Planning and managing the safety lifecycle for Defence Standard 00-56 Issue 4

10th-12th July 2012, London

Adelard is pleased to announce this course which presents the requirements of Defence Standard 00-56 issue 4.

Part 1 (days 1 and 2) will provide attendees with the capability to develop safety processes, identify arguments and generate supporting evidence to comply with the standard.

Part 2 (optional — day 3) will build on the first two days to train a limited number of attendees in hands-on use of Adelard’s Assurance and Safety Case Environment (ASCE) in the construction of DefStan 00-56 compliant safety cases, and the development and presentation of safety case reports. This work will be based on material presented and developed during Part 1.

Part 1 is limited to 16 attendees; Part 2 to 8 attendees.

(Attendance is a requirement for attendance at Part 2; however Part 1 may be attended on its own)

Who should attend
- IIP leaders, safety managers and other duty holders utilising the standard in MoD contracts.
- Contractors/suppliers who have a requirement to deliver or bid against the standard.
- Safety specialists and consultants who plan to develop 00-56 issue 4 compliant safety cases.
- Independent Safety Assessors who plan to assess a product or project against the standard.

Prerequisites
- General safety familiarity.
- Previous safety case development or assessment experience is desirable.
- Part 2 requires some basic familiarity with the ASCE tool — an evaluation version and hardcopy tutorial material will be provided in advance to those who have not used it before.

Learning outcomes
- Familiarity with good practice in safety case structure, organisation and lifecycle.
- Awareness of regulatory requirements for safety cases and safety management.
- Awareness of requirements of 00-56 including guidance on software.
- Practical experience of safety case construction and techniques for developing supporting evidence.

Part 1
Session 1: Introduction to the Def Stan 00-56 Issue 4
- Overview: the requirements of the standard and supporting guidance.
- The safety lifecycle and process model.
- Relationship to the MoD CADMID project lifecycle.
- Roles, stakeholders and responsibilities: the legislative framework.
- Putting the safety case at centre stage.
- Implications for safety project planning and management.
- Working with stakeholders.
- Customers, ESA, safety offices, regulators.

Session 2: Establishing the safety case — determining system safety requirements
- Collaborative analysis of the system in its operating context.
- Starting the risk management process.
- Preliminary hazard analysis, risk analysis and risk assessment.
- Determining tolerable levels of risk.
- Identifying system and equipment safety requirements.
- Demonstrating effective hazard analysis and safety management.
- The role of the hazard log.

Session 3: Developing the safety case — demonstrating equipment safety
- Development process model and activities.
- Propagating safety requirements through the design.
- Management of derived safety requirements.
- The treatment of systematic failure.
- New approach to safety integrity requirements.
- Safety arguments.
- Sources of evidence and argument strategies.
- Demonstrating that risks are ALARP.
- Gaining confidence in evidence.
- Justifying hazard management via the hazard log.
- Approaches to software and programmable systems.
- Managing legacy systems, off-the-shelf systems and COTS systems integration.

Part 2
Session 1: Building safety case arguments within a managed safety lifecycle
- Assembling safety argument components.
- Use of ASCE in the development of structured safety cases using graphical argumentation.
- Overview of Goal Structuring Notation and Claims-Argument-Evidence.
- Linking to safety case evidence and integrating with other tools.
- Safety document hierarchies and dependencies.
- Supporting safety lifecycle activities.
- Mapping Part 1 results to overall safety case lifecycle.
- Shaping the safety case through the project lifecycle — use of models and templates.
- Supporting safety lifecycle review and assurance activities.
- Approaches to generating safety case reports.

Session 2: Safety case development workshop
- Tricks of the trade — planning tactics to make life simpler across the lifecycle.
- Traceability and versioning across evolving heterogeneous safety documentation.
- Group exercise.
- Discussion of results.

Part 4: Establishing system safety into service and in service — the safety case in operation
- Procedures and training as contributions to safety.
- Management of operational limitations.
- Operational validation of safety case assumptions.
- Maintaining safety in a changing environment.
- Safety at the end of service life.

Session 5: Conclusions
- Overall themes.
- Safety case reports — ensuring adequate and appropriate reports for relevant stakeholders.
- Wrap up — open technical discussion.

Course tutors
These will include Dr Tim Clement, Dr Catherine Menon, Mr Luke Emmet, and Dr George Cleland. The tutors have a wide-ranging background including systems and safety analysis, safety case development and assessment, standards development and interpretation, and human factors.

Costs
Part 1: £895
Parts 1 and 2: £1,420
This includes all course notes, refreshments, and a course dinner on the evening of the first day.

Location
London - TBC

To register
Complete the form overleaf

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