

## **Requirements Traceability**

## CQC Solutions has now incorporated Traceability into CA-Clarity

(supporting Safety Instrumented Systems)

For companies developing new products and or new software, it is paramount that every specified requirement is met.

For some industries this is also a critical safety issue, and Requirements Tracing becomes part of a larger certification process whereby a full audit trail of how requirements have been implemented and tested is mandatory. This is often covered by the generic standard IEC61508 for the design, construction and operation of electrical/electronic programmable systems. However many industries have their own derivations, for example:-

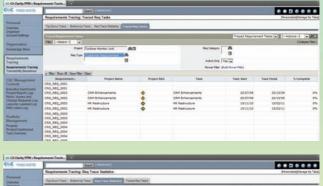
- DO178B & DO254 Avionics software and hardware standards.
- ISO 26262 Automotive standards, (currently draft).
- IEC 61513 Nuclear Industry for instrumentation and control for systems important to safety.
- CMMI Level 2 Capability maturity model standard.
- EN5012x/IEC 62425 for railway signalling systems.
- FDA 21 CFR for laboratory practices for conducting non-clinical laboratory studies.



CQC Solutions has developed a Requirements Tracing capability using the world leading CA Clarity PPM system which will not only meet the overall tracing need but provides the following added advantages :-

- Full linkage to Programmes, Projects and Portfolios.
- Full Resource Management capability linked to the Projects/Programmes and Portfolios.
- Ability to enter via a Web based portal the **Requirements** and link **Contractual Requirements Specification** to **Specific Design Specifications** through to **Test Plans &Test Results**, in a fully auditable way, obviating the need for a Requirements Traceability Matrix.
- Documentation structure and storage (including diagrams) that can be linked to Specifications, Projects, Programmes and Portfolios.
- Detailed **dashboards** and **reporting**, including the generation of documents from requirements entered into Clarity PPM.
- Ideas capture, strategic alignment and the ability to run scenarios at the Portfolio level.
- Accurate real time metrics for projects, programmes and portfolios such as Estimated Time to Complete (ETC), **costs** and **financial plans**.
- Ability to partition instances such that outsourced work can be monitored and reported against the overall Programme/Portfolio – without the outsource company having visibility of commercially sensitive materials.
- Sophisticated workflows that enable business processes such as NPD Stage-Gate<sup>®</sup> and/or Prince II methodology including notification by Email or SMS when a user is required to take action.

CAC PMO DOTE		Search.						
Personal Deprises Deprises Account Settings Organization	Regulaements To	scing: Top Dev	n Trace			_	Pe	schales@failes
	Text Inner Texts Bellin-Lis Texts   Reg Texts Educates   Texted Res Texts							
	Trap Drown Des Tax				Top Down Rep Tr	in Sider	of a life	Advent-1
	filet [-delete-]							Date:
	Popul Turbing Hundur Link (MD			Active Day   All				
Departments Knowledge Dane	Rei Type		AD President		Bydd Rowell Pater			
17 Service Management Bevices	s file See Al See file Oer							
	-	Rene	Level		2 3	6 5	6 F	el Level Level
	B CH4_480_5011	B CK8_ADQ_DDIS Temperature The turbine monitor must be capable of reporting temperature frequency of not less than once every 3 excords (5.3%), et el		temperatures redundantly, with a (2-2Hz), at each monitoring point.				
Requirements Teacing	U CAS_ARO_IDID	Temperature Desothing	All reported internal temperatures must be amost prevent instrumentation piter.	thed over a suitable monitoring period to				
Requirements Tracing	10 CR3_860_000	Temperature Reporting	The turbine montal should be able to report temp degrees Celsius their Requirement					
Repairments	8 CAR, MQ, 1004	ECLE_ADD_DOOL Temperature The turbine monitor must be capable of generating an ale Alert Generation temperatures						
Planning Barages Plannes	CX8_862_0005 Vitration The turbine monitor must be capable of report Monitoring Requestly of not less than once every 3 record			(2.2Hz), at each monitoring point.				
Natazonti Reguraciantia	12 CAS_ABQ_5008	Vibration Emothing	28 reported vibrations must be smoothed over a suitable monitoring period.					
COC Management	CR8_882_0007	Version Reporting	The turbine montor should be able to report suit horizontal displacements in both runs from the cer- horizontal.	of band vibrations in terms of vertical and renal pointand degrees from vertical or				
Controls Eventive Doctorent	CN8_MQ,0005	Vibrator Alart Generator	The turbine monitor must be capable of generaling an elect for out of band temperatures					
ProjectProgramme Reporting Project Report Logs	E Catorier East	Cuttoner Spec	1 This downlent attached to this top level requirement is the poly file received from the customer on 20th July 2009. For revisione will be attached New Version Bith September 2009.					
Rors, Tolues and Change Requests Log	100,480,0001	Thermostruple	Dual thermostuples will be mounted equidatant I	from each monthring point,				







## For further information visit www.cqc-solutions.co.uk

www.cqc-solutions.com info@cqc-solutions.com Office: +44(0)1753 701811 Fax: +44(0)1638 7437437 Slough office: CQC Solution Ltd, The Nova Building, Herschel Street, Slough, Berkshire, SL1 1XS London office: CQC Solutions Ltd,1 St Andrew's Hill, London, EC4V 5BY