

Project Controls Expo – 14th November 2018

Emirates Arsenal Stadium, London

**“Supporting organisational change through
successful development and integration of
Controls and PMO functions”**

wood.

About the Speakers

The logo for Wood, featuring the word "wood." in a dark blue, lowercase, sans-serif font.

Christine Mclean

Head of Profession for Project Controls – Nuclear

Christine has spent over 17 years in the project controls arena covering cost, planning, estimating and risk execution (the last twelve years being employed by Wood). She has worked in utilities, oil & gas and nuclear. She is a Fellow of the ACostE and elected member of their council.



Richard Dealhoy

Head of Planning and Controls – Programme and Project Solutions

Richard is a Director level Programme Manager with 15 years multi-disciplinary experience. Specialising in PMO, controls and governance of major projects, programmes and portfolios. Richard leads the Project Controls and PMO function of wood's Environment and Infrastructure Services external PM consultancy business.



About the Topic

The presentation will provide a perspective on the deployment of Controls and PMO functions:

- Assessment of their success factors and Business Case
- Development and execution
- Integration with the wider business
- Transition into BAU
- Further development
- Continuous improvement
- Ongoing effort to sustain the function, achieve its business case and demonstrate continuing benefit.

Benefits Case for proposed function

There is a lot of material articulating the benefits of implementing a PMO within a project delivery organisation.

Research shows that increasing project management maturity can result in:

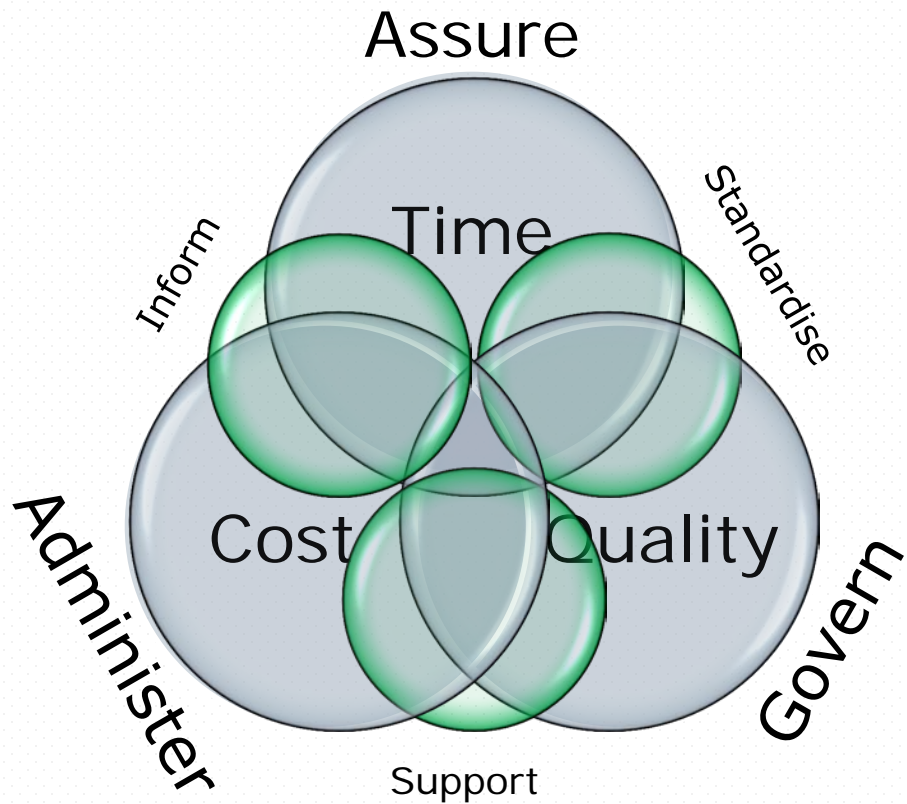
- ❑ an overall cost reduction of 6-26% per project.
- ❑ 16% increased delivery to time requirements
- ❑ 26% more customer satisfaction

