The Gold Standard
1st Line Supervisor/Manager
(Chemicals & Polymers)

Report by John Holton, Cogent Strategy Director

Project Sponsored by the Welsh Assembly Government

April 2009

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Executive Summary

The Gold Standard is an aspirational standard for key job roles that defines the skills and competences required to perform the job to world class standards. Developed with employers the Gold Standard provides a workforce up-skilling programme. The Gold Standard not only defines the background technical knowledge and competences to do the job safely and well but also addresses the challenges of improving productivity and new product & process development. The development of functional & behavioural skills provides the employee with a set of valuable, transferable cross sector skills.

This project developed the Gold Standard for a 1ˢᵗ Line Supervisor in Chemicals and Polymers. The competencies required to become a world class supervisor have been defined by employers for technical competence, business improvement, compliance and functional & behavioural skills. For a 1ˢᵗ line supervisor the skill developments mainly focus on managerial aspects of the role including process, people and self management but also include health, safety and environmental responsibilities.

Based on the defined competencies qualifications and training programmes have been identified for up-skilling the workforce. Where suitable courses exist these have been incorporated into the Gold Standard however employers are seeking more flexible training and favour smaller 'bite sized' modular training programmes and a number of new qualifications have been designed.

The Gold Standard has been matched to provision in Wales. Business improvement, compliance and management & leadership training is widely available from both public and private providers. Technical training is less widely available for up-skilling, for example, an apprentice; this is the range covered by Foundation Degrees. There are no chemical or polymer Foundation Degrees available in Wales and Cogent is currently developing a national FD framework for science and engineering and the University of Glamorgan with Pembroke College is working on a Petrochemicals FD.

Technical up-skilling was a contentious area of the Gold Standard for employers who were seeking good management skills and were less focused on strong academic knowledge; thus lack of availability of provision probably reflects employer demand. The challenge is therefore to stimulate demand and provision at the same time; this is a role of the newly formed National Skills Academy for Process Industries. The role of NSAPI which includes the quality assurance of training provision needs to be more clearly defined in Wales.

In rolling-out the Gold Standards the next stage is to identify funding opportunities in Wales for the qualifications through the HRD consultants; management & leadership and business improvement are potentially fundable qualifications.

The new Gold Standards are available in Welsh and English to all stakeholders as product sheets (see appendix 9) or on-line (www.cogent-ssc.com/Gold_Standard/index_3.php) and have been incorporated into the Cogent career pathways (www.cogent-careers.com).

Background

The Cogent sector is characterised by science based, chemistry using, process technology driven industries. Technology continues to advance in sophistication and new product development sits at the heart of many companies' strategy. As a result the workforce continually needs to become more skilled and entrepreneurial.

The UK process industries: chemicals, pharmaceuticals and polymers compete in a global market but lack the benefits of low cost labour, utilities and raw materials that are enjoyed by many competing countries. To remain competitive the UK process industries must demonstrate real added value yet data shows that the UK lags in productivity compared to the US and a number EU countries and a strength in innovation is often not exploited. To remain competitive the UK needs a well trained, highly skilled workforce that continues to develop as technology advances.

Demographic research has demonstrated that 70% of the 2020 workforce is already in employment highlighting the imperative for a robust industry up-skill programme; to provide a sound basis for such a programme Cogent has initiated the development of the Gold Standard as one of the benchmarks for global competitiveness.

In March 2007 Cogent completed a skills study for the Welsh Assembly Government entitled "A Survey of Process Industries in South Wales". The recommendations were:

> ***Recommendation 1***
> *In line with Cogent's Sector Skills Agreement, develop the Gold Standard job roles for first-line supervisors in the process industries.*
> ***Recommendation 2***
> *Understand the up-skilling requirements for employers in Wales against the Gold Standard.*
> ***Recommendation 3***
> *Review current training for first-line supervision, health and safety, lean manufacturing/productivity enhancement et cetera.*
> ***Recommendation 4***
> *Identify appropriate sector specific solutions to up-skill the workforce in Wales and develop training where gaps exist.*

These recommendations were driven by the identified skills needs and gaps identified in the report i.e.

Skills Needs and Gap Drivers (from "A Survey of Process Industries in South Wales")

> *Employers were asked a series of questions related to the skills of their current workforce, and to indicate the most important skills issues to be tackled over the short term .Of the 800 process operators and technicians in the sample, there was a 100% response indicating the need for up-skilling by one level, regardless of current level.*
> *This need was not reflected in craft occupations, where the majority was felt to be operating at the required level.*
>
> *When asked to categorise the area in which the workforce would most need to improve their skills over the next one to 5 years, Management and Leadership and People Management scored highest, closely followed by improvement in Basic Technical Skills.*

When this was probed further a need for supervisor training particularly the First Line Supervisor was identified. This is often the first job role where an individual is

responsible for a small team and management skills emerge as an important job requirement.

The Gold Standard

The Gold Standard is an aspirational standard that underpins an industry up-skilling programme. For the key job roles in each industry sector employers, with support of Cogent, define the skills and competences required to perform the role to world class standards. These Gold Standard job roles underpin the identification of local training requirements to raise the standards bar for industry skills. For more information on the Gold Standard see the web-site:

www.cogent-ssc.com/Gold_Standard/index_3.php

This project is to develop the Gold Standards for a First Line Supervisor at Level 4 in Chemicals and Polymers.

The aspirational Gold Standard will include training and qualifications for a world-class supervisor covering
- Technical Competence
- Business Improvement
- Compliance
- Functional & Behavioural Skills

Thus the Gold Standard not only defines the background knowledge and competences to do the job safely and well but also addresses the challenges of improving productivity, new product and process development. The development of functional & behavioural skills provides the employee with a set of valuable, transferable cross sector skills.

The Gold Standard can then be used to ensure that local provision is available and focussed on the clearly defined demand-led requirements. This is particularly valuable for SMEs by 1) giving clarity on training requirements, 2) ensuring local provision and 3) targeting funding.

Providers can then deliver courses that employers value in a cost effective manner and funding can be directed to demand led training.

Project Structure

The objective was to define the aspirational, world-class standards for the Gold Standard - First Line Supervisor at level 4 in Chemicals and Polymers.

Employers in Wales from the Chemical and Polymer industries were consulted on the competencies required for the First Line Supervisor job role using the four categories defined above.

The competencies were then matched to the National Occupational Standards – currently being re-written by Cogent and credit and levelled for submission onto the Qualification Credit Framework - and qualifications identified to develop and accredit the required skills.

The Gold Standards including the new qualifications were tested with employers, awarding bodies and providers before final sign-off. The ability of providers in Wales to deliver the Gold Standard qualifications was also tested and gaps highlighted.

The final phase was the promotion Gold Standard in Wales and, outside of this project, how the Gold Standard training will be delivered (i.e. role of the National Skills Academy for Process Industries) and funded in Wales.

Project Team

The project team consisted;

Steve Westhead	Solutia & Chair
John Holton	Project Manager
Melanie Welch	Project Administrator
Kieran Quill	Cogent Consultant (Chemicals)
Tony Pringle	Cogent Consultant (Polymers)
Mike Lynham	Consultant
Rebecca Chapman	Penn
Joanne McCafferty	Penn
Lynn Evans	Dow
Tony Beck	Warwick

Plus support from: James Murdock, Cogent Education & Qualifications

Development of the Draft Gold Standard Competencies

Using Cogent's internal expertise of the industry sector and knowledge of the Gold Standard format a Cogent team produced a 'strawman' Gold Standard for a 1st Line Supervisor (Appendix 1).

At the first project meeting in September 2008 this was extensively reviewed with the employers on the project team and this led to some significant changes in content and concept, viz

The Technical Competence category seeks to cover two pathways; graduate new entry and internal promotion (i.e. apprentice up-skilling).

A graduate has the technical knowledge but lacks the work experience hence a set of process operations competencies are included. Whilst it was agreed that a new graduate must acquire operational know-how it was not accepted that he/she must know how to hands-on operate the plant. The competencies were changed to recognise a need to know how the plant works.

