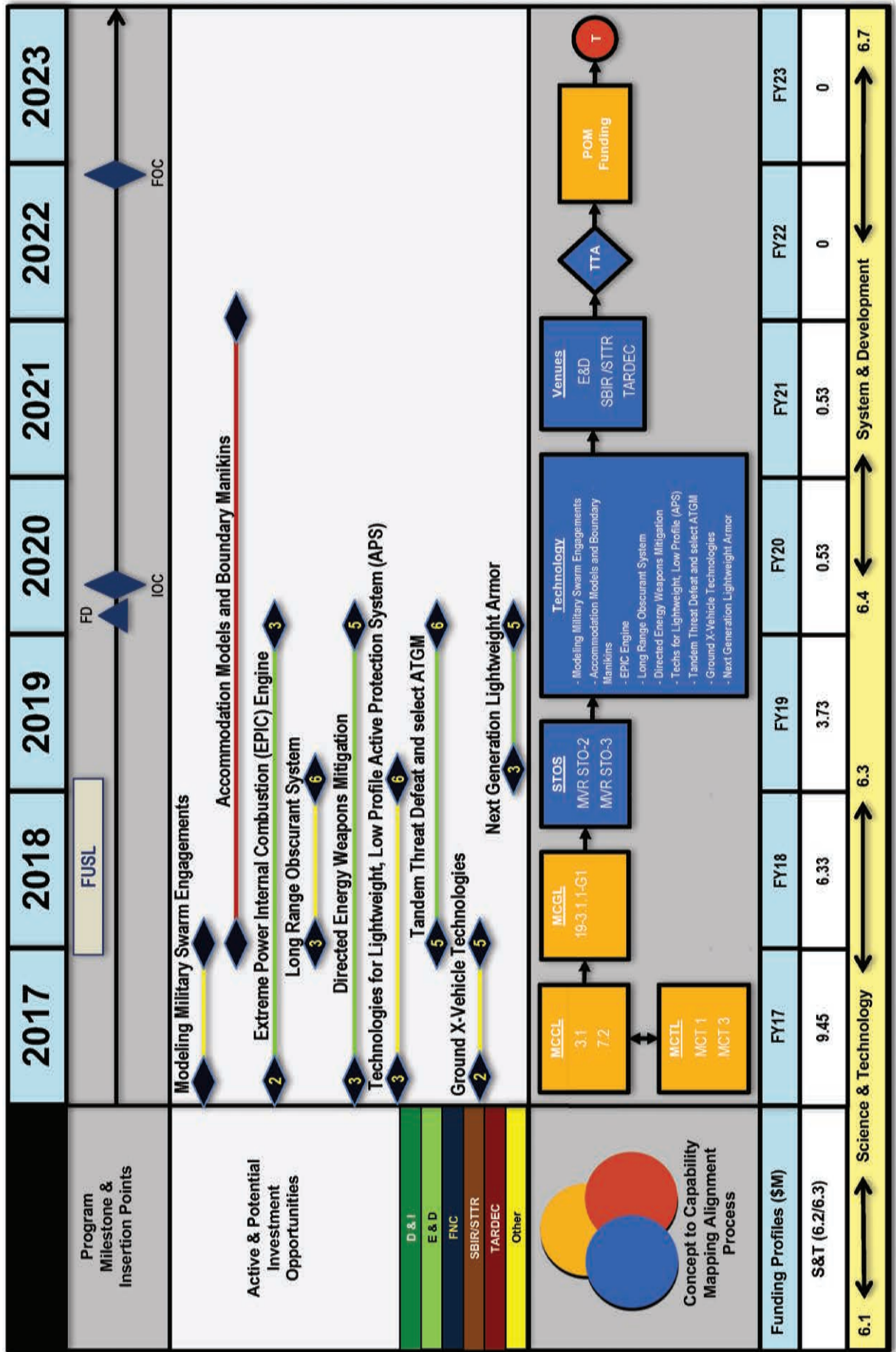
# JLTV Technical Issue #1 Weight/Protection





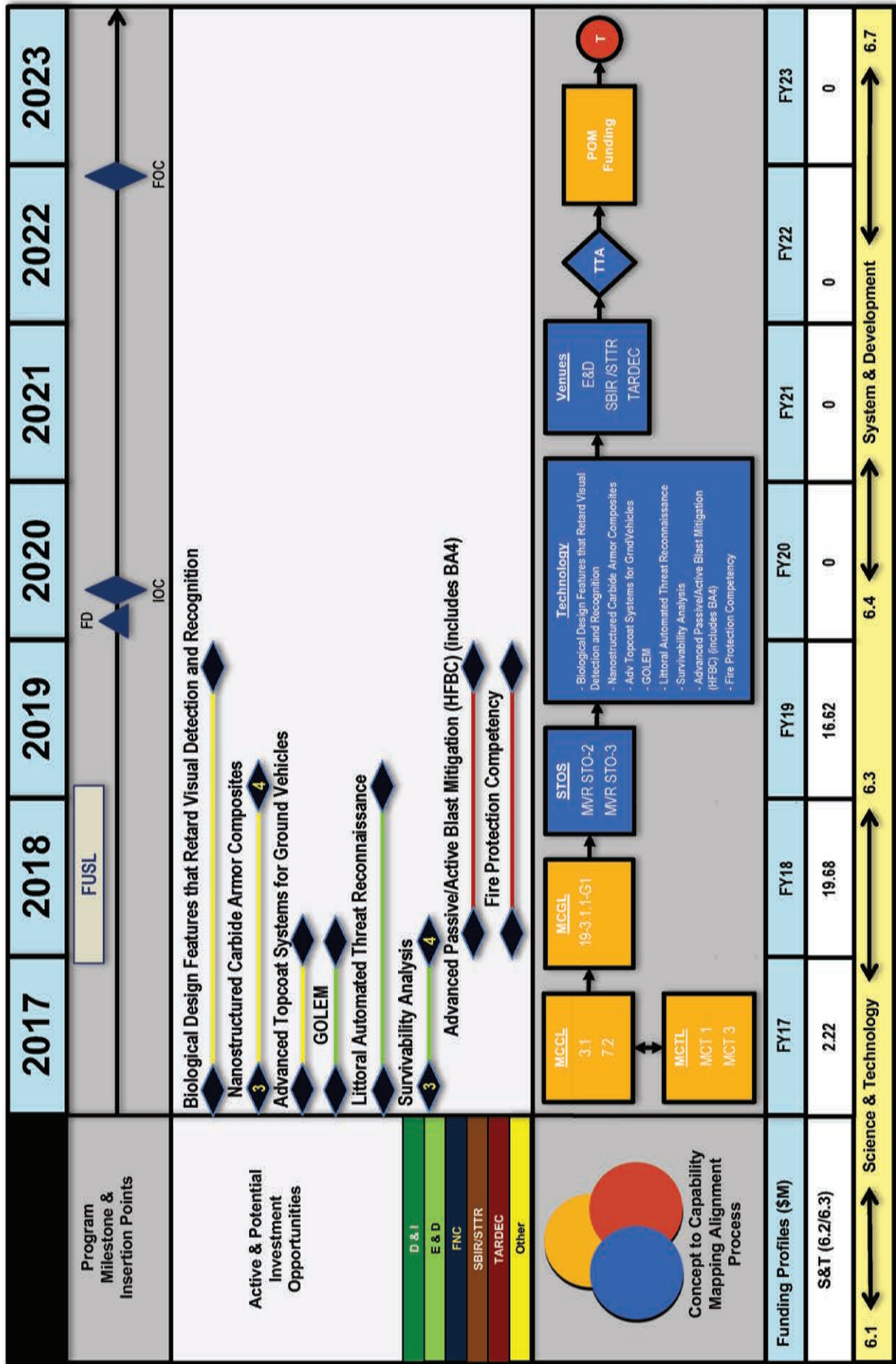