These benefits are achieved through:

Quality Assurance: The PMO can undertake independent assurance of projects on a risk based approach – providing review and assurance over the most complex projects

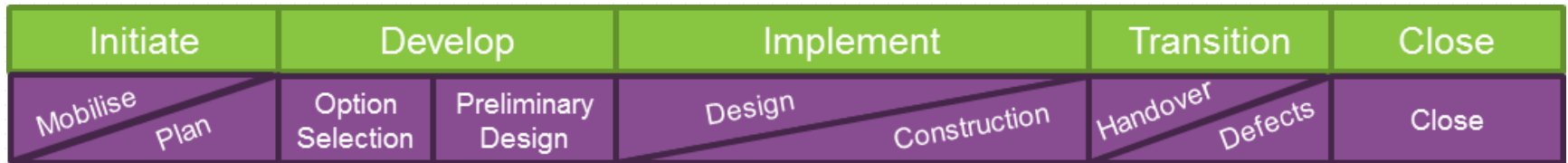
Training and Development: The PMO can support development of skills within the organization, raising the maturity and competence of staff thereby reducing costs through risks and write-offs.

Design and structure

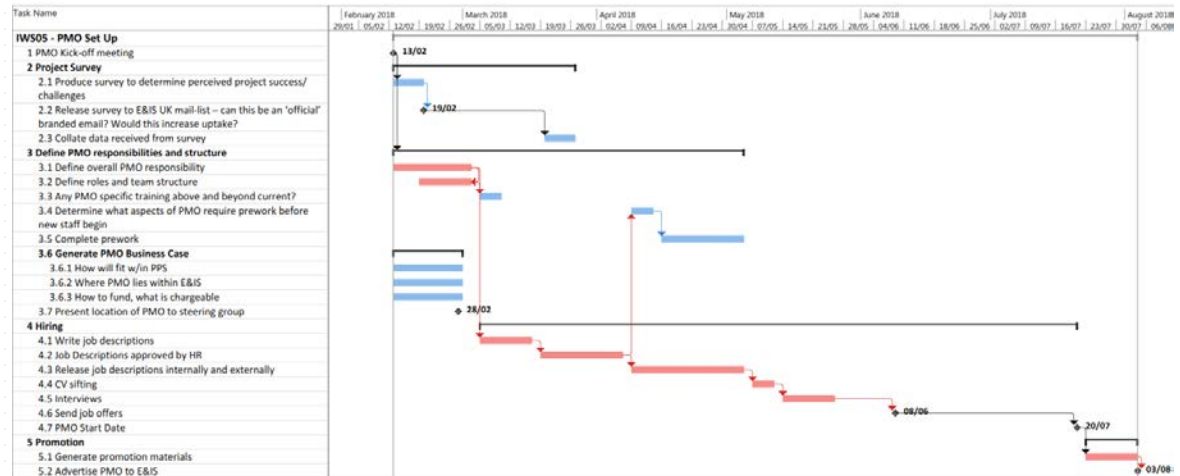


- Identify needs and drivers
- Prove through assessment eg. Maturity modelling / P3M3
- Define and record role of the function
- Document anticipated outcomes
- Capture in a Business Plan and Terms of Reference
- Business approval of BP and ToR

Plan and manage as a project



- ❑ SMART planning
- ❑ Time for rework, delay in adoption and optimisation
- ❑ Recognise as the Business Change it represents
- ❑ Acknowledge the communication and soft side of delivery



Where to Start: Unsurmountable Tasks

- Break work into manageable tasks – Workstreams
- Stakeholder Management
 - Market Awareness – internal and external
- Interface Management
 - Interface with existing team /bodies
 - Existing Processes and Governance
 - Interface needs
- Team Development
 - Recruitment or deployment
 - Training and development

one bite at a time...