An apprentice knows how the plant operates from hands-on experience and hence 'ticks the box' for process operations, however they may not have the technical know to the required depth. This could be obtained from a science based Foundation Degree.

It was suggested adding 'safety critical procedures' to the process operations module.

The process maintenance competencies were more aligned to a maintenance manager and did not reflect the job requirements for a process supervisor. This was changed to reflect the need to 1) respond to maintenance, 2) plan for maintenance and 3) allocate personnel.

The Business Improvement category was modified to include 6-Sigma training; Green belt status at this job level.

The Compliance competencies are about understanding and managing safety; the lower level job roles contain the knowledge requirements to work on a chemical or polymer plant i.e. Nebosh L2 Certificate in Workplace Health and Safety, Nebosh L2 Award in Process Safety and Nebosh L2 Award in Environmental Control. It was decided to test with employers current training for supervisors and at the same time talk to providers on the options.

In the Functional & Behavioural section it was agreed that "managing diversity and discrimination" should be added and 'performance management'.

The Gold Standard could provide a route to Charter status; this is being pursued with the institutions for the Engineering Technician status with the level 3 Gold Standard and when the level 4 GS is complete a similar process will be undertaken.

The draft Gold Standard was agreed (Appendix 2) and used in the consultation process. At this point chemicals and polymers were kept together in the one Gold Standard because there are significant overlaps and it was felt that only in Technical Competence and possibly Compliance would differences emerge.

Employer Consultation

The initial consultation plan comprised 20 face to face interviews and an email questionnaire; this was later expanded to include more face to face interviews and a postal consultation, thus the final employer consultation was;

Face to Face interviews	43
Email Questionnaire	126
Postal Questionnaire	145

Two companies, Solutia and Brecon, suggested a meeting with their Supervisors to get first hand feedback; this proved a very useful exercise. Similarly two companies Solutia and Penn arranged workshop sessions with a small group of local employers which again were extremely useful.

The Cogent database contained over 250 sector employers in Wales but an analysis revealed that many were micro companies (<10 employees) and many were small (<50 employees). It was decided to include the small companies but exclude micro companies who were unlikely to have a 1st line supervisor position. The initial email questionnaire generated a poor response so the face to face interviews were increased and a postal questionnaire sent out (with prepaid return envelope), this generated an improved feedback.

Face to face interviews were held with the companies listed in Table 1.

Table 1 Employer Consultation

	Employer	Sector
1	Dragon Polystyrene	Polymers
2	Synergy Plastics, Newport	Polymers
3	Principality Plastics, Newport	Polymers
4	Mollertech, Newport	Polymers
5	Klockner Pentaplast, Newport	Polymers
6	Gwalia Packaging, Pontypridd	Polymers
7	Riverside & Dragon Plastics (Merged to form Gwalia)	Polymers
8	Kautex Textron, Hengoed	Polymers

9	JM Plastics, Caerphilly	Polymers
10	Linear Plastics	Polymers
11	Clariant	Polymers
12	Atlas Polymers	Polymers
13	Colour Tone Masterbatch	Polymers
14	MVTP Packaging	Polymers
15	Dow Corning, Barry	Chemicals
16	Ineos, Barry	Chemicals
17	Hexion, Barry	Chemicals
18	Vopak, Barry	Chemicals
19	Centrica, Barry	Chemicals
20	Penn Pharma, Cardiff	Chemicals
21	Warwick, Flint	Chemicals
22	Synthe, Mold	Chemicals
23	Solutia, Newport	Chemicals
24	Roperhurst, Barry	Chemicals
25	Tubex, Aberdare	Polymers
26	Flexsys Ruabon	Chemicals
27	Knauf Insulation, Pontypool	Chemicals
28	Everwhite plastics, Aberdare	Plastics
29	Sekesui, Merthyr Tydfil	Chemicals
30	British Salt, Northwich	Chemicals
31	GSK, Ulverston	Chemicals
32	Teva, Runcorn	Chemicals
33	Chevron, Pembroke	Chemicals
34	K Premium Film, Newport	Polymers
35	Brecon, Hay on Wye	Chemicals
36	Biotec Services International	Chemicals
37	Norgine Ltd	Chemicals
38	Advanced Elastomer Systems, Newport	Polymers
39	Murco, Pembroke	Chemicals
40	GE Healthcare, Cardiff	Chemicals
41	Visqueen, Rhymney	Polymers
42	Zeon, Barry	Chemicals
43	Cabot, Barry	Chemicals

The feedback was extensive and is summarised in Appendix 3. With few exceptions companies were very supportive of the Gold Standard both in concept, "it provides a valuable framework for training to world class" and content. A number of the small companies whilst recognising the value do not have the position of 1st Line Supervisor or the position with this title is set at a lower level (in these cases we suggested the Gold Standard at level 3 – Process Technician).

Medium and large companies were very supportive and provided good feedback on the content. The key changes to arise in this phase were:

Technical Competence

Process technology proved highly contentious. Many companies commented that understanding the theory and principles of chemistry, polymers and biochemistry/ pharmaceutical science is a "nice to have" at best, excellent production staff is what is required. This is a difficult area and some flexibility needs to be built into the Gold Standard – Cogent would like to improve the science knowledge of employees but do not want to exclude vocationally trained individuals who may lack the academic training but are excellent supervisors with hands-on experience.

Business Improvement

A number of companies train their supervisors to 6-Sigma Green Belt status and this will be reflected in the Gold Standard. A number of companies identified specific improvement techniques but this was captured by having a pick and mix set of units in the qualification.

Quality was mentioned on a number of occasions; often the reference was to business improvement techniques aimed at quality improvement which is covered by BIT however others referenced programmes aligned to ISO 9000. One suggestion was a workshop "Introduction to QM Systems" by the Wales Quality Centre.

Compliance

Compliance was discussed with NEBOSH but the supervisor course identified required 80 hours training and was felt by employers to be unsuitable. The preferred course suggested by many companies was IOSH Managing Safely; this was added to the Gold Standard.

Companies suggested that this section should include;
Safety and Environmental and Quality eg COMAH, ISO 9000/1, ISO 14001, Operational Excellence
Safe Work Practice (Core 7 plus local additions)
'an individual can section….'
Identify legislative updates, effects on workforce and communicate these to shift personnel.
Use WHS, PS, EH etc knowledge to effectively manage shift compliance
Mitigate risks to compliance and/or direct team to mitigate risk.
Respond appropriately to breaches in compliance
Sustainability

Functional & Behavioural

It was suggested adding a number of other competencies to the Functional & Behavioural skills
- managing diversity and discrimination
- performance management
- development of coaching skills to improve delegation
- business awareness contextualised for the sector and company
- financial know-how; P&L, cost management
- communication in the workplace
- solving problems and making decisions is a key management unit
- prioritisation skills, i.e. ability to deal with a number of issues at one time, evaluate, consult and be able to make rational logical decisions on work priorities
- standard setting skills, i.e. the ability to operate to set standards of behaviour, and reinforce standards when necessary (e.g. discipline, work throughput) by taking appropriate action.
- positive Counselling skills to cope with the human aspects of the team, allied with a basic understanding of management theory

Revision and Sign-off of the Gold Standard

In light of the employer feedback the project team revised the draft Gold Standard to take account of key points raised during the consultation. Some points were very company specific and would be reflected by contextualisation of the Gold Standard by a company; however other points were more generally applicable.

Technical Competence

The need for a new entrant (i.e. graduate recruit) to understand the company production process was agreed but testing this through a Level 3 VRQ was not seen as appropriate. Companies ensure that new starters understand the site's Standard Operating Procedures and this requires an understanding of the process; some companies test this but not all. It was therefore decided to develop an industry standard which the company could use to ensure that new starters had the required process knowledge.

