

CONFORMITY ASSESSMENT & SUPERVISION



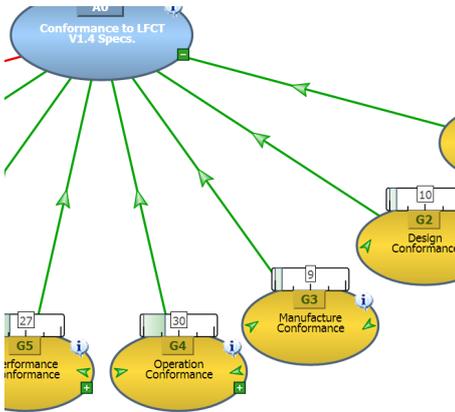


Figure 1: Overview of the LFCT Conformity Assessment Schema developed in SyCAS as an illustration of the system for CRCC

Background

Most modern complex systems especially those with electronics, computing and communication contents employed in safety and mission critical applications require assessment and certification as a precondition to authorised deployment. In practice, most computer based electronic systems cannot be safety assured purely through product type testing at the end of the production process and the safety confidence (integrity) is largely achieved through following a systematic life cycle process and competent resources. The increasingly sophisticated and competitive international market place as well as the regulatory framework in most developed countries require adoption, implementation and assurance of conformity with a suite of quality, safety, security and environmental assurance standards. In spite of the cost, time and resource intensive nature of adoption and compliance, most safety and mission critical industries and progressive organisations lack the systematic supporting means to monitor and accumulate sufficient evidence and confidence in support of compliance cases. As a result, many of the risks as well as the conformity arguments are relegated towards the end of the life cycle or development processes that constrain the opportunity for corrective actions as well as result in major cost escalation.

The same is true for processes, procedures and life cycle phases that a programme, project or undertaking goes through. There's a need to go beyond audits and ticks in the boxes as means of confidence building in complex products, projects and undertakings.

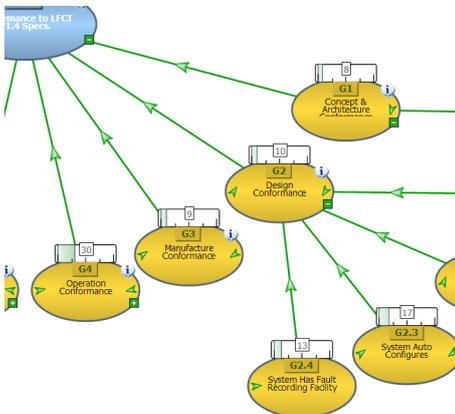


Figure 2: A more detailed illustrative view of the schema for LFCT conformity assessment developed for CRCC in SyCAS

A Systems Solution

Based on extensive experience in leadership, development and application of CENELEC and IEC International standards, Vega Systems has developed an advanced graphical system for conformity assessment of any complex product or system against a given standard. After initial demonstration, a sample specification for the Low Frequency Code Transmitter (LFCT) has been provided by CRCC for a pilot development. This specification (LFCT V1.4) has now been developed into a conformity assessment schema using Vega Systems' Systemic Conformance Assurance Service (SyCAS).

The following figures illustrate the appearance of SyCAS's schema for specific LFCT application. The full schema developed for LFCT is more comprehensive than shown and includes all the requirements in the LFCT Version 1.4 specifications as translated and provided by CRCC.

The Vega Systems' SyCAS employs a multi-level graphical schema where Level 1 is usually generic life cycle based structure as devised by Vega experts or adopted by the client that stays the same for all products and systems for which conformity assessment is required. This renders coherence and consistency between different schemas for different products and systems. The specific requirements for a product or complex system is usually developed below the generic life cycle model in Levels 2 and beyond as illustrated in Figure 2.

Employing SyCAS, it is possible to develop a schema for any complex product or system specification or standard and use this as a basis for structured and systematic evaluation, assessment, feedback and certification. The schema for a given product or complex system standard is developed only once employing a panel of acknowledged experts and employed many times afterwards without the need for the original experts for each subsequent assessment. SyCAS can also generate reports and certificates at the end of an assessment and provides guidance for the clients on where to enhance their product or system should they fail to achieve certification.

SyCAS Benefits

Given the knowledge and expertise requirements for assessment and certification, SyCAS can empower organisations involved in the evaluation and assessment of products, processes (e.g. management, investment etc.) and complex systems to manage the tasks consistently, efficiently and comprehensively using best expert input once and supervise the operation closely. It is the most advanced and user friendly tool in this context that is secure and web based that offers a range of benefits chiefly:

- A structured and consistent process for conformity & certification;
- Supervisory and timely feedback on deficiencies against a standard, specification or process;
- Structured incremental and progressive confidence towards compliance;
- Save on the necessity for or the frequency of audits and independent assessments;
- Incremental development of the Safety/Security/Assurance arguments and cases;
- A structured means for corporate/process memory and learning;
- A repository of re-usable assurance components that can be shared globally within a large or distributed organisation;
- Significant savings on reduced risks and efficient client acceptance and approval/certification.

SyCAS PACKAGE

Upon completion of negotiations & contract, SyCAS will be introduced in the client organisation according to the following process or a variation thereof within an agreed time period:

- A presentation and workshop with the senior executives to clarify the principal objectives, business impact expectations and principal areas of application;
- A training presentation and workshop with the departmental managers to devise a plan, identify required resources & milestones;
- Up to three workshops with appointed relevant experts to develop up to three schemas (models) for the priority standards/procedures/business rules that are considered priority items for implementation in the organisation. The workshops may take one day each and will result in calibrated ready to implement schemas relevant to the three high priority facets of the organisation's critical activities;
- Immediate support by a licenced Vega Knowledge Engineer (VKE) for the first week of deployment;
- Continued Operational (application related) and Technical (system related) support by Vega experts depending on the preferred arrangements that may take one of the following forms:

A: Platinum Support – a resident VKE at client premises that will provide Operational support and be backed up by full Technical Support remotely.

B: Gold Support – 24/7 level of online, email and telephone based support with a minimum response time of 5 hours & a local visit by VKE should the issue persist within 12 hours.

C: Silver Support – working hours online, email and telephone based support with a minimum response time of 8 hours.

D: Standard Support – online & email based support with a minimum response time of 24 hours.

- All SyCAS contracts include Standard Support for a period of one year from the start of the contract. All forms of Support services are available for annual periods extensible at the end of each contractual year.
- Access to SyCAS is via Vega Systems secure SyCAS portal subject to contractually agreed number of concurrent use licences.
- Vega Systems offers developmental services for customisation of its web services portfolio currently comprising SyCAS & CASS™ to corporate styles, specialised forms/reports and additional functionality.

Please contact Info@VegaGlobalSystems.com with the technical specification of the required functionality for evaluation and quote by our experts.