The Rest of the Elephant

- 
- Engagement
 - Communications
 - Process and Technology
 - Operation and supporting technology
 - Mobilisation and handover
 - Appoint an owner for each workstream
 - Appoint an integration lead
 - Regular Workstream Lead updates / meetings
 - Aligned plans

one bite at a time...

Develop identity and community - ENGAGEMENT

Stakeholder engagement is one of the key workstreams in the development of a new function

Community engagement will encourage:

- Stakeholder buy-in + confidence
- Staff and community support
 - Smoother deployment and integration
- Increased efficiencies
- Alignment to practical need
- Innovation



Deployment – mobilisation of function

An effective mobilisation strategy can make the difference between a successful deployment and failed change initiative.



1. Stakeholder engagement
 - Consistent messaging
2. Pre-training and tool-kit sessions
3. Staged deployment
4. Overlapping / dual operation of old and new process
5. Visibility of senior resource
6. Resource deployment
7. Flexibility
8. Feedback sessions

Pit-falls and Bear Traps

- ❑ Document everything from Original Need onwards
- ❑ Be specific with the needs of your organisation – target 2 of the 3 PMO focuses and scale functionality to match.
- ❑ Follow your standard corporate governance process
- ❑ Create a formal business case
 - Include a Benefits Plan
 - Refer back to the Business Case regularly
- ❑ Plan and execute as a change project
- ❑ Allow plenty of time
- ❑ Engage with your stakeholders
- ❑ Stage/stager mobilisation
- ❑ Adopt existing process where appropriate and fit for purpose.

Post Mobilisation Bedding in and Flourishing in BAU



Summary of Governance Requirements

	Category A/B Project	Stand Alone Category C Project	Framework	Project or Task under a Framework
Project Management Plan	Multi Volume PMP	Condensed PMP	Condensed PMP	Task Specific Work Sheet
Project Assurance Plan	Required (can be included in PMP)	Required (can be included in PMP)	Required (can be included in PMP)	N/A
Quality Control Plan	Required (can be included in PMP)	Required (can be included in PMP)	N/A	Required if there is a deliverable i.e. not embedded resource
Commercial Plan	Required	Required	Required	N/A

Reporting Indicators

Lagging Indicators

(based on a reflective view of the current status of the project)

- HSSE
- Commercial
- Schedule
- Costs to Date
- Margin to Date
- Cash
- Customer Feedback

Leading Indicators

(based on a forward view of the status of the project and anticipated issues)

- Engineering & Technical
- Procurement/Supply Chain
- Construction & Commissioning
- Resources
- Risk Management

PROJECT OVERVIEW							
Lagging Indicator	Current Status	Change in Month	Comments	Leading Indicator	Current Status	Change in Month	Comments
HSSE	Acceptable	↔		Engineering & Technical	Acceptable	↔	
Commercial	Minor Actions	↔		Procurement / Supply Chain	Minor Actions Required	↔	
Schedule	On Schedule	↔		Construction & Commissioning	Acceptable	↔	
Costs to Date	On Budget	↔		Resources	Acceptable	↑	
Margin to Date	More than Forecast	↔		Risk Management	Review Required	↓	
Cash	Acceptable	↔					
Customer Feedback	Acceptable	↔					

Planning Lunch 'n' Learns

Topics

- Layouts and Codes
- Report Writing in P6
- NEC3 Programme Requirements
- EVM
- Resource Loading
- Resource and Cost Loading Process
- Estimating and Planning
- The New P6 Database
- Change Control

Delivered to:

- All ODUs
- Various discipline Team Forums
- Various locations – outer-lying offices

We, along with PC, have made great strides in understanding and achieving improvements for our projects this year and I think this will continue to gather a pace in 2018. The planning workshops that Planning held were very good and I think have helped people to understand the place of planning and its benefits