The level of technical knowledge required was contentious. It was agreed that companies should be striving to develop individuals and that modules of training would be appropriate but not the requirement for a full Honours or Foundation degree. Cogent is currently managing a HEFCE funded project to put in place a framework for Science and Engineering Foundation degrees; this will be based on modules in a continuing professional development programme. The academic modules from this project covering Principal and Specialist knowledge would be ideal. This is very much in the spirit of an 'aspirational' Gold Standard.

The key skill development for this job role is managing the process and people and suitable training is available through the management National Occupational Standards. As many companies told us they use ILM for management training we structured training around ILM qualifications, again 'bite sized' modules that can be delivered flexibly.

Business Improvement

The pick and mix Business Improvement module met the needs of the companies for lean manufacturing training and Green belt was deemed as appropriate as a 6-Sigma attainment level. As part of a separate project, 6-Sigma training is being mapped for the BIT NVQ and this will be fed into the Gold Standard when available.

Compliance

This was debated at great length and it was agreed that IOSH Managing Safely was the appropriate training. This 4 day course is used by many companies for training their supervisors and is the industry standard.

The IOSH Managing Safely includes modules on:

Legislation	Investigating accidents & incidents
Assessing risks	Measuring performance
Controlling risks	Protecting our environment
Identifying hazards	Understanding your responsibilities

which cover most of the training needs identified.

The level of environmental training will be reviewed and discussed with IOSH if seen to be insufficient. There is a qualification in Level 2/3 Gold Standards – Award in the Management and Control of Environmental Hazards, which may also be appropriate.

Cogent is currently looking at Sustainability skills with a view of developing appropriate training standards; when these are available they will be incorporated in the Gold Standards.

Functional & Behavioural

Coupled with the more general management skills that need development such as responsibility, people management, problems solving and decision making two key skills that are often missing emerged during the consultation. Firstly a major challenge for newly promoted supervisors was delegating tasks rather than doing them themselves, too often they continued with old behaviours. Secondly communication was often a problem area, getting the point across is important and also presenting a convincing argument to more senior managers.

Companies in many instances also want managers to take responsibility for performance management and people development. These programmes are generally company specific but there are some general principles that can be applied. Understanding the issues around diversity and discrimination was also important

Interestingly there was a desire for more senior technical staff to have an appreciation of the business and many companies valued this. Typically this included an understanding of the company values, competitive environment, present and future challenges faced by the industry/company, financials including cost/budget management and customers.

Taking all these points into consideration the Gold Standard was re-drafted and signed-off by the project team (Appendix 4).

Provider Consultation

A number of providers were selected for consultation covering private and public provision, to gather their view of the Gold Standard and their ability to deliver the required training.

	Provider	Delivery
1	Focus HR Consulting & Training	HRD advisor
2	Awbery Consultants	Management & Leadership
3	Barry Training Services	Compliance
4	Freshbaked	Business Improvement, M&L
5	University of Deeside	Polymer Composites
6	University of Bangor	Bio materials (not relevant)
7	University of Swansea	Polymers
8	Pembroke College	Chemicals

The private providers were supportive of the Gold Standard and could and would deliver parts of it. The training identified matched their employer designed training courses in many aspects which was positive feedback that the consultation had truly identified the skills needs. Awbery suggested adding communication to the F&B skills – it was missing at that time although noted.

Gold Standard Delivery

Awarding bodies such as ILM have accredited centres and these were mapped for Wales; as can be seen in Appendix 5 there is a good network of provision for delivering the Gold Standard ILM qualifications.

Approved IOSH centres for delivering Managing Safely are also widespread across Wales, Appendix 6.

Many public providers in Wales are delivering the NVQ in Business Improvement at levels 2 and 3, Appendix 7; in addition there are many private providers delivering 'lean manufacturing' and 6-Sigma courses. By scoping the business improvement requirement, the aim is to focus all provision based on employer demand and at the end give the learner a qualification (Certificate in Process Improvement L2 & L3).

The technical competence section of the Gold Standard differentiates Chemicals and Polymers; the other skills are transferable although contextualised for the sector. The delivery of the technical training is sparser due to the lack of Foundation degrees in the sector. The University of Glamorgan is currently (April 09) working with Pembroke College to produce a Foundation Degree for Petrochemicals; this will be based on the concept of modules, *vide supra*. The University of Swansea offers higher level polymer science courses but these are not suitable for this Gold Standard; similarly the University of Deeside offers composite courses. An action from this project is to extend the provision of modular Foundation degrees in science in Wales as part of the HEFCE project mentioned previously.

There are also few vocational training centres in Wales delivering chemical and polymer NVQs for the process operators and technicians at levels 2 and 3 in Wales, Appendix 8.

Promotion of the Gold Standard

A Gold Standard template has been designed for the range of Gold Standards and the final 1st Line Supervisor Gold Standards for polymers and chemicals are shown in Appendix 9. This version has been made available on-line and can be accessed via the Cogent web-site www.cogent-ssc.com.

A Gold Standard information leaflet was produced outside of this project Appendix 10 and explains the concept, benefits and gives an example Gold Standard. Both the fact sheet and 1st Line Supervisor Gold Standards will be translated into Welsh as part of this project. An information backdrop/pull-up will be produced for use in Wales.

The Marketing Plan is detailed in Appendix 11 and will follow the completion of the project. Following translation of the Gold Standard documents they will be circulated in hard copy to all those companies consulted previously i.e. ~150 large, medium and small companies. An information letter will be produced for providers explaining the project and the Gold Standard and inviting them to contact Cogent if they wished to be accredited to deliver all or parts of the Gold Standard. This will be circulated with the Gold Standard documentation.

The documentation will also be circulated to trade unions, trade bodies and institutes, business organisations in the sector and WAG officials regional and central.

The 1st Line Supervisor is being incorporated into the Cogent career pathway www.cogent-careers.com providing on-line careers information.

The suite of Gold Standards is to be launched at the National Skills Academy for Process Industries Conference in York on April 30, 2009 and this will be coupled with other media promotions.

What Next

The 1st Line Supervisor Gold Standards in chemicals and polymers form part of an ever increasing suite of Gold Standards that will form a national CPD framework for the science based industries. This project has also informed the Pharmaceutical 1st Line Supervisor.

The next stage is to ensure that the Gold Standard has the impact desired and makes a real difference to training in the Cogent sector. Clearly promotion is an important aspect of this but two other challenges need to be addressed.

Funding – in England funding for the Gold Standard modules is through Train to Gain; discussions will be opened with HRD advisors (Alan Williams is an advisor to a number of companies consulted) on funding opportunities for the Gold Standard and where there are gaps these discussions will be followed up with the Welsh Assembly Government.

Provision – the National Skills Academy for Process Industries is a subsidiary of Cogent and works closely with Cogent to ensure that quality assured provision is available to deliver the Gold Standard. The role of the Skills Academy in Wales is ill-defined and clarity will be sought with WAG.

End of Project Reviews

Project Plan

The original project plan foresaw project completion end March 2009 and, despite starting later than anticipated this was achieved. The milestones were adjusted during the project due to; late start of the project; economic downturn causing many companies to close Dec – Jan and bad weather in January restricting travel. A summary of the project plan and actual delivery is shown below.

