

# Maintenance, Repair & Overhaul (MR&O)

All types of electro-mechanical equipment are supported, predominantly for use in defence, but also for other applications – for example generating sets and other power generation & distribution systems – whether designed and manufactured by Rolls-Royce DGS, or by third party providers.

## Power Generation and Distribution Equipment:

Rolls-Royce DGS have been ensuring supply of mission critical power to the UK MoD, as a prime supplier, for around 20 years. Originally our specialist team developed and manufactured the high specification mobile power systems that are currently in use by the UK MoD.

Today we continue to ensure availability of power, up to 80kW, via the generators and associated distribution systems. In addition to the main generator availability contract for the UK MoD we provide a range of equipment services to maintain delivery of the essential power required by our Armed Forces in the execution of their operational missions. This covers a range of generators, generator interface units, distribution modules and the cabling. Obsolescence management and reverse engineering services are a key feature of our services enabling Rolls-Royce DGS to ensure continued safe operation of in-service equipment. These services also extend to third party equipment to provide complete and reliable power solutions capable of operating in any environment.

**Example:** Repair and overhaul the Deltic engines used in the Royal Navy's Hunt Class MCMV vessels. Deltic engines are 940 shaft-horse-power, highly complex, 2-stroke diesel engines which have been out of production for c.30 years. The engines are no longer supported by the OEM. Rolls-Royce DGS successfully managed equipment obsolescence by reverse-engineering and re-validating major components and incorporating reliability improvement packages.

### This contract demonstrates the following capabilities:

- Full inspection, complete strip-down, remanufacture, full factory acceptance testing (FAT).
- In-house repainting.
- Management of government furnished spare parts at our facility.
- Supporting equipment setting-to-work and warranty obligations in-theatre on the vessel through in-house field service engineers.
- Ability to adhere to all contractual KPIs relating to equipment availability and spare engine stock availability.
- Adoption / reverse engineering of supply chain required to support third party equipment.

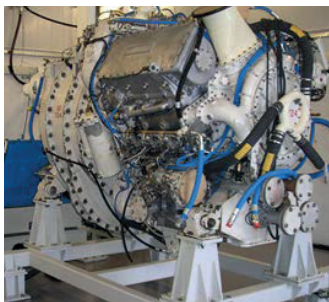


Generator maintenance at the Winsford facility

**Example:** Rolls-Royce DGS were the original equipment manufacturer for the Auxillary Power Unit (APU) installed on the Titan/Trojan vehicle. We also provided repair coverage for the full overhaul of the equipment.

### This contract demonstrates the following capabilities:

- APU detail strip, inspection and provision of detailed repair quotation.
- Equipment remanufacture in-house to as-new condition.
- Full in-house Factory Acceptance Testing.
- In-house repainting (spray booth facility).
- Equipment obsolescence management.



Deltic engine in Rolls-Royce DGS test bed