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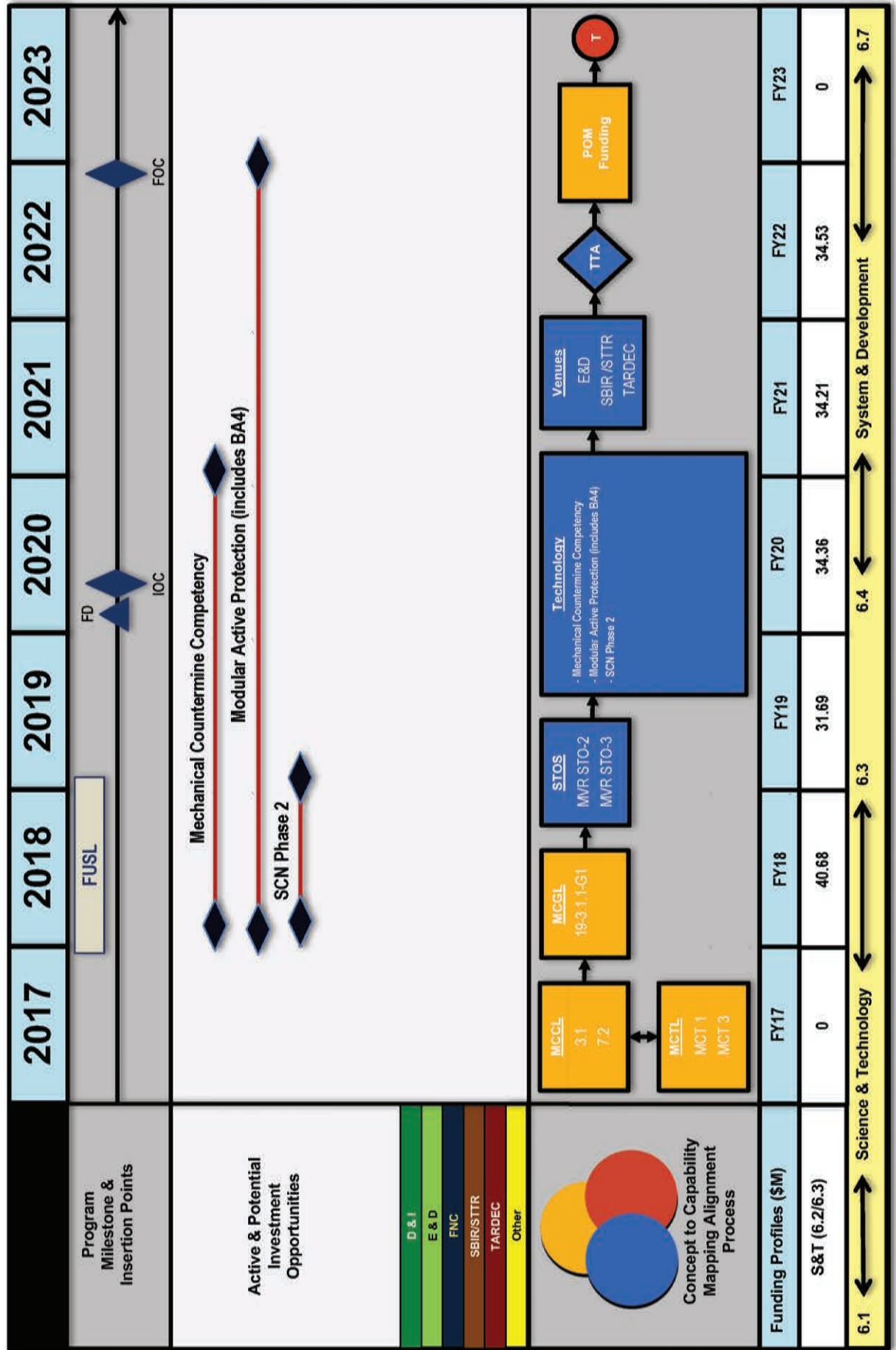