Task	Output + Comments	Supporting Evidence (to be submitted to WAG)	Date	Completed
Project Initiation and first steering group meeting	Steering Group established Terms of Reference agreed Project Plan agreed Meeting plan agreed	1. Constitution of members of Steering Group 2. TOR and Remit 3. Copy of Plan 4. Meeting minutes	By 27-07-08	16-07-08
Development of a Gold Standard concept document for a level 4 First Line Supervisor in 1. Chemicals 2. Polymers suitable for consultation	Draft Gold Standard documents for 1. Chemicals 2. Polymers Delayed due to late start of project coinciding with holiday season	5. Draft Gold Standard Framework documents a. Chemicals b. Polymers	30-07-08 To 18-08-08	09-09-08
2nd Steering Group meeting	Review of progress against project plan, revisions to quality plan and risk register as necessary	Agenda and minutes	By 22-08-08	09-09-08
Bi-monthly report	**Progress report for July and August; steering group agenda and minutes; invoice for completed activity accompanied by agreed evidence 1-5.** Put back one month		29-08-08	29-09-08
Consultation of these Gold Standard concept documents with employers (20 interviews and 50 questionnaire respondants)	A report summarising the consultation results and recommendations Significant delay in employer consultations caused by 1) economic downturn & employers closing for extended periods (Dec-Jan) and 2) bad weather in Jan restricting travel	6. A report on the consultation feedback consisting of one on one 20 interviews and minimum 50 replies to questionnaires circulated via email	21-08-08 To 31-10-08 Extended to end 08	31-01-09
3rd Steering Group meeting	Review of progress against project plan, revisions to quality plan and risk register as necessary	Agenda and minutes	By 31-10-08	21-10-08
Bi-monthly report	**Progress report for September and October; steering group agenda and minutes; invoice for completed activity accompanied by agreed evidence 6.** Put back one month		**31-10-08 Revised to 30-11-08**	03-12-08
Development of the Gold Standard 'syllabus' document	Revised draft Gold Standard documents for 3. Chemicals 4. Polymers Delayed awaiting	7. Revised Gold Standard Framework documents for Chemicals and Polymers	03-10-08 To 14-11-08 Extended to end 08	31-01-09

	completion of employer consultations			
Sign-off of the Gold Standard 'syllabus' document	Industry signed-off Gold Standards	8. Final agreed Gold Standard Framework documents	17-11-08 To 12-12-08 Revised to end 08	19-02-09
Dissemination of Gold Standards to employers and providers	Meetings and/or events agreed	9. Details of meetings held and attendance	05-1-09 To 19-1-09	28-02-09
4th Steering Group meeting	Review of progress against project plan, revisions to quality plan and risk register as necessary Delayed to Jan09	Agenda and minutes	By 19-12-08 Moved to 14 Jan 09	14-01-09
Bi-monthly report	**Progress report for November and December; steering group agenda and minutes; invoice for completed activity accompanied by agreed evidence 7-9.** Put back one month		30-1-09	11-03-09
Identification of gaps in provision	Report on gaps and action plan Part of final report	10. Report detailing the results of consultation with local providers and qualification mapping against the Gold Standards with identification of the gaps and corresponding action plan	05-1-09 To 25-03-09	31-03-09
5th Steering Group Meeting	Additional review meeting		19-02-09	19-02-09
Final report and evaluation	Final Report and evaluation	11. Final report and evaluation	27-02-09	31-03-09
Final Steering Group meeting	Review of final report and whole project. Discussion of exit strategy and next steps Put back one month	Agenda and minutes	By 27-02-09	26-03-09
Final progress report	**Progress report for January and February; steering group minutes; final invoice for all completed activity accompanied by agreed evidence 10-11.**		31-03-09	17-04-09

Cost Review

A summary of the costs is given below.

	Contract				Actual		
	WAG Contribution	Other Contribution	Total		WAG Contribution	Other Contribution	Total
Administration/Management	2,600.00	2,000.00	4,600.00		2,600.00	3,137.50	5,737.50
Consultancy/Provider Fees	12,600.00	0.00	12,600.00		12,600.00	0.00	12,600.00
Travel/Subsistence/Premises	2,000.00	1,200.00	3,200.00		2,000.00	1,493.00	3,493.00
Publicity/Marketing	1,000.00	1,000.00	2,000.00		1,000.00	800.00	1,800.00
Dissemination*	1,500.00	1,800.00	3,300.00		1,500.00	1,800.00	3,300.00
Evaluation		1,800.00	1,800.00			2,000.00	2,000.00
Other please detail consultation		2,450.00	2,450.00		0.00	3,502.33	3,502.33
Research - Gap Analysis#	2,600.00	1,500.00	4,100.00		2,600.00	400.00	3,000.00
Consultation - Sign-off by Employers	2,250.00	900.00	3,150.00		2,250.00	1,650.00	3,900.00
Totals	24,550.00	12,650.00	37,200.00		24,550.00	14,782.83	39,332.83
Translation into Welsh Language	2,000.00	0.00	2,000.00		0.00	0.00	0.00

* ongoing
# grouped under other consultation

The total project cost was £39,333 of which the Welsh Assembly Government contributed £24,550. Translation of the report, the Gold Standards and the leaflet into Welsh is in progress and will be charged against invoice as agreed with a budget of £2000

Risk Register

The risk register was updated throughout the project.

Description of Risk	Likelihood 1 – 5 (1= unlikely 5= almost certain)	Severity of Impact 1 - 5 (1=low 5= critical)	Total	Action	Review Date
Employers do not respond to questionnaire	3	5	7	Arrange face to face meetings, use senior management contacts to facilitate Agreed to ensure face-to-face meetings	Jan 14
Emails ineffective for getting feedback	4	3	7	Telephone and repeat emails. Need to broaden coverage outside Wales due to only limited (100) email contacts in Wales. Post GS with prepaid reply to 150 companies	Feb 19
Employers do not use the Gold Standards	2	4	6	Marketing campaign to publicise good practice and enhance peer pressure	Jan 14
Employers do not value Gold Standards	1	3	4	Revisit the Framework to ensure that it has credibility with all employers	Jan 14
Unavailability of consultant	1	3	4	Many consultants available	Jan 14
Low take up of Gold Standard	4	4	8	Marketing campaign; Economic Climate severely affecting companies Ensure funding, talk to WAG; promote through the National Skills Academy Process Industries	Feb 19
Slippage in developing the Gold Standard	3	1	4	Gold Standard consultation extended to end08; project completion date unchanged	Jan 14
Long term shutdowns delaying consultation	3	2	5	Extend sign-off period for GS to ensure multi-feedback	Jan 14

Quality Plan

Throughout the Gold Standard project, Cogent ensured that quality principles were followed in a number of ways:

Internal review

Internal reviews were conducted throughout the project by the project team.

External review

External reviews with stakeholders were conducted to ensure that the programme meets expectations.

Word of Thanks

Cogent would like to thank the Welsh Assembly Government for their financial support for this project; without this support Cogent would have been unable to develop Gold Standards that truly reflect employer demand.

John Holton   March 2009

Appendices

Appendix 1   Gold Standard 'Strawman' for 1st Line Supervisor
Appendix 2   Draft Gold Standard for 1st Line Supervisor – Consultant Doc
Appendix 3   Feedback on the Gold Standard
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Appendix 1   Gold Standard 'Strawman' for 1st Line Supervisor

Technical Competence	The Gold Standard
	What skills, knowledge and behaviours can the individual demonstrate?
Process Operations	the individual understands… • how to control and maintain process operations the individual can… • develop and monitor plans and procedures • allocate personnel to maintain processing • solve operational problems • respond to process problems
Process Maintenance	the individual can… • respond appropriately to maintenance issues • adapt plans and procedures • allocate personnel to prepare for/carry out maintenance
Process Technology	the individual understands… • the theory and principles of organic and inorganic chemistry • how to use practical laboratory skills to perform analytical procedures • the industrial applications of chemical science • how to use maths, IT and problem solving techniques

Business Improvement	The Gold Standard
	the individual understands… • the theory, principles and practice associated with a variety of appropriate business improvement techniques the individual can.. • solve process problems using business improvement techniques

Compliance	The Gold Standard
	the individual understands… • the reasons for and application of a variety of safety management systems such as Permit to Work, Standard Operating Procedures and Risk Assessment • the implications and relevance of company policy, external legislation and regulation on working practices (including environmental control) • his/her responsibilities for controlling workplace hazards and managing the health and safety of others

Functional & Behavioural	The Gold Standard
Autonomy	the individual can… • take responsibility for planning and developing courses of action, including responsibility for the work of others • exercise autonomy and judgement within broad but generally well-defined parameters
Management and Leadership	the individual can… • develop and implement operational plans for his/her area of responsibility • provide leadership for his/her team • encourage innovation within his/her team • implement change • ensure compliance with legal, regulatory, ethical and social requirements
Working with others	the individual can… • develop and maintain productive working relationships with colleagues and stakeholders • allocate and monitor the progress and quality of work within his/her area of responsibility • provide learning opportunities for colleagues

