

## News from the Centre

### Ten years, and counting....

CSE is just over ten years in operation, having started up during the course of 1991. While the software industry has changed dramatically during those ten years, we have continued to adapt in line with those changes to ensure we continue our mandate of Promoting Better Software. The technology underpinning and driving the software business continues to evolve at a rapid pace, but the underlying issues of seeking to improve quality and raise productivity remain.

During the past ten years, we have assisted many companies achieve ISO9000 status, move to CMM levels 2 or 3, adopt object or component technology, or take other steps to improve their software processes. We look forward to continuing to work with these, as well as many new companies, to meet the challenges ahead. Especially when the business climate is getting tougher, as at present, an important challenge is to stand out from the crowd and demonstrate the quality of what you produce. Good software engineering practice is part of that.

Robert Cochran, CSE Director

### Graduate Training Programme

This programme has successfully run for two years but for this coming September we have made some changes, mainly to the format. We are now offering it as a more intensive one-year programme. The aim remains the same: *to raise the level of professionalism among young software developers early in their career and to round off undergraduate skills already gained.*

This new intensive programme of one-day workshops runs from September to June. The topics covered include:

- **lifecycle issues** like project management, planning and tracking, configuration management, requirements management and process and product quality
- **development issues** like architecture & design, object technology, usability, UML and DSDM and new development approaches
- **general issues** like team working, IPR and professional standards.

The CSE is a registered training provider for the IEI CPD scheme.

The programme is endorsed by the ICS.

For more details look at our website or contact us for a brochure:

Tel: (01) 700 5750

Fax: (01) 700 5605

### Mark this date in your diary!

CSE will again be running a software engineering conference in November.

### Standing Out from the Crowd

**13th November 2001  
Great Southern Hotel  
Dublin Airport**

Topics:  
Requirements,  
Inspections,  
CMMI,  
Java/XML

Programme and date are provisional and are subject to change, check our website for latest details:

**<http://www.cse.dcu.ie>**

## CSE Online

<http://www.cse.dcu.ie>

Many of our publications, including this Newsletter are available in pdf format from our website, under Resources. If you want to find out when new material is available then subscribe to csenews. You will also be kept up to date with courses and other events at CSE.

To subscribe send an email to:

[maiser@cse.dcu.ie](mailto:maiser@cse.dcu.ie)

The contents should be as follows:

subscribe csenews  
exit

A message will be emailed to you as confirmation of subscription.

We would encourage you to contact us to discuss issues arising from articles in this newsletter or with any other queries you might have, all CSE emails follow the same pattern, <firstname>@cse.dcu.ie.

## CSE's Improvement for Small Companies Programme (ISCP)

By Jill Pritchett,  
Programme Manager

CSE has been running the ISCP programme for 6 years, helping software companies to implement effective Quality Systems, using ISO 9001 as a framework. Some participants go on to apply for ISO Certification, and others use it simply to improve their processes and to introduce a consistency to how they approach their Software development.

Implementation of a Quality System can seem a daunting prospect, but the programme gives you support, and ensures that you have a system that is flexible and can adapt as your company evolves over time. With the new version of the standard launched last year you can also remove a great deal of the bureaucracy previously associated with Quality Systems. The standard is now far more about proving that you have done the right thing, rather than writing procedures for everything, only 6 core procedures are required now.

In a series of articles we have asked previous participants to give you some insight into their thoughts about the programme, and what they got out of it. This first one is from EMC Software Development Group in Cork who were awarded ISO certification to the new standard in March.

If you want to find out about the programme, related training courses or consultancy in the ISO 9001:2000 arena contact:

Jill Pritchett at CSE on 01 700 8055 or email: [jill@cse.dcu.ie](mailto:jill@cse.dcu.ie).

### EMC Software Development Group benefits from ISCP

EMC's software development group initially enrolled on the ISCP Programme to achieve improvements in our processes. We successfully achieved this along with the added bonus of ISO9001:2000 certification.

We obtained a lot of benefits from participating in the ISCP programme, some of these being:

- Performance of an assessment at the start, and end, of the programme. This allowed us to work on key areas that would be of immediate benefit to us and see how we had grown as a result of completing the programme.
- The cluster forum supports free and open communication among all participants. This allowed the group to share their experiences on what worked, and what didn't work, as well as sharing any problems that were encountered.
- Regular site visits of an independent third party (assigned ISCP Tutor) provided an incentive to the group to achieve the tasks set, as well as unearthing issues that needed to be dealt with by the software group.
- The Implementation of the Quality management system was treated as a full project, on a par with all other projects, and of equal importance and equal entitlement to required resources.
- ISCP homework assignments, set for the next meeting of the programme, provided a visible indicator of commitment to the

programme and progress being made.

- A full 1-day audit performed by our assigned Tutor - this audit, and the subsequent audit report, gave us a very good picture of where the company stood in relation to applying for ISO 9001:2000 certification

The vast experience, ongoing support and friendly atmosphere provided by all the staff of CSE, as well as our assigned Tutor ensured our success. I wholeheartedly recommend this programme to any Software organisation that wishes to become certified to ISO 9001:2000, or wishes just to improve itself and deal with the issues that lack of process create.

**Edwin Kenny,**  
*Software Quality Manager,  
EMC<sup>2</sup> Software Development Dept,  
Ovens, Co. Cork.*

### Informatics Project Update

The Component Engineering for e-business project team has been busy over the summer getting to grips with key technologies and researching the application of patterns to e-business problems. A Pattern provides a proven solution to a specific kind of problem that may arise in a variety of contexts, or put more simply a pattern captures hard won expertise in an accessible format.

