

ISO9001 & ISO27001 @ EPCC

25 APRIL 2018

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Process at EPCC

- Started formalising/standardising EPCC processes after the formation of the Applications Group in 1997
- PRINCE2 project management introduced in 2009
- ITIL service management since 2012
- Focus on ISO9001 (Quality Management) from December 2015
 - And now working on ISO27001 (Information Security)
- Benefits
 - Ensure that we provide the best service to our users
 - Codifying best practice → normal practice becomes best practice
 - Less reliant on information stored in individual's heads
 - Baseline for continuous improvement



Motivation

- Motivation is to provide high quality, process-oriented services that meet or exceed customer expectations, by ensuring that:
 - Services are designed to meet user requirements
 - Systems and data are kept secure
 - Consistent processes are used to deliver consistent services
 - User feedback is received and acted upon
 - Performance is measured and improvements made
 - The impact of improvements made is tracked
 - Performance is reported upon to customers and stakeholders
- Processes cover:
 - Helpdesk, system admin, CSE and eCSE, Training, Outreach



ISO9001 and ISO27001 Compared

- **ISO9001**

- Quality management – process and service improvement
- Scope – focussed on National Tier-1 and Tier-2 HPC Services
- Drivers – service improvement, need for certification

- **ISO27001**

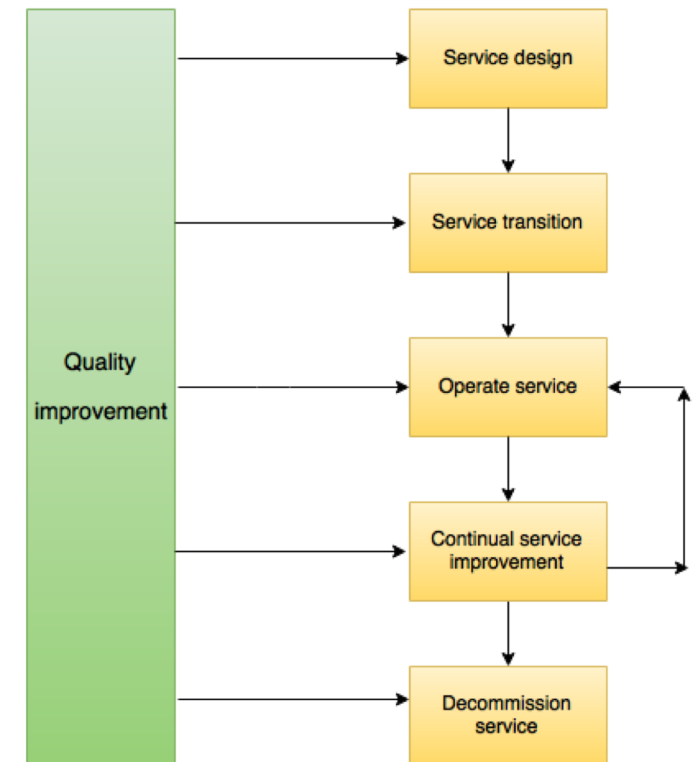
- Information security management – people, processes and systems
- Scope – all the systems EPCC manage or run
- Drivers – increasing data science focus, requirements from collaborative data projects