Appendix 2   Draft Gold Standard for 1st Line Supervisor – Consultation Doc

Technical Competence	The Gold Standard	Feedback
	What skills, knowledge and behaviours can the individual demonstrate?	
Process Operations	the individual understands… • how the process is started and shutdown • how the process is controlled and maintained • the operating procedures for the process • how to manage safety critical process operations the individual can… • develop and monitor plans and procedures • allocate personnel to maintain processing • solve operational problems • respond to process problems	
Process Maintenance	the individual can… • respond appropriately to maintenance issues • adapt plans and procedures • allocate personnel to prepare for/carry out maintenance	
Process Technology	the individual understands… • the theory and principles of organic and inorganic chemistry • how to use practical laboratory skills to perform analytical procedures • the industrial applications of chemical science • how to use maths, IT and problem solving techniques	

| Business Improvement | the individual understands…
 • the theory, principles and practice associated with a variety of appropriate business improvement techniques

 the individual can..
 • solve process problems using business improvement techniques | |

Compliance	The Gold Standard	Feedback
	the individual understands… • the reasons for and application of a variety of safety management systems such as Permit to Work, Standard Operating Procedures and Risk Assessment • the implications and relevance of company policy, external legislation and regulation on working practices (including environmental control) • his/her responsibilities for controlling workplace hazards and managing the health and safety of others	

Functional & Behavioural	The Gold Standard	Feedback
Autonomy	the individual can… • take responsibility for planning and developing courses of action, including responsibility for the work of others • exercise autonomy and judgement within broad but generally well-defined parameters	
Management and Leadership	the individual can… • develop and implement operational plans for his/her area of responsibility • provide leadership for his/her team • encourage innovation within his/her team • implement change • ensure compliance with legal, regulatory, ethical and social requirements	
Working with others	the individual can… • develop and maintain productive working relationships with colleagues and stakeholders • allocate and monitor the progress and quality of work within his/her area of responsibility • provide learning opportunities for colleagues	

Functional & Behavioural	The Gold Standard	Feedback
Communication	the individual can… • read, discuss and synthesise complex information effectively • communicate complex information to others using formal presentation and written document	
Numeracy	the individual can… • interpret and present numerical information • perform numerical calculations	
Information and Communication Technology	the individual can… • find, select, store, develop and present information using a variety of appropriate techniques	
Personal Development	the individual can… • manage his/her professional development by setting targets and planning how they will be met • review progress towards targets and establish evidence of achievements	

Appendix 3 Feedback on the Gold Standard

Knauf Insulation	Knauf Insulation.doc	Chevron	Chevron.doc
Penn Pharma; Biotec Services Int.; Norgine; HR Consulting and Training	Penn Tredegar meeting.doc	Dow Corning	DowCorning.doc
Roperhurst	Roperhurst.doc	Flexsys	Flexsys.doc
Sekisuialveo	Sekisuialveo.doc	Freshbaked	Freshbaked.doc
Solutia	Solutia.doc	Awbery	Awbey Management Consultants.doc
Teva	Teva.doc	Barry Training Services	Barry Training Services.doc
Tubex	Tubex.doc	British Salt	British Salt.doc
Zeon	Zeon.doc	GSK	GSK.doc
Vopak Hexion Ineos Dow Centrica	Barry Joint Sites Managers Meeting.doc	Catalent	Catalent Pharma Solutions.doc
Brecon	Brecon.doc	Report on questionnaire consultation	Report on Consultation FLS.doc
Atlas Polymers	Very difficult to make contact with this company; they expressed no interest due to their size and current conditions		
Dragon Plastics	This company together with Riverside Plastics have merged to become Gwalia Packaging and are interested and keen for further consultation and possible use of the Standard, No adverse comments on the content, but would see if changes are needed after implementing.		
Dragon Polystyrene	This company is very small and has no interest due to its size		
Kautex Textron	This is a well established Tier One Automotive supplier with global plants and the South Wales factory has seen many changes over the years. At present on short time working due to the decline in UK manufacturing, however they are interested in the Gold Standard, only reservation was does it effect or change anything in their Automotive standards and ratings, QS 16949 Management Systems. Should they see an improvement in output then they would use it, but at present they are not		

	sure if they will survive in the current situation and some work streams may go to the German plant in Bonn.
Kay Premium Marking Films	Very good feed back from this company and very keen to follow through with the Gold Standard. It was felt that we had put too much emphasis on chemistry in the Technical Competence part
Klockner Pentaplast	Not interested. In hindsight perhaps needs to be contacted from MD level.
Linear Plastics Mollertech MVTP Packaging Principality Plastics	Very small companies; not interested.
Synergy Plastics	Medium sized company and interested to follow through. At first opinion thought that it was a bit over the top for their supervisors but could understand the reason behind the need for qualifications in an area that has not used formal quals before.
Advanced Elastomer Systems.	Based on the Solutia site but fully independent, this company is run from off site offices in Leicester and showed interest in the Gold Standard but will not implement any changes at present in the manufacturing plant.
Visqueen	seeking increased standards like this
GE Health Care	Specialised facilities/ QA processes

Chemicals

Technical Competence	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
Process Operations Process Maintenance Process Technology	the individual can… • develop and monitor plans and procedures • allocate personnel to maintain processing • solve operational problems • respond to process problems the individual can… • respond appropriately to maintenance issues • adapt plans and procedures • allocate personnel to prepare for/carry out maintenance the individual understands… • the theory and principles of organic and inorganic chemistry • analytical procedures & interpretation of results • the industrial applications of chemical science • how to use maths, IT and problem solving techniques the new starter (e.g. graduate) understands… • how the process is started and shutdown • how the process is controlled and maintained • the operating procedures for the process • how to manage safety critical process operations	**L3 ILM Award in Managing Operations** Solving problems & making decisions Planning to work efficiently Organising & delegating Managing projects Managing the effective use of equipment **BSc (Honours) in Science, Engineering or Technology** *OR* **Foundation Degree modules in:** Underpinning STEM module and Specialist STEM module in Science or Engineering or Technology **Cogent Industry Training Standard for Chemicals** (to be developed)

* Or an equivalent qualification such as those listed below…

Technical Competence	NVQ L3 in Chemical Pharmaceutical and Petro-Chemical Operations NVQ L4 in Chemical Pharmaceutical and Petro-Chemical Operations

Business Improvement	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
	the individual understands… • the theory, principles and practice associated with a variety of appropriate business improvement techniques the individual can.. • solve process problems using business improvement techniques • encourage innovation within his/her team	**L3 PAA\VQSET Certificate in Process Improvement** 1 Mandatory Unit • Carrying out problem solving activities Plus 2 further units from the Optional list below: • Analysing and selecting parts for improvement • Carrying out value stream mapping • Applying set up reduction techniques • Applying total production maintenance • Carrying out statistical process control procedures • Applying flow process analysis • Carrying out potential failure modes and affects • Carrying out measurement systems analysis • Carrying out mistake/error proofing

*Or an equivalent qualification such as those listed below…

Business Improvement	NVQ L3 in Business Improvement Techniques

Compliance	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
	the individual understands… • the reasons for and application of a variety of safety management systems such as Permit to Work, Standard Operating Procedures and Risk Assessment • the implications and relevance of company policy, external legislation and regulation on working practices (including environmental control) • his/her responsibilities for controlling workplace hazards and managing the health and safety of others • ensure compliance with legal, regulatory, ethical and social requirements • making plant safe for maintenance or in emergency shutdown • environmental & sustainability responsibilities	**IOSH Managing Safely**

