(U) **Sentient**

(U) Sentient is an effort to fuse multiple intelligence (multi-INT) capabilities into an end-to-end integrated system that will influence automated collection and actionable response.

**(S//TK//REL)** Defined: Sentient is a research and development (R&D) program developing an automated, multi-INT, problem-centric architecture, revolutionizing the current sequential tasking, collection, processing, exploitation and dissemination (TCPED) cycle into a learning and adaptive cycle.

- (U) The Sentient four core functions are:
  - (U) Data ingest and processing – *What information do we have in context of the situation?*
  - (U) Sense-making – *What does the information mean? What additional information do I need?*
  - (U) Orchestrated collection – *How can I get the best coordinated collection to fill knowledge gaps?*
  - (U) Framework and human/machine interface – *How does the architecture interact with humans?*
- (U) Sentient substantially improves the intelligence value of the NRO constellation by:
  - (U) Allowing automated tasking and collection and applying machine learning to build intelligence knowledge;
  - (U) Providing situational awareness based on observed activity and historical intelligence to model and anticipate potential courses of actions of adversaries.
- (U) Sentient will enable deeper intelligence understanding by:
  - (U) Involving analysts throughout the cycle, while enabling tasking, collection, and processing to occur at machine speed to bring actionable information to analyst desktops;
  - (U) Allowing analysts to focus on reasoning and situational understanding instead of data search and correlation.