

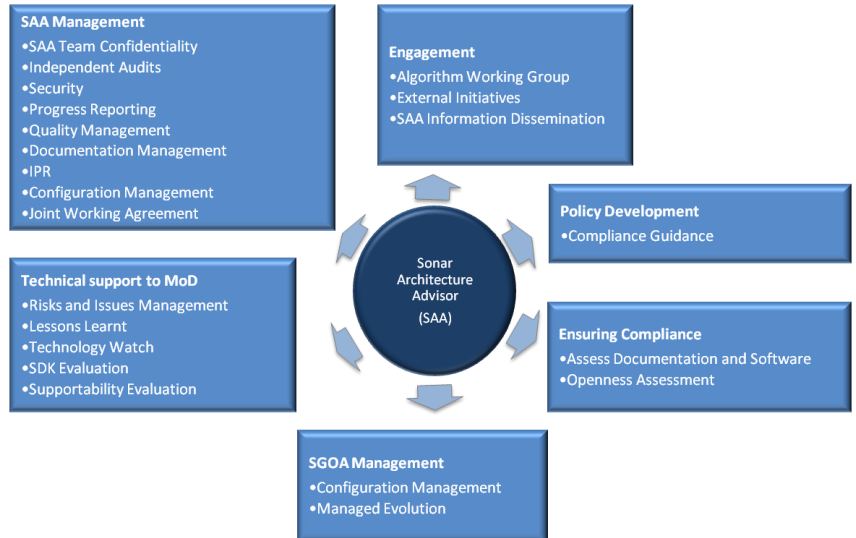


Sonar 2054 (IR) System Architectural Advisor (SAA).

To ensure that the S2054 (IR) programme meets the open architecture requirement, the MoD has appointed SEA as the System Architectural Advisor or SAA; an independent overseer to police the system architecture

The Underwater Weapon Systems Integrated project team (IPT) placed a contract in September 2006 for the replacement of the inboard hardware and software of Sonar 2054, the active/passive sonar suite of the Vanguard class ballistic missile nuclear submarines. This programme is known as S2054 (Inboard Replacement) or (IR).

During the 20 years since the design of the initial system, technology has advanced and the requirements for open architecture systems to enable capability growth to be achieved incrementally have been recognised and is now achievable.



SEA's role covers SAA management, SGOA management, policy development, technical support to the IPT, compliance assurance and meeting co-ordination.

The SAA will work with the System Integrator (SI) within the following key assumptions:

- At least the current capability of S2054 shall be maintained, with legacy hardware running alongside newer hardware where necessary;
- The existing arrays shall continue to be used;
- The replacement architecture shall be 'open';
- The replacement architecture shall be compatible with the anticipated Common Core Combat System (CCS) transitional (initial) architecture and S2076 Stage 5.

Replacement of the inboard processing hardware with modern technology will result in major reductions in physical processing volume for beam forming, signal processing and data processing.

The SAA :

- Is an independent delegated body and is not party to any other project-related contract;
- Monitors the S2054 (IR) architecture and the extent to which it delivers the required openness during the design and build phases;
- Has a central role in supporting the UWSIPT by acting as a central point of communications on openness aspects, monitoring the SI developing design and advising the UWSIPT on reported problems, concession requests and suitable opportunities for technology refresh during the S2054 (IR) design and development phases.