LOGISTICS VEHICLE SYSTEMS REPLACEMENT

Logistics Vehicle Systems Replacement (LVSR)

Program Background

The Logistics Vehicle Systems Replacement (LVSR) system serves as the Marine Corps' heavy logistics vehicle and transports large quantities of supplies across the battlefield. The LVSR is deployed in the Marine Logistics Group, Marine Divisions, and Marine Aircraft Wings.

The LVSR includes three variants: MKR 18 Cargo, MKR 16 Tractor, and MKR 15 Wrecker. The 5-axle vehicle has a 22.5-ton (20,412 kilograms) on-road/16.5-ton (14,969 kilograms) off-road payload, a 600-horsepower diesel engine, integrated control and diagnostic electronics, and factory-installed armor integrated into the vehicle design.

The LVSR can travel up to 65 miles per hour on paved surfaces and ford five feet of water. It has a cruising range of 300 miles. Built by Oshkosh Corporation, the tactical-distribution heavy hauler is capable of carrying fuel, water, ammunition, standardized containers, palletized cargo and heavy equipment.

The all-wheel drive LVSR has a straight body design supporting its three distinct variants. The LVSR, with a standard two-person cab (and a third position for an optional machine gunner position), uses Oshkosh's TAK-4™ independent suspension system for improved mobility and off-road maneuverability. The acquisition objective of 2,246 vehicles has been fielded.

Program Status

The LVSR MKR 18 Cargo variant achieved Initial Operating Capability in September 2009, and the first LVSRs were deployed to Operation Enduring Freedom in support of the Mobile Trauma Bay in that same month. The LVSR is currently in sustainment.

LVSR's Top Technical Issues:

1. Fuel Consumption

Given the LVSR's 2.0 miles per gallon fuel consumption rate and the fully burdened cost of fuel, even a moderate increase in fuel efficiency can potentially save lives and millions of dollars. Practical, cost-effective technologies are required to increase the fuel efficiency of the LVSR while maintaining payload capacity and mobility.

2. Increased Survivability

Technologies are required that maintain or increase survivability of the vehicle and occupants from emerging threats, including technologies that can increase armor protection while maintaining or reducing current weight; improvements in blast resistant seats; crew egress systems; and advanced fire-suppression systems. New methods to mitigate or repair current protection systems issues such as transparent armor delamination are critical to the ongoing sustainment of the Armored LVSR fleet.

3. Safety

Safety technologies are required to increase vehicle-to-driver feedback, vehicle control and vehicle stability. They are also needed to mitigate the effects of vehicle rollovers while maintaining the ability of the LVSR to achieve its 30% on-road/70% off-road mission profile.

LVSR

ACAT II/P&D

Description: The Logistics Vehicle System Replacement (LVSR) is the Marine Corps' heavy-tactical distribution system, the LVSR Cargo variant transports bulk liquids ; ammunition; standardized containers; bulk, break-bulk, palletized cargo, and bridging equipment. The LVSR Wrecker variant performs heavy wrecker/recovery missions, while the LVSR Tractor variant tows heavy engineer equipment and combat vehicles