Functional & Behavioural	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
Autonomy	the individual can… • take responsibility for planning and developing courses of action, including responsibility for the work of others • exercise autonomy and judgement within broad but generally well-defined parameters	
Management and Leadership	the individual can… • develop and implement operational plans for his/her area of responsibility • manage diversity & discrimination issues • provide leadership for his/her team • implement change	**L3 ILM Certificate in First Line Management** Solving problems & making decisions Understanding change in the workplace Planning change in the workplace Achieving objectives through time management Giving briefings and making presentations in the workplace Introduction to leadership
Working with others	the individual can… • develop and maintain productive working relationships with colleagues and stakeholders • allocate and monitor the progress and quality of work within his/her area of responsibility • provide learning opportunities for colleagues	Building the team Motivating to perform in the workplace Developing yourself and others Managing performance Influencing others at work Understanding the communication process in the workplace Managing the employment relationship
Personal Development	the individual can… • manage his/her professional development by setting targets and planning how they will be met • review progress towards targets and establish evidence of achievements	
Communication	the individual can… • put across ideas in clear and concise manner and present a well structured case • communicate complex information to others • handover at end of shift	

Functional & Behavioural	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
Business Awareness	the individual…. • understands the business environment in which the company operates • has an appreciation of the industry sector and competitors • understands the customer base and is aware of customer requirements	**L3 ILM Award in Business Awareness** Understanding organisations in their context Managing customer service Working with costs & budgets

*Or an equivalent qualification such as those listed below…

Functional and Behavioural	ILM L3 Diploma in First Line Management CMI L3 Diploma in First Line Management NVQ L3 in Management

Polymers

Technical Competence	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
Process Operations Process Maintenance Process Technology	the individual can… • develop and monitor plans and procedures • allocate personnel to maintain processing • solve operational problems • respond to process problems the individual can… • respond appropriately to maintenance issues • adapt plans and procedures • allocate personnel to prepare for/carry out maintenance the individual understands… • polymer science and engineering • the theory and principles of materials • the theory, principles and practice involved in the manufacturing processes of the polymer industry • how to use maths, IT and data handling the new starter (e.g. graduate) understands… • how the process is started and shutdown • how the process is controlled and maintained • the operating procedures for the process • how to manage safety critical process operations	**L3 Award in Managing Operations** Solving problems & making decisions Planning to work efficiently Organising & delegating Managing projects Managing the effective use of equipment **BSc (Honours) in Science, Engineering or Technology** *OR* **Foundation Degree modules in:** Underpinning STEM module and Specialist STEM module in Science or Engineering or Technology **Cogent Industry Training Standard for Polymers** (to be developed)

* Or an equivalent qualification such as those listed below…

Technical Competence	NVQ L3 in Polymer Processing and Related Operations

Business Improvement	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
	the individual understands… • the theory, principles and practice associated with a variety of appropriate business improvement techniques the individual can.. • solve process problems using business improvement techniques • encourage innovation within his/her team	**L3 Certificate in Process Improvement** 1 Mandatory Unit • Carrying out problem solving activities Plus 2 further units from the Optional list below: • Analysing and selecting parts for improvement • Carrying out value stream mapping • Applying set up reduction techniques • Applying total production maintenance • Carrying out statistical process control procedures • Applying flow process analysis • Carrying out potential failure modes and affects • Carrying out measurement systems analysis • Carrying out mistake/error proofing

*Or an equivalent qualification such as those listed below…

Business Improvement	NVQ L3 in Business Improvement Techniques

Compliance	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
	the individual understands… • the reasons for and application of a variety of safety management systems such as Permit to Work, Standard Operating Procedures and Risk Assessment • the implications and relevance of company policy, external legislation and regulation on working practices (including environmental control) • his/her responsibilities for controlling workplace hazards and managing the health and safety of others • ensure compliance with legal, regulatory, ethical and social requirements • making plant safe for maintenance or in emergency shutdown • environmental & sustainability responsibilities	**IOSH Managing Safely**

Functional & Behavioural	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
Autonomy	the individual can… • take responsibility for planning and developing courses of action, including responsibility for the work of others • exercise autonomy and judgement within broad but generally well-defined parameters	
Management and Leadership	the individual can… • develop and implement operational plans for his/her area of responsibility • manage diversity & discrimination issues • provide leadership for his/her team • implement change	**L3 ILM Certificate in First Line Management** Solving problems and making decisions Understanding change in the workplace Planning change in the workplace Achieving objectives through time management Giving briefings and making presentations in the workplace Introduction to leadership Building the team Motivating to perform in the workplace Developing yourself and others Managing performance Influencing others at work Understanding the communication process in the workplace Managing the employment relationship
Working with others	the individual can… • develop and maintain productive working relationships with colleagues and stakeholders • allocate and monitor the progress and quality of work within his/her area of responsibility • provide learning opportunities for colleagues	
Personal Development	the individual can… • manage his/her professional development by setting targets and planning how they will be met • review progress towards targets and establish evidence of achievements	
Communication	the individual can… • put across ideas in clear and concise manner and present a well structured case • communicate complex information to others • handover at end of shift	

Functional & Behavioural	The Gold Standard *Job Role skills, knowledge and behaviours*	Gold Standard Qualifications *Awards, Certificates & Diplomas*
Business Awareness	the individual…. • understands the business environment in which the company operates • has an appreciation of the industry sector and competitors • understands the customer base and is aware of customer requirements	**L3 ILM Award in Business Awareness** Understanding organisations in their context Managing customer service Working with costs & budgets

*Or an equivalent qualification such as those listed below…

Functional and Behavioural	ILM L3 Diploma in First Line Management
	CMI L3 Diploma in First Line Management
	NVQ L3 in Management

Appendix 5   Functional & Behavioural Providers

Management & Leadership Providers

Acorn Learning Solutions Limited	Newport
Acom Business Services	Pyle
Arfon Dwyfor Training Ltd	Gwynedd
Awbery Management Consultants	Repton
Bethany Training Services	Newtown
Barry College	Barry
Bridgend College	Bridgend
CK One Training	Aberdare
Cardiff College Training	Cardiff
CT Learning	Kilgetty
Coleg Gwent	Usk
Cardian Associates	Usk
Challengers	Portcawl
Careers Wales West	Gorseinon
Coleg Menai	Gwynedd
Coleg Morgannwg	Pontypridd
Coleg Powys	Powys
Carmarthenshire College	Llanelli
Deeside College	Deeside
Fershbaked	Cardiff
Gorseinon College	Swansea
Hyfforddiant Gwynedd Training	Caernarfon
Hyfforddiant Môn Training	Ynys Môn
Hafal	Landarcy
Hendre	Rhondda
Interact development Training	Gresford
ITEC Training Solutions Ltd	Cardiff
IPTS	Newport
I-SA Training	Bridgend
JGR Training	Bridgend
Job Force Wales	Llanelli
LJM Training	Barry
Llandrillo College	Colwyn Bay
Mid & North Wales Training Group	Montgomery
MHP Consultancy	Cardiff
North Wales Training	Colwyn Bay
North East Wales Institute of Higher Education	Wrexham
NPTCBC Lifelong Learning	Port Talbot
Online2U	Chepstow
Pembrokeshire College	Pembrokeshire
PRP Training	Pembroke
Professional and Technical Development	Llanelli
Palladium Training & Consultancy	Caerphilly

Protocol Skills	Caerphilly
PI Associates	Pentyrch
Progression Training	Newtown
PHS Group	Caerphilly
Qualtech Services	Pontypridd
Rossett Training	Wrexham
SA Brain & Co	Cardiff
Swansea College	Swansea
Smartcare Training	Wrexham
Talk Training	Parc Nantgarw
Training Solutions Wales	Rlumey
T2 Business Solutions	St Mellons
TSW Training Ltd	Aberkenfig
Tri-Solutions	Llanishen
THE Group	Ruabon
The Training & Learning Co	Swansea
University of Wales	Bangor
University of Glamorgan	Pontypridd
Vision Training	Ponypool
Welsh College of Horticulture	Flintshire
Wrexham Training	Training
Yale College	Wrexham