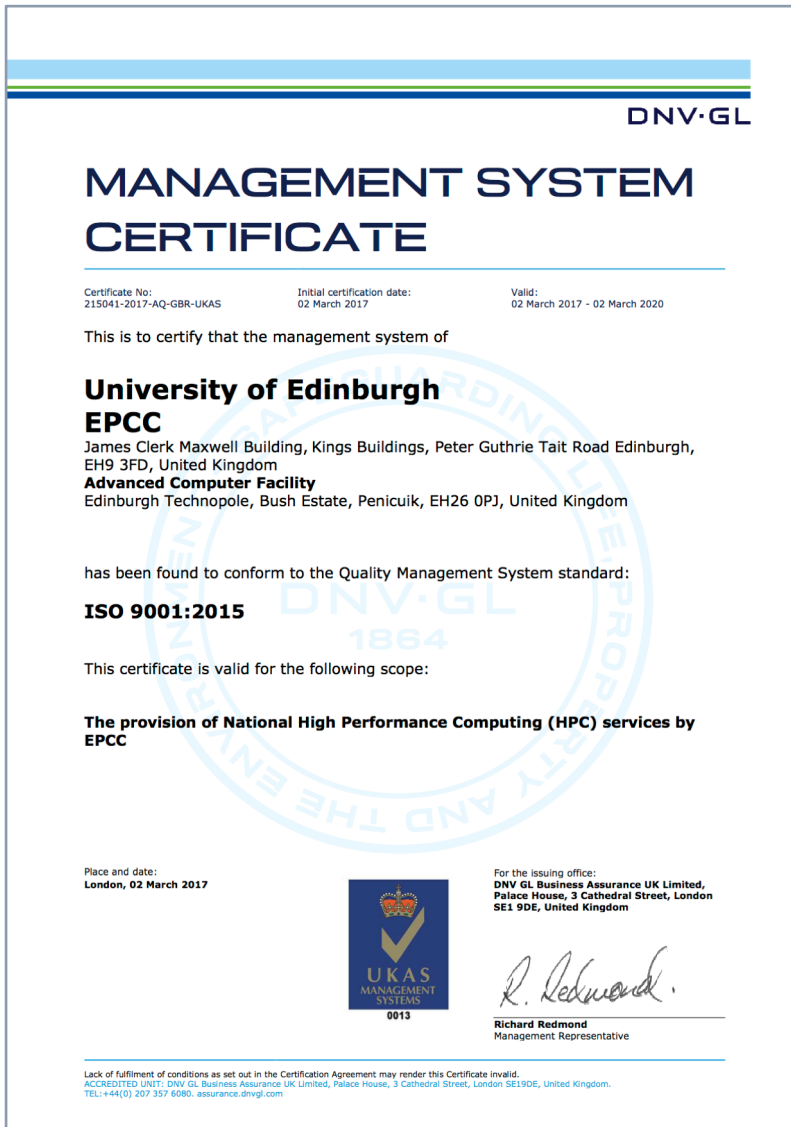
ISO9001 and ITIL

- Our implementation of ISO9001 Quality Management System is based on established high quality ITIL processes
 - Structure is similar to ITIL service lifecycle
- Around 20 ARCHER staff have already passed ITIL training courses
- All ARCHER staff have attended ISO9001 training seminars
- Quality Management System is a valuable repository for all the different processes we undertake on National HPC Services
 - Integrated into what we do, not just sitting on “virtual shelf”

Running a National HPC Service



ISO9001 Certification



- First external audit passed successfully in February 2017
 - Covers “Provision of National HPC Services”
- Second annual audit went even better!
- Re-audited annually, with a major audit every 3 years

Focus Area 2
Process orientated approach



Low DEGREE OF CONTROL High



ISO27001

- ISO27001 information security management certification being pursued to demonstrate that best practice is followed, e.g., when handling user data
- External consultant has completed gap analysis
 - ...with encouraging results
 - Very happy with what we do; most of work required is in documentation of existing policies and processes
- Leveraging as much of the ISO9001 QMS and its processes as possible
 - e.g. quality team, internal audit, management review, ...
- Robust risk assessment framework
 - Central to ISO27001:2013
- Target: certification audit in 2H2018



Benefits from ISO27001

- Shows EPCC thinks seriously about how it handles data and about its users appetite for risk
- Demonstrates EPCC follows best practice when handling user data
- Reflects the increasing importance of data analytics, data handling and storage
- Requested for some systems run or managed by EPCC by the data controller of the dataset e.g. health, tax records, education records
- Compliance with legislative requirements, e.g., GDPR



Tips and Advice

- It is the service improvement that is important, not the certificate
- Getting the scope right is key
- Top management involvement and sponsorship are essential
- Ideally use tools that you are already familiar with
- Having people assigned with responsibility for their activities is vital
- You need to be seen to manage risk
- Collect evidence of what you have done
- Process-oriented approach does deliver benefits if used consistently
- Don't sit back and relax if you pass the initial external audit, you will need to do it all again next year!



Any Questions?