Key Events

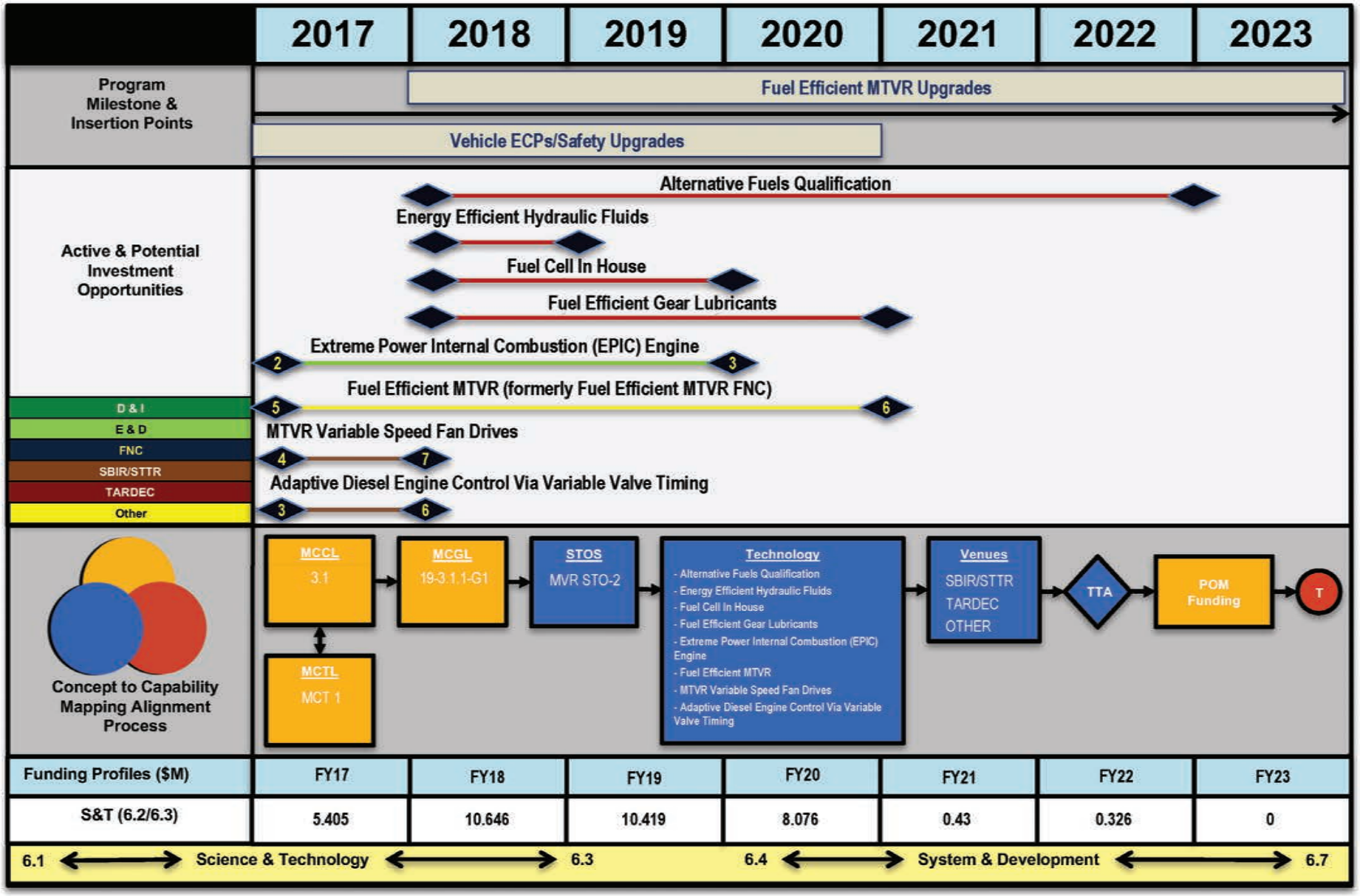
- Brake corrosion ECP with Nevada Automotive Test Center (NATC) is on schedule with a completion date scheduled for 3QFY17
- LRIP of the Brake Corrosion ECP is scheduled for 3QFY17
- Improved Armored Door Lock production scheduled for 3QFY17
- Retesting of Rock Island Arsenal (RIA) armor coupons have been scheduled for 4QFY17