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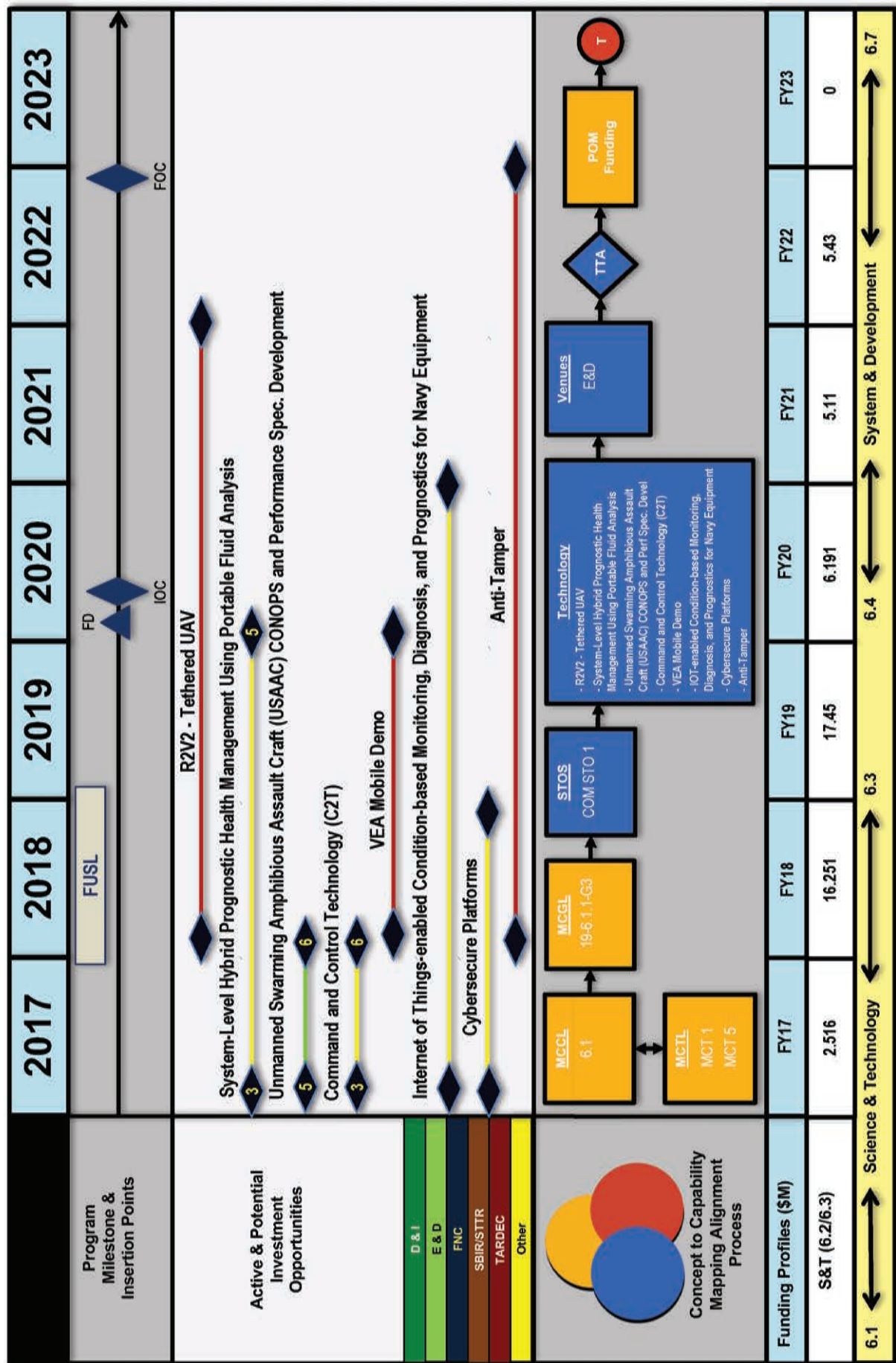
# JLTV Technical Issue #1 Weight/Protection







# JLTV Technical Issue #2 Vehicle Network Architecture







# JLTV Technical Issue #3 JLTV-CCWC Missile

## Reloading Improvement