Appendix 6   Compliance Training Centres

IOSH Managing Safely Approved Centres, North Wales	
Deeside College	Connah's Quay
Coleg Llandrillo	St Asaph
Coleg Menai	Holywell
Setter & Associates Ltd	Greenfield, Flintshire
Perseus Pinacl Holding Ltd	St Asaph
Jennings Safety Services	Hawarden
Yale College	Wrexham
Holistic Services Ltd	Llandarry
UK Safety Network	Cardigan
Atrium – First Aid Company of Trainers	Wrexham
Safety and Training Solutions	Wrexham
Staysafe Safety Health & Environmental Services	Shrewsbury
IOSH Managing Safely Approved Centres, South Wales	
TSW Training Ltd	Bridgend
N Safety Ltd	Bridgend
Coleg Gwent	Usk
Crownford Limited	Hirwaun
Bridgend College	Bridgend
NPTCBC Lifelong Learning Services	Port Talbot
Cardiff University	Cardiff
Neath Port Talbot College	Port Talbot
MLJ Safety, Health and Environmental	Cardiff
UWIC	Cardiff
Providence Training	Milford Haven
Jays Training	Merthyr Tydfil
National Britannia Ltd	Caerphilly
Training Solutions & Consultancy 2000	Merthyr Tydfil
Symmons Madge Associates	Cowbridge
Cambio	Abergavenny
Barry College	Barry
Swansea College	Swansea
DTD Training Ltd	Caerphilly
Horizon Training Services	Penarth
BPI Training Ltd	Aberdare
DLT Training	Bridgend
University of Glamorgan	Pontypridd,
Pembrokeshire College	Haverfordwest
Hoskins Consulting Ltd	Aberdare
Barry Training Services	Penarth
Phoenix Training Solutions	Port Talbot
Integrity Training & Consultancy	Margam
Portico Associates	Porthcawl

Appendix 7   Business Improvement Training Centres

Name of Provider	NVQ in Business-Improvement Techniques
A4E Development	Level 2
Acom Business Services Ltd	3
ACT	2
Bridgend College	2, 3
Coleg Gwent	3
Coleg Llandrillo	2, 3, 4
Coleg Sir Gar	2, 3
Deeside College	2, 3
Myrick Training Services	4
Neath Port Talbot College	4
Network Training	2, 3
Newport & District GTA	3
Swansea College	2, 3
Vision Training & Recruitment Ltd	2, 3, 4

Appendix 8   Technical Competence – NVQ provision

Name of Provider	Polymers NVQ	Level	Chemicals NVQ	Level
Barry College	Polymer Processing and Related Operations	2		
	Polymer Processing and Related Operations	2		
	Polymer Processing and Related Operations	3		
Bridgend College			Laboratory and Associated Technical Activities	3
Coleg Gwent	Signmaking	2	Laboratory and Associated Technical Activities	3
	Signmaking	3		
Coleg Llandrillo	Polymer Processing and Related Operations	2		
	Polymer Processing and Related Operations	3		
Deeside College			Laboratory and Associated Technical Activities	3
			Laboratory and Associated Technical Activities	4
Myrick Training Services			Packaging Operators	2
National Training Partnership	Polymer Processing and Related Operations	2		
	Polymer Processing and Related Operations	3		
Nustaff Training Limited			Refinery Field Operations	3
			Process Engineering Maintainance	2
Welsh College of Horticulture			Laboratory and Associated Technical Activities	3,4
Yale College			Laboratory and Associated Technical Activities	3

Gold Standard – First Line Supervisor (Chemicals)

Appendix 9	The Gold Standard Job Role skills, knowledge and behaviours	Gold Standard Qualifications* Awards, Certificates & Diplomas
Technical Competence Managing Process Operations	*the individual can…* • develop and monitor plans and procedures • allocate personnel to maintain processing • respond to and solve operational problems • adapt plans and procedures • allocate personnel to prepare for/carry out maintenance	**L3 ILM Award in Managing Operations** (8 credits)
Process Technology	*the individual understands…* • science/technology theory and principles • analytical procedures & interpretation of results • the industrial applications of chemical science • how to use maths, IT and problem solving techniques	**BSc (Honours) in Science, Engineering or Technology** *OR* **Foundation Degree modules in:** *Underpinning & specialist STEM modules in Science or Engineering or Technology*
Process Operations	*the individual understands…* • how the process is started and shutdown • how the process is controlled and maintained • the operating procedures & how to manage safety critical process operations	**Cogent Industry Training Standard for Chemicals**
Business Improvement	*the individual understands…* • the theory, principles and practice associated with business improvement techniques *and can…* • solve process problems using business improvement techniques • encourage innovation within his/her team	**L3 PAA\VQSET Certificate in Process Improvement**
Compliance	*the individual understands…* • the reasons for and application of safety management systems • the implications and relevance of company policy, legislation and regulation on working practices • responsibilities for controlling workplace hazards and managing the health and safety of others • how to ensure compliance with legal, regulatory, ethical and social requirements • making plant safe for maintenance or in emergency shutdown • environmental & sustainability responsibilities	**IOSH Managing Safely**

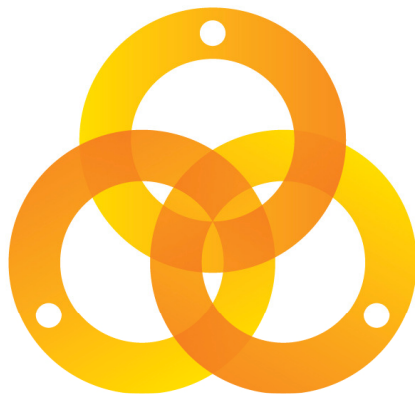cogent | Skills for Science Based Industries

Gold Standard - First Line Supervisor (Chemicals)

	The Gold Standard Job Role skills, knowledge and behaviours	**Gold Standard Qualifications*** Awards, Certificates & Diplomas
Functional & Behavioural Autonomy	*the individual can…* • *take responsibility for planning and developing courses of action, including responsibility for the work of others* • *exercise autonomy and judgement within broad but generally well-defined parameters*	
Management and Leadership	*the individual can…* • *develop and implement operational plans for his/her area of responsibility* • *manage diversity & discrimination issues* • *provide leadership for his/her team* • *implement change*	**L3 ILM Certificate in First Line Management** (20 credits)
Working with others	*the individual can…* • *develop and maintain productive working relationships with colleagues and stakeholders* • *allocate and monitor the progress and quality of work within his/her area of responsibility* • *provide learning opportunities for colleagues*	
Personal Development	*the individual can…* • *manage his/her professional development by setting targets and planning how they will be met* • *review progress towards targets and establish evidence of achievements*	
Communication	*the individual can…* • *put across ideas in clear and concise manner and present a well structured case* • *communicate complex information to others* • *handover at end of shift*	
Business Awareness	*the individual….* • *understands the business environment in which the company operates* • *has an appreciation of the industry sector and competitors* • *understands the customer base and is aware of customer requirements*	**L3 ILM Award in Business Awareness**

* Or an equivalent qualification such as those listed

Technical Competence	NVQ L4 in Chemical Pharmaceutical and Petro-Chemical Operations
Business Improvement	NVQ L3 in Business Improvement Techniques
Functional and Behavioural	ILM L3 Diploma in First Line Management
	CMI L3 Diploma in First Line Management
	NVQ L3 in Management

Gold Standard – First Line Supervisor (Polymers)