Project Controls Away Days

What did the Management Team take

- away
- Developing their internal network
- With Project Controls specific area
- of strength and location
- Each person takes something 'new'
- list of comments/issues/concerns for
- 5 key areas to take away to formulate
- training plans, process improvement
- building a wider network
- ideas, items to cover at PC Forum etc.
- Understanding the Project Control
- Journey so far and where we are
- progress at end of year reviews
- Headed as a function
- Reinforce commitment to delivering
- the Improvement Plans

The away day was an excellent opportunity to put a name to a face, learn more about different areas of the business, it was our opportunity to have a voice to say how we feel processes do and the way that things have gone. We have been able to share our views and have been able to discuss the way we can improve our processes and the way we can work together. We have been able to discuss the way we can improve our processes and the way we can work together. We have been able to discuss the way we can improve our processes and the way we can work together.

Project Control Improvement Plans

Our clients expect that we deliver projects on time and within the approved budget - effective project control contributes significantly to meeting these expectations.

Developed to improve the visibility and capability of Project Controls in the Nuclear(STS) business to support successful delivery of Projects.

The Improvements will contribute to maximising profitability by improving forecasts (cost and schedule), fostering integration of data, streamlining processes and building on our risk capability. To achieve this we will develop the capabilities of Project Control personnel to ensure we provide SQEP individuals to undertake Project Control duties on projects and frameworks.

Improvement Plan Project Control - ISSUED



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This Improvement Plan has been developed to improve the visibility and capability of Project Controls in the Nuclear(STS) business to support successful delivery of Projects. The improvements will contribute to maximising profitability by improving forecasts (cost and schedule), fostering integration of data, streamlining processes and building on our risk capability.

To achieve this we will develop the capabilities of Project Control personnel to ensure we provide SQEP individuals to undertake Project Control duties on projects and frameworks. This will be funded the Project Delivery and Learning and Development budgets.

Organisation	
Capability at December 17	Capability at end December 18
O1 Profile of the Project Controls function, whilst being raised in 2017 needs further promotion	Project Controls function respected throughout Nuclear as a Technical Function and ODOs understand the benefits this brings to projects. ODOs use us not only for resources but for general advice and guidance.
O2 Defined links into the wider Wood Project Controls function	Links established throughout STS and wider Wood.
O3 Projects do not budget for sufficient PC support	Funding areas know to include X% for PC (depending on category)
O4 Working with Finance and Commercial to create a list of responsibilities and which department owns what role	List on PC Sharepoint showing the division of tasks between Commercial and Finance and Project Controls.
O5 Varied understanding of PC in the PM community and how they can assist the PM.	RACI Matrix issued for PM/PC

