BAE Systems designed and built Challenger 2 – now we are leading the team bidding to keep it battle-ready for the next two decades. Our complete knowledge of the tank means we can provide the safest and most effective solution for the British Army, alongside the best industry partners available.

Key elements of the Challenger 2 Life Extension Project

1. **Thermal Imaging System**
   This provides day and night surveillance and target engagement. We now have the opportunity to provide an up-to-date system which will deliver improved, 24-hour performance.

2. **Commander’s Primary Sight**
   The current sight gives the Commander 360 degree independent surveillance, electronically ‘handing over’ targets to the gunner and looking for new targets. The new system will include thermal imaging and give the Commander a full 24-hour, day and night hunter/killer capability, delivering greater situational awareness and flexibility.

3. **Gun Control Equipment**
   This sub-system moves the turret and the gun under direction from the fire control system, ensuring timely and accurate fire. We will future proof the sub-system with up-to-date technology.

4. **Electronic Architecture**
   This connects the vehicle’s sub-systems. Once upgraded, it will allow a new Commander’s crew station to be installed and give the vehicle an expandable architecture hosting new interfaces, reconfigurable displays and controls.

5. **Fire Control System**
   This acts as the brain of the weapon system, orchestrating the sighting, gun control and sensor sub-systems to provide accurate and dynamic weapon aiming. We will modernise and future proof this system.

**Further Capability Improvements**

There is an opportunity for further capability enhancements to Challenger 2. We will follow a systems engineering and User Centred Design approach to offer the Ministry of Defence options for their consideration.

**Bringing the team together**

All team members are leaders in their field with a long track record of serving the British Army. BAE Systems will use its unique knowledge of Challenger 2 to integrate the most technologically advanced and proven systems available.

**General Dynamics Land Systems – UK (GDLS-UK)**

Working with BAE Systems, GDLS-UK will carry out the vehicle conversion programme in its new AJAX manufacturing facility in South Wales. This solution combines our unique knowledge of Challenger 2 with GDLS-UK’s expertise in integration. It also ensures commonality with AJAX to allow more efficient integration into the British Army.

**Technical Support – QinetiQ**

QinetiQ will provide its systems engineering expertise and an independent assessment service, including computer modelling and verifying safety measures. This is essential to ensure we offer the most robust, effective and low-risk solution.