We intend to have a web site up in September that will provide information on our work. The second phase of our project, beginning in October, involves working with external companies, so if you are interested in the kind of things our project is looking at why not call us for a chat.

Dave Halpin, 01 700 5622,  
email: [dave@cse.dcu.ie](mailto:dave@cse.dcu.ie)

Jim Rook, 01 700 5640, email:  
[jim@cse.dcu.ie](mailto:jim@cse.dcu.ie)

## Technology Overview Series

We are running a series of awareness raising events at a number of locations around the country. We hope to bring software and business professionals together to discuss new ideas and share experiences of software development in an Irish context.

For more details look at our training schedule on our website:  
[www.cse.dcu.ie/training.html](http://www.cse.dcu.ie/training.html).

### Software Process Improvement Frameworks

..... 13<sup>th</sup> September, Letterkenny/Derry

### Building Software Quality into Web-based Development

..... 25<sup>th</sup> September, Dublin (CSE)

**Why Use the UML?** ..... 9<sup>th</sup> October, Limerick

**Managing R&D** ..... 17<sup>th</sup> October, Dublin (CSE)

### Software Development Process Forum 2

..... 9<sup>th</sup> November, Dublin (CSE)

**Why Use the UML?** ..... 22<sup>nd</sup> November, Dundalk (RDC)

### Implementing the New Standard - ISO 9001:2000 How was it for you?

..... 28<sup>th</sup> November, Dublin (CSE)

**XML in Context** ..... 12<sup>th</sup> December, Dublin (CSE)

## Consultancy Services

***Our aim is not to do things for you but to help you do them for yourself.***

In this way you gain and retain valuable knowledge that will help your company both now and in the future.

### ***Services we provide include:***

- mentoring for companies to help them implement a Quality System including preparation and pre-assessment for ISO 9001:2000
- informal and formal CMM<sup>®</sup> assessments
- process improvement strategy and implementation of an improvement programme suitable for your organisation
- advice and assistance on product strategy
- product evaluations in terms of the feasibility of product development and also end product quality
- advice and assistance on business strategy
- advice and assistance on implementing cultural change
- advice and assistance on introducing new technologies
- advice and assistance on IPR issues
- a mediation and arbitration service

We offer a range of consultancy services which can be carried out as individual assignments or which can be packaged together with in-house training (from our portfolio of public courses, or specifically tailored for you needs).

While providing a service to all size of companies, we are particularly conscious of the issues which are specific to SME's (small and medium sized enterprises).

*These are just some of the ways in which we can help you.*

Our services are flexible and are very much tailored to your needs, so whatever your problem give us a call and let us help.

**If you would like more information about any of our services please contact us at:**

**[admin@cse.dcu.ie](mailto:admin@cse.dcu.ie),**

**Tel 01 700 5750**

## Training Calendar for September - December 2001

Event	Days	Sep	Oct	Nov	Dec
<b>Quality and Software Process Improvement</b>					
➤ Fundamentals of Software Engineering	2		18-19		3-4
➤ SPI Approaches	1	7			
➤ Upgrading Software Companies to ISO 9001:2000	1	14		16	
➤ Introduction to Capability Maturity Model	2	27-28			10-11
➤ Aspects of Quality	2		22-23		
➤ Internal Auditing for Software Companies	1	21		23	
➤ Software Inspections	1	20			
➤ Tmap - A Structured Approach To Software Testing	2		15-16		13-14
• ISCP7 Briefing	0.5		9		
• SPIRE Briefing	0.5			8	
• SCATE Briefing	0.5	3			
<b>Object Orientation &amp; Component Based Development</b>					
➤ Introduction to Object Orientation	1				7
➤ Overview of the UML Notation	1		10		
➤ OOAD using UML	2			6-7	
➤ Component Based Development Overview	1			27	
➤ OO Development Processes: an evaluation	1		5		5
➤ Java, C++, VB or C? - Making the Right Choice for Projects!	1	Available on-site only			
• XML in Context					12
<b>RAD - Dynamic Systems Development Method</b>					
➤ Overview of DSDM	1		24		
➤ DSDM Practitioner	3	Available on request			
• DSDM Interest Group	0.5				
<b>Requirements Engineering</b>					
➤ Requirements Capture - Gathering User Requirements	2		25-26		
➤ Requirements Management - Managing Requirements from Capture to Design	2			20-21	
<b>Project Management</b>					
➤ Project Management Fundamentals	2	17-18		29-30	
➤ Project Management Frameworks	1		31		
➤ Configuration Management – Key Issues	1		12		
➤ Successful Risk Management for Software Projects	1	24		26	
➤ Software Estimation	2	10-11			
<b>Business Strategy</b>					
➤ Winning Strategies - Introduction	1	26			7
➤ Intellectual Property Rights	1			14	
➤ R&D Management for Software Organisations - Overview Course	1			23	
➤ R&D Strategy	1			30	
➤ R&D Management	3		3-5		
<b>People Issues</b>					
➤ Facilitation Skills	2	Available on-site only			

**Dates shown are subject to change.**

Events marked with a, •, are awareness events and are usually free of charge to Associate members.

Events marked with a, ➤, are training courses and are usually discounted to Associate members.

**For more information and booking details please contact our admin department:**

Phone: +353 (0)1 700 5750, Fax: +353 (0)1 700 5605, Email: [events@cse.dcu.ie](mailto:events@cse.dcu.ie)

Details of CSE events and registration forms are also available on our web site at: <http://www.cse.dcu.ie/training.html>