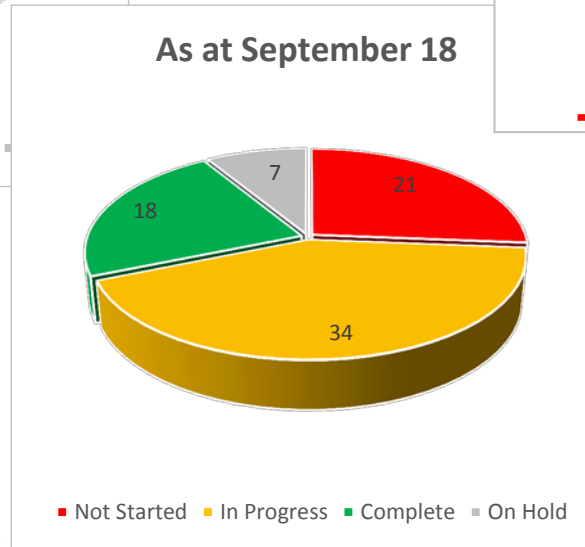
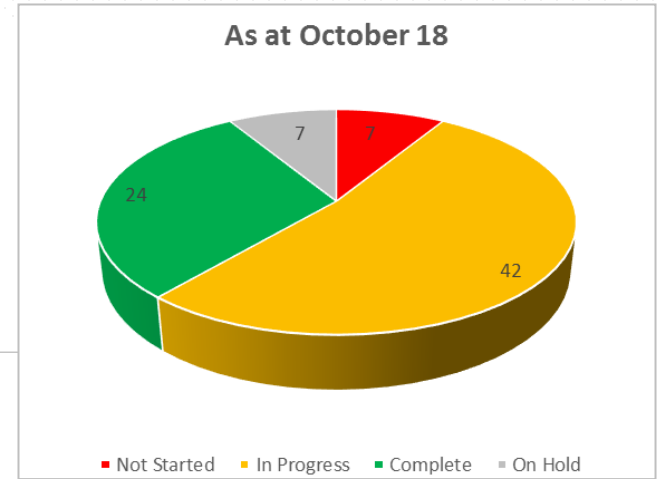
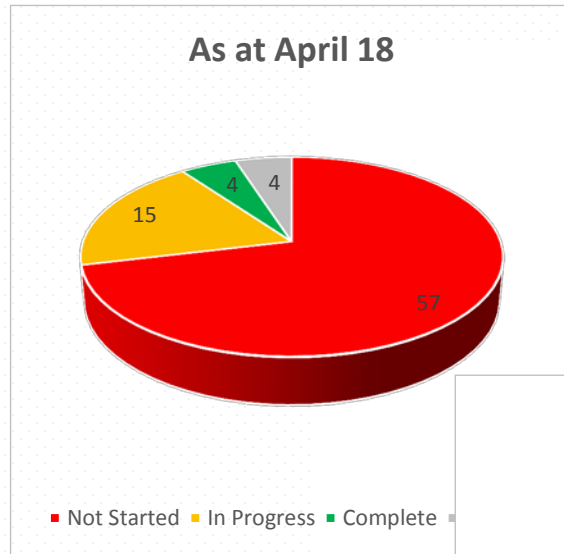
Processes and Procedures	
Capability at December 17	Capability at end December 18
PP1 Project Control Processes and Procedures need to be revised to current best practice and ensure they are applied consistently	Complete set of procedures updated and consistently applied.
PP2 No standard trackers for higher risk projects	PC Dashboard to be in place for Cat A, B and C1 projects
PP3 Some standardised reports	Standardised templates shown on Inrap.
PP4 General lack of understanding of Change Control	Every individual in the PC function understands the importance of Change Control and can be seen in budgets and plans.

People	
Capability at December 17	Capability at end December 18
P1 Minimum CAS attributes per discipline established	CAS attributes matched to all levels per discipline.
P2 Individuals do not know who they can go to for certain areas of expertise apart from PC Management.	Established list of individuals and their key skill on PC Sharepoint.

Tools	
Capability at December 17	Capability at end December 18
T1 No integrated PC tools	Some integrated PC tools
T2 Non-PC personnel have access to some of our systems	Removal of IT access for non-PC personnel
T3 No off the shelf Technical Assessments for Project Control Function.	Standard off the shelf Technical Assessments for all sub disciplines in Project Control

Action Plan				
Ref	Area	Action	Who	When
1	O1	Complete awareness sessions for VP, OD and ODOs.	SM	Jun-18
2	O2	Digital tracking of areas/projects where the actions of Project Controls has improved the outcome of the Project.	SM	Aug-18
3	P1	Ensure a career progression chart, matched with CAS attributes and levels, and general training is published.	SM/M/VM	Apr-18
4	P2	List to be produced and stored on PC Sharepoint.	SM	Feb-18
5	T1	Be part of the STS Working Group looking at PC Systems	SM	Feb-18
6	PP1	Revised suite of PC Procedures - highlighted on each individual Action Plan.	SM	Jun-18
7	PP2	Trackers to be created and used by PC Management to track and audit higher risk projects	SM/M/VM	Mar-18
8	PP3	Create suite of standardised templates for all projects.		Sep-18
9	O3	Work with Bidding Team to ensure sufficient PC support is included in Project Manhour estimates.		Jun-18
10	T2	Removal of non-PC personnel	SM	Jun-18
11	O4	Issue with Commercial and Finance to create a MASTER list of roles and which owns what in each area	SM	Jun-18
12	O5	RACI Matrix for PM/PC	SM	Jun-18
13	PP4	Change Control training for all PC personnel covering understanding change, impacts to budgets and impacts to schedules.	SM/T/M/VM	Sep-18
14	O1	Write dummies guide to Project Controls.	SM	Jun-18
15	T3	Standard off the shelf Technical Assessments for all sub disciplines in Project Controls	SM	Sep-18

