

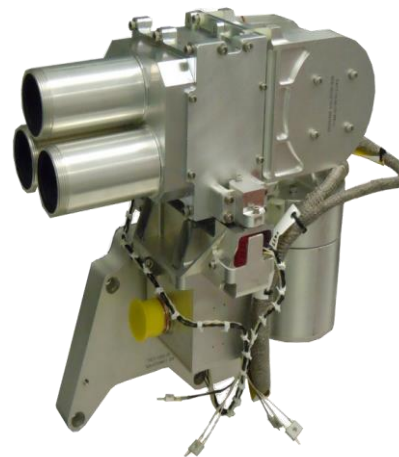


Fact Sheet

Spacebased Kill Assessment

The Spacebased Kill Assessment (SKA) system is a network of small sensors hosted on commercial satellites. The individual sensors house three infrared detectors used to collect the energy signature of the impact between a threat ballistic missile and an interceptor of the Ballistic Missile Defense System. The SKA system is currently on orbit and executing planned test events.

In Fiscal Year 2014 several events prompted the Missile Defense Agency to start the SKA project. The Fiscal Year 2014 National Defense Authorization Act directed the Missile Defense Agency to address hit and kill assessment for the Ballistic Missile Defense System. An internal study on space highlighted strategies that could provide sensor capabilities at lower price points. In addition an opportunity for hosting sensors on commercial space platforms became available. In April 2014 after coordination with the combatant commands and Congressional staff, the Missile Defense Agency began the SKA project.



SKA Sensor Assembly

Capabilities crucial to the Ballistic Missile Defense System

- Capability provided by network of sensors
- Real time tasking and reporting
- Multi-spectral sensor with three fast frame infrared detectors capable of capturing the intercept signature
- Connected to BMDS command and control elements for tasking and reporting
- SKA data can be fused with radar data for integrated, multi-phenomenology assessments

SKA is important to materiel developers like the Missile Defense Agency for several reasons

Real world example of rapid development and fielding

- Innovative acquisition processes delivered first payload on orbit in half the time of traditional space programs
- Rapid commercial launches provided full capability in months, not years

Case study for how to contain development costs

- Constrained schedule avoids #1 cost driver of space programs: people x time
- Purchasing services on-orbit avoids development and integration costs