# Trials Management



- Trials Planning
- Trials Facilities
- Conduct of Trials
- Instrumentation
- Data Analysis & Trials Reporting



SDE offers a comprehensive trials service, for Ordnance, Munitions & Explosives spanning land, air and sea domains. This includes the planning and management of trials plus the analysis of data and reporting.

Agreements are in place with a number of UK and overseas T&E facilities and the Company is also authorised to conduct firing trials on UK MoD Land Ranges.

Trials can be conducted utilising our suite of comprehensive and fully portable trials instrumentation and equipment. SDE also has significant experience in analysis of trials data to produce independent reports in support of safety cases, procurement programmes etc.

Our fully qualified trials team has extensive experience in

undertaking trials across the complete range from simple Technical Trials though to complex Measures of Performance and Measures of Effectiveness programmes.



OAK PARK • HUNSDON • WARE HERTFORDSHIRE • SG12 8QP • UK

Email: Enquiries@SDE-UK.com



TEL: +44 (0)1279 842 203 FAX: +44 (0)1279 843 372

www.SDE-UK.com

# **Trials Management**



### **Trials Planning**

SDE offers a comprehensive trial planning service for land, sea and air systems. This includes compliance with national or NATO standards or customer specified criteria. Trial planning case studies include:

- Measures of Performance and Measures of Effectiveness.
- In Service Surveillance and life extension plans.
- C4I and survivability trial plans.
- Ordnance, Munitions and Explosives Safety and Suitability for Service trial plans.



### **Trials Facilities**



SDE has access to and use of appropriately licensed trial firing facilities and UK MoD ranges that allow a wide variety of trials to be conducted as follows:

- Indoor ranges up to 200m capable of firing 40mm weapon systems.
- Outdoor ranges for small arms, mortar, tank & artillery systems.
- Sequential environmental testing.
- Insensitive Munitions (IM) testing.
- OME & automotive testing of wheeled & tracked vehicles.
- Integration of weapons onto land, naval and air platforms.

SDE also operates an in-house two stage Light Gas Gun with calibres of 5.56mm & 7.62mm, capable of achieving velocities of 7.5 km/s.

### **Conduct of Trials**

SDE has suitably qualified staff and has extensive experience in facilitating, managing and conducting trials which have included the following:

- System and sub-system MOP and MOE trials.
- DOSG Manned Firing Advice & Live Crew Clearance testing.
- Environmental data gathering trials.
- Platform integration.
- Internal & external ballistics.
- Characterisation of novel materials.

### Instrumentation

SDE has an extensive range of instrumentation available including:

- Doppler and tracking radar
- Rate-of-fire and velocity measuring equipment.
- Acoustic shot position indicators.

## **Data Analysis & Trials Reporting**

SDE has extensive experience in producing independent trial reports and has developed bespoke data analysis software in order to provide the customer with timely reports. Examples include:

- Generation of arena trial fragmentation data.
- Automated MOP and MOE data analysis.
- Assessment of data to inform acceptance processes, such as ITEAs.
- Interactive reports to provide evidence in support of safety cases
- External ballistics performance data analysis for the production of firing tables