Program Status/Issues/Concerns

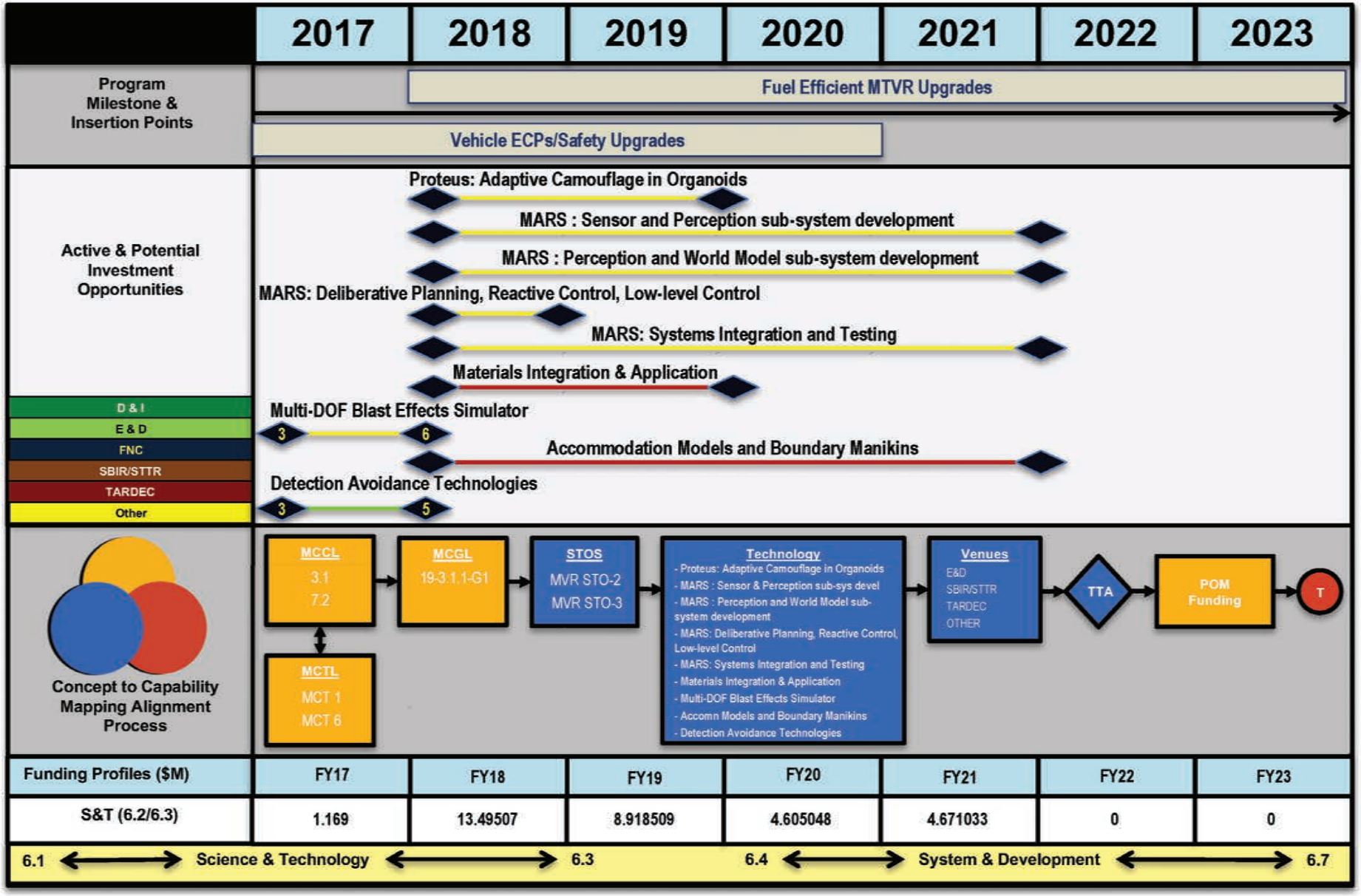
- Logistics
  - Program in sustainment

PROGRAM	PRIOR	FY17				FY18				FY19				FY20				FY21				FY22				FY23			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Milestones & Phases																													
SETR Reviews	In Sustainment																												
Test Events																													
Contract Events																													

