

# Systems engineering and integration

Reducing risk while enabling delivery of mission outcomes



A disciplined systems engineering and integration (SE&I) process reduces risk, provides acquisition transparency and ensures that new capabilities integrate seamlessly with legacy systems.

We know that no two systems are alike; that's why we deliver a customized approach, tailoring the engineering process to meet the customer's objectives. Our resume includes the successful application of SE&I services that have informed the design, expansion, integration, operations and mission optimization of the nation's most complex systems of systems.

Perspecta delivers SE&I services in four major areas to inform designs and integrate complex systems throughout the project life cycle.

## Full life cycle systems engineering

Our full life cycle systems engineering approach strikes the right balance between technology, process and mission expertise, so you can ensure that your enterprise is achievable, reliable and successful. Through close collaboration with our customers, we are able to deliver mission-based outcomes from capability acquisition to deployment to disposal at end of life.

- Trade studies
- Requirements and interface definition
- Operations concept development
- Independent verification, validation and test
- Operational transition

## Mission enterprise integration

Our subject matter experts focus on engineering the entire enterprise. We take a holistic perspective to understand the complex architecture associated with multiple inter-connected systems so you can meet mission objectives while improving the value of your mission enterprise. Our approach combines the cost and schedule interdependencies spanning the portfolio

of multiple projects and programs, the performance of the systems and their components, and how that performance translates to the overall enterprise.

- Integrated architectures
- Portfolio planning and optimization
- Enterprise Schedules
- Acquisition strategy and support
- Technology insertion planning

## Mission modeling, simulation and analysis

Mission modeling, simulation and analysis plays a key role in all system phases and enables data-driven decision making that supports acquisition and development of large-scale systems-of-systems mission enterprises. We offer a suite of modeling, simulation and analysis capabilities developed using our expertise in mission and technical spaces that span the end-to-end mission chain.

- Space, air and terrestrial platform dynamics
- Remote sensing performance
- Communications and networks performance
- Functional Availability
- End-to-end performance and mission effectiveness

## Program management and control

We provide program management and control services to ensure the delivery of SE&I services meet customer cost, quality and schedule requirements while supporting customers' strategic and mission objectives. Our approach ensures the delivery of quality technical, engineering, and programmatic support services using learned and industry best practices.

- Integrated program control
- Configuration management
- Risk and opportunity management
- Cost and schedule management
- Decision review boards