Progress Monitoring of Improvement Plans



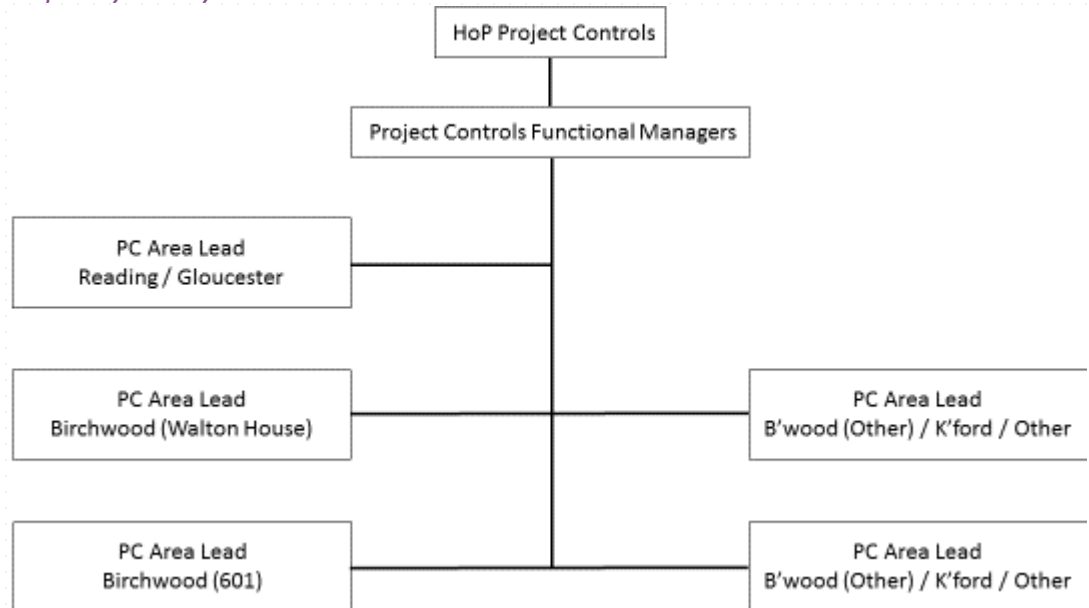
New Area Leads Appointed

When we grew from a team of 41 individuals to over 70 individuals we identified that the teams were too big for two Functional Managers to manage effectively, as well as developing the competency of individuals.

We hired a third functional manager and appointed 5* Area Leads so they started to gain line management experience at a lower level (succession planning).

I believe the area lead roles have been very helpful, freeing up time for more senior members within our team and also expanding my network of people who I can go to for support.

I think it's been a positive step as we have local points of call and someone to go to in the first instance for minor issues, rather than going to the PC Management Team. If it needs escalating then it can be or resolved fairly quickly locally.



Competency Assurance

- Value starting to be recognised in development of planning
 - IT system introduced in 90's
 - Developed into present day Assurance Management System (CAS)
 - Subsequently highlighted by several other AFW businesses with the aid of endorsing global roll-out

- Our "Target 5% Operational" in the nuclear sector
 - Essential for demonstrating competencies to customers and regulators alike
 - Valuable for summarising capability for bids, CV management etc



Profile

Allows you to maintain your complete skill set, manage your CV's and provides a public profile for others to see.