LVSR Technical Issue #1 Fuel Consumption



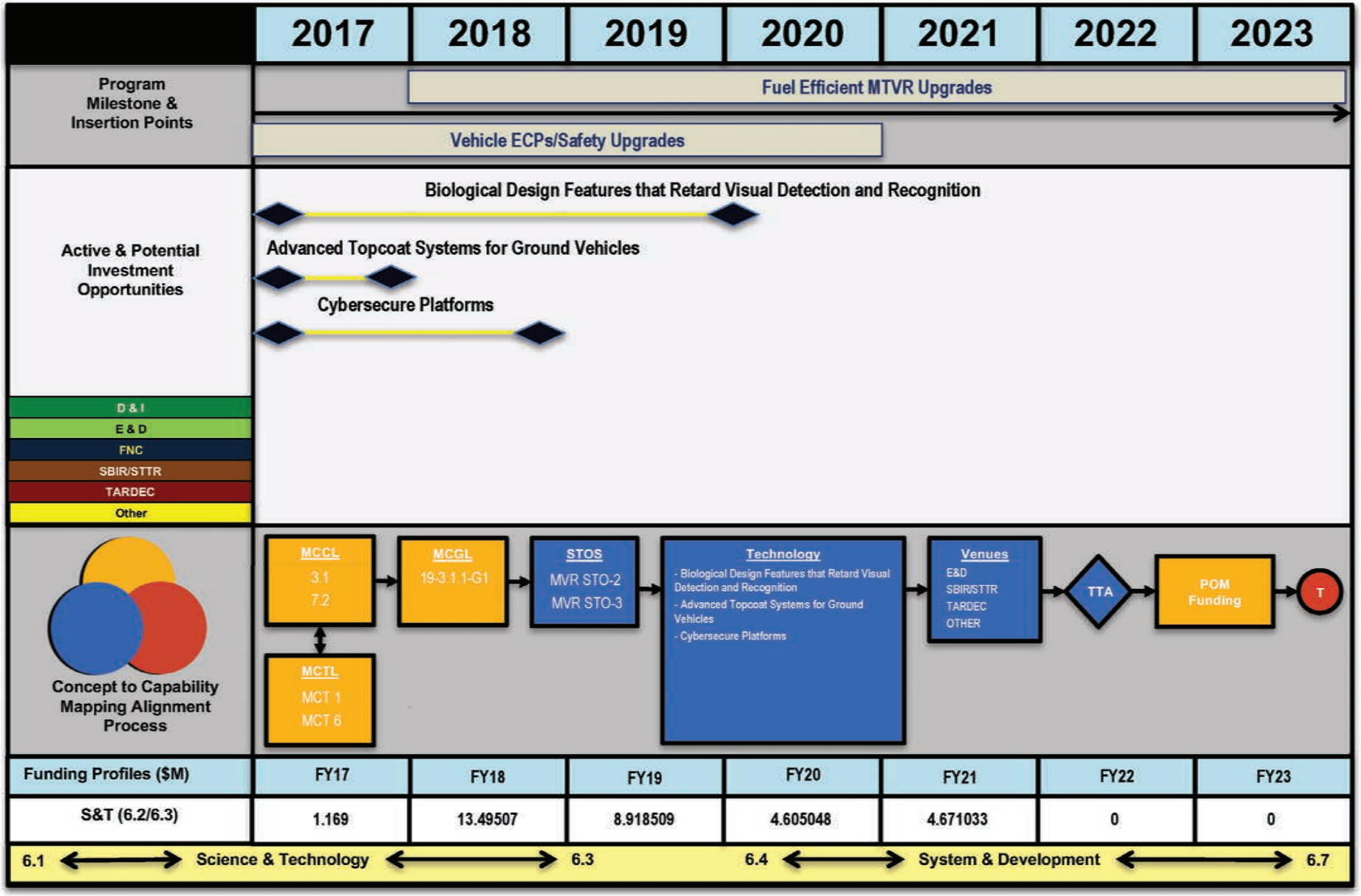
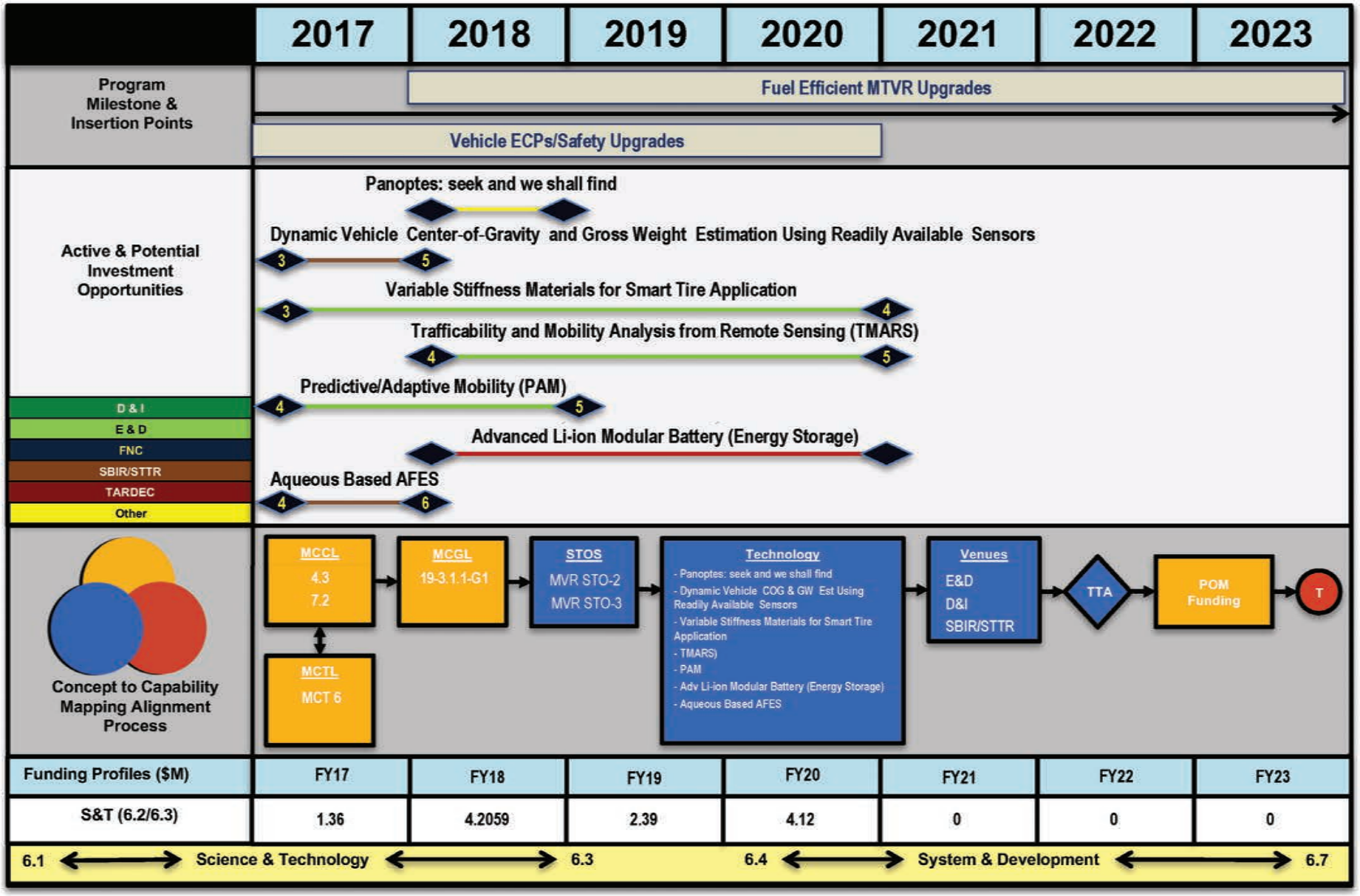
LVSR Technical Issue #2 Increased Survivability



Funding Profiles ($M)	FY17	FY18	FY19	FY20	FY21	FY22	FY23
S&T (6.2/6.3)	1.169	13.49507	8.918509	4.605048	4.671033	0	0

6.1 ⟷ Science & Technology ⟷ 6.3 6.4 ⟷ System & Development ⟷ 6.7

LVSR Technical Issue #2 Increased Survivability



LVSR Technical Issue #3 Safety