From sensors to decision-makers, HII’s Enlighten subsidiary builds the data fabric that connects the all-domain force

Executing missions in complex and contested environments requires decision advantage, but the challenge is the unprecedented levels of data that need to be distilled into actionable information to inform decision-making. Processing, analyzing and visualizing data at a massive scale to provide predictable analytics and critical information at the speed our warfighters need – and then sharing that information – requires a data-agnostic, innovative approach.

Advancing National Security with an All-Domain Force

The vision of a truly joint all domain force relies on the ability to convert data into actionable intelligence, while connecting platforms, sensors and shooters across the battlespace. As part of its shift toward data-centric operations, the DoD recognizes that the data fabric layer – or architecture -- is a critical element in connecting and enabling this all-domain force.

The data fabric, applied at both the enterprise level as well as at the tactical edge, ingests vast amounts of information from disparate sources across the battlespace. Through advanced analytics and machine learning, it also aggregates and packages the data in a way that enables commanders to plan and act decisively against emerging threats.

The U.S. Army recently tested its data fabric during Project Convergence 2022, the Army’s Joint All Domain Command and Control (JADC2) initiative, bridging tactical with enterprise data to enable information sharing not only at all echelons of command but also between the U.S. military and international partners. HII’s Enlighten subsidiary supported Project Convergence with a data fabric solution that helped facilitate data sharing, collaboration and analysis from the dismounted soldier to the command post.

HII-developed Big Data Solutions

To enable today’s all-domain force, HII is developing advanced analytics and machine learning-enabled big data solutions for a new generation of smart defense and intelligence systems. The Big Data Platform (BDP) is a government-owned cloud-based data analytics platform developed by Enlighten. When connected with the Cloud Native Command Post, it
enables data sharing and multi-domain operations across various echelons, organizations and networks.

The BDP and its instantiations, now deployed across DoD, provide a secure all source data layer for JADC2. The data fabric layer creates the fastest and most agile enterprise architecture possibility for JADC2 to operate within a common trusted “big data” sharing environment. The BDP will also enable an agile future for theater, command or mission tailored operational pictures.

Defending the Pacific
INDOPACOM, the nation’s oldest and largest combatant command, must operate in a contested battlespace, provide all domain battlespace awareness and collaborate with our nation’s allies and partners, among other responsibilities.

Strengthening allies and partners, improving information sharing and enhancing coordination while addressing security threats in the region are critical components of the INDOPACOM plan. A joint interconnected data fabric, like HII’s solution, supports multi-mission use across the DoD, enabling joint all domain operations from the enterprise to the edge in a multi-domain contested environment.