Expertise

Allows the business to monitor our capability and helps you source suitable people with the correct skills for your needs.



Assurance

Delivers assurance to the business and to our clients that competency management within the business is robust.

Project Controls Career Path Issued

- Provided a career path map for individuals to see the progression within Project Controls
- Included current Academy self learning courses and external training required, but it is more about the skills required for promotion and advancement
- This excludes all systems training (MDAX, EXCEL, ORACLE, P6)

Development Needs and Activities	Current Programmes	Career Development Pathway
Strategic Management and Leadership (marketing, law, finance, commercial, organisational development, IT, HR)	Diploma in Professional Management/ MBA	HOP
Project Management Introduction to Strategic Management	APM Level C Certificate in Professional Management Delivering results in challenging environments Managing diversity and culture	Team Manager
Mentoring Project Management Negotiation skills Auditing skills Risk Awareness	Mentoring APM Level D QCF Level 5	Principal
Pathway to People Management Performance Management Interviewing skills Managing conflict Facilitation skills Presentation skills	Engagement, Performance and accountability, developing your people, individual and team management, resourcing Diversity of thought Managing conflict Facilitation skills Presentation skills	Lead
Coaching Skills	Coaching and training others Leading effective meetings	Senior Engineer
Understanding yourself Writing for the workplace	Personal impact and influence Report Writing QCF Level 3	Engineer
Starting in Project Controls Understanding roles on projects	Time Management Learning to Learn Introduction to Project Controls	Technician Apprentice

My Career Journey

Experience of a number of different MEGA sized projects in both Cost & Planning



Gained Oil & Gas experience

QCF Level 5 in Project Controls



Gained Nuclear experience

Joined the Board



Route Panel Member



wood.

Head of Profession for Project Controls
2017

2016
Head of Cost for Clean Energy

Proposals Manager

Commercial Cost Manager

Principal/ Lead Cost Engineer

2006

Joined Foster Wheeler as a Senior Planning Engineer

Gained Utilities experience



Joined Thames Water as Project Controller

2003

Cost & Planning Manager for Network Projects (team~15 based in 4 locations)

Promoted to Programme Co-Ordinator

2001



Left school with A Levels in Maths, Accounting and English Literature



Law degree (2006)
Started MBA 2015



Went to South Africa to set up cost system and train staff

Assessor for all NVQ Levels



Developed skills

- Technical
- Tendering
- Negotiation
- Project Management
- Leadership

Developed internal and external networks



Trained Clients in Schedule Risk Analysis and Estimating Techniques



Qualifications and Training

- QCF Level 3 – 9 individuals started on their journey in September 2017
- Advanced P6 + Pertmaster (10 individuals trained) July 2018
- Academy Area Lead Training (5 individuals trained) started March 2018
- Mentoring
- Coaching
- Personal Development Plans
- Membership of ACostE/ APM

Career Development

- ❑ Monthly Project Control Forum
- ❑ People Forum and HiPo's identification,
- ❑ Alignment of Competency claims to job profiles
- ❑ Working with Learning & Development to provide "soft skill training" to "develop the full potential of individuals".
- ❑ Further Chess Moves - facilitating breadth of projects, contracts, different Clients



This is our **COMMITMENT** to you all with the aim of **EMPOWERING** individuals to have the **COURAGE** to challenge/innovate

What Next ?

Continuous Improvement and Value Proposition Testing

- RJD notes

Team Development and Growth

- Continued development of staff through chess moves
- Develop strategic training plans for future years
- PC Away Day(s)
- Maintenance of Career Paths and Competency Assurance
- Support and benefit from industry body and forum engagement:
 - Attendance and presentation at Project Control Expo (November)
 - Continuing to Support ECITB Trailblazer for Project Controls at Level 6/7
 - Continued involvement in board of ACostE
 - Continued involvement with IFA
 - Membership and accreditation of ACostE/APM for individuals