	The Gold Standard Job Role skills, knowledge and behaviours	Gold Standard Qualifications* Awards, Certificates & Diplomas
Technical Competence Managing Process Operations	the individual can… • develop and monitor plans and procedures • allocate personnel to maintain processing • respond to and solve operational problems • adapt plans and procedures • allocate personnel to prepare for/carry out maintenance	**L3 ILM Award in Managing Operations** (8 credits)
Process Technology	the individual understands… • polymer science and engineering • the theory and principles of materials • the theory, principles and practice involved in the manufacturing processes of the polymer industry • how to use maths, IT and problem solving techniques	**BSc (Honours) in Science, Engineering or Technology** OR **Foundation Degree modules in:** *Underpinning & specialist STEM modules in Science or Engineering or Technology*
Process Operations	the individual understands… • how the process is started and shutdown • how the process is controlled and maintained • the operating procedures & how to manage safety critical process operations	**Cogent Industry Training Standard for Polymers**
Business Improvement	the individual understands… • the theory, principles and practice associated with business improvement techniques and can… • solve process problems using business improvement techniques • encourage innovation within his/her team	**L3 PAA\VQSET Certificate in Process Improvement**
Compliance	the individual understands… • the reasons for and application of safety management systems • the implications and relevance of company policy, legislation and regulation on working practices • responsibilities for controlling workplace hazards and managing the health and safety of others • how to ensure compliance with legal, regulatory, ethical and social requirements • making plant safe for maintenance or in emergency shutdown • environmental & sustainability responsibilities	**IOSH Managing Safely**

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Gold Standard - First Line Supervisor (Polymers)

	The Gold Standard Job Role skills, knowledge and behaviours	Gold Standard Qualifications* Awards, Certificates & Diplomas
Functional & Behavioural Autonomy	*the individual can…* • take responsibility for planning and developing courses of action, including responsibility for the work of others • exercise autonomy and judgement within broad but generally well-defined parameters	
Management and Leadership	*the individual can…* • develop and implement operational plans for his/her area of responsibility • provide leadership for his/her team • implement change	**L3 ILM Certificate in First Line Management** (20 credits)
Working with others	*the individual can…* • develop and maintain productive working relationships with colleagues and stakeholders • manage diversity & discrimination issues • allocate and monitor the progress and quality of work within his/her area of responsibility • provide learning opportunities for colleagues	
Personal Development	*the individual can…* • manage his/her professional development by setting targets and planning how they will be met • review progress towards targets and establish evidence of achievements	
Communication	*the individual can…* • put across ideas in clear and concise manner and present a well structured case • communicate complex information to others • handover at end of shift	
Business Awareness	*the individual….* • understands the business environment in which the company operates • has an appreciation of the industry sector and competitors • understands the customer base and is aware of customer requirements	**L3 ILM Award in Business Awareness**

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* Or an equivalent qualification such as those listed

Technical Competence	NVQ L3 in Polymer Processing and Related Operations
Business Improvement	NVQ L3 in Business Improvement Techniques
Functional and Behavioural	ILM L3 Diploma in First Line Management
	CMI L3 Diploma in First Line Management
	NVQ L3 in Management

Appendix 10 Gold Standard Leaflet

Zoom

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The Cogent Gold Standard

Vision: increasing industry profitability and competitiveness through world-class skills.

The Gold Standard is a national framework for continuous professional development setting out the skills required for world class performance in key job roles in the process industries.

It describes and maps the competencies required to do each job across four areas of competence:

- Technical Competence
- Business Improvement
- Compliance
- Functional and Behavioural

Cogent Gold Standard

Steve Westhead,
Managing Director of
Solutia UK Ltd in Newport.

Solutia is part of a global chemicals company which creates performance materials that are used primarily in the automotive and architectural, transportation and industrial markets.

"The Cogent Gold Standard is absolutely essential if this vital and value-adding sector is to realise its ambitions in an aggressive global market. Without such a standard, there is a danger our industry will lag in productivity terms. It is fundamental to the highest standards of Safety, Health and Environment which is essential to public confidence and employee well-being and motivation."

What does the Cogent Gold Standard offer employers?

- An industry skills benchmark for world-class performance
- Assurance that a company's investment in skills hits all the right targets
- The accreditation of existing skills and identification of gaps
- Transferability of skills across the Process Industries
- Signposting to fundable training programmes
- Quality assured, bite-sized training programmes delivered flexibly to meet the needs of individuals and businesses

What does the Cogent Gold Standard offer employees?

- The ability to transfer their skills across the Sector
- Accreditation of their skills to world-class standards
- Clear role progress and career pathways
- An aspirational framework for individuals to fulfil their potential
- Support for Trades Unions Representatives in promoting training

How can the Gold Standard be achieved?

Achievement of the Gold Standard can be made through existing full qualifications or smaller bite-sized qualifications targeted at particular skills areas. These new qualifications match the way training is delivered in the Sector and provide a more flexible way to build up a portfolio of accredited skills. See the example below:

Process Technician (Chemicals)	The Gold Standard Job Role skills, knowledge and behaviours	Gold Standard Qualifications Awards, Certificates & Diplomas
Technical Competence		
Process Operations	*the individual can...* • prepare to start up a process; start up a process; monitor a process, resolve problem, shutdown a process	L3 PAA\VQSET Certificate in Chemical & Pharmaceutical Based Process Operations
Process Maintenance	• prepare the work area for maintenance; carry out routine maintenance; reinstate the work area after maintenance	L2 PAA\VQSET Certificate in Chemical & Pharmaceutical Based Process Maintenance
Process Support	• clean and prepare complex items of plant and equipment for production; sample and test materials	L2 PAA\VQSET Certificate in Chemical & Pharmaceutical Based Process Support
Process Technology	*the individual has...* • the underpinning science and technology knowledge for the chemical sector & job role	L3 City and Guilds Certificate in Process Technology
Business Improvement		
	the individual understands... • the theory, principles and practice associated with business improvement techniques *the individual can...* • solve process problems using business improvement techniques	L3 PAA\VQSET Certificate in Process Improvement
Compliance		
	the individual understands... • the reasons for and application of safety management systems such as Permit to Work, Standard Operating Procedures and Risk Assessment • the implications and relevance of company policy, external legislation and regulation on working practices (including environmental control)	L2 NEBOSH Award in Workplace Health & Safety L2 NEBOSH Award in Process Safety L2 NEBOSH Award in Management & Control of Environmental Hazards
Functional and Behavioural		
	Basic skills Autonomy Working with others Personal Development Business Awareness	Can be acquired through GCSE or Key/Core skills programmes and embedded in NVQ and Technical Certificates L2 ILM Certificate in Team Leading L2 ILM Award in Enterprise Awareness L2 ILM Award in Customer Awareness

For more information on Gold Standard roles and to see how it can be achieved visit:

www.cogent-ssc.com and click on Gold Standard

Or contact us on: **01925 515 200**

Cogent SSC, Unit 5, Mandarin Court, Centre Park Warrington WA1 1GG

cogent | Skills for Science Based Industries

The National **Skills** Academy

PROCESS INDUSTRIES

The strategic skills alliance for the Process Industries

Appendix 11 Marketing Plan

Purpose:
The marketing and communications activity proposed will raise awareness of the '"world class standards "concept behind the Cogent Gold Standard and understanding of the relevance to profitability and competitiveness by employers, individuals and key influencers on the process industries in Wales. It will also focus on the national training framework concept which is judged a major benefit by employers.

Objectives:
1. To communicate directly with all identified process industry companies in Wales, (see messages and channels).
2. To communicate key messages about the Gold Standard through key influencers in Wales, including trade bodies, training providers, Government and local authority channels, professional bodies and trades unions and the media.
3. To target relevant Welsh and cross-border media with bespoke stories about the benefits of the Gold Standard and how industry is aspiring to higher quality and effectiveness in difficult economic times.

Outcomes:
1. To engage the Welsh process industry employers in the Gold Standard
2. To achieve coverage of the Gold Standard in the regional/city business and industry sections of the South Wales, South West Wales and North Wales media, and in relevant cross-border media.
3. To activate training providers in Wales to deliver the Gold Standard.

Publicity material
1. Revised Gold Standard Product Sheets: English/Welsh.
2. Gold Standard 1st Line Supervisor for Chemicals and Polymers: English/Welsh
3. Gold Standard backdrop/pull up for events

Distribution
1. DM/letter to all identified process companies: English/Welsh
2. DM letter to all identified training providers
3. DM/letter to all relevant Trade and professional bodies.
4. DM/letter to trades unions ULRS.
5. DM/letter to business support organisations
6. DM/letter to relevant AMs and local, regional and WAG officials.

E-comms:
1. New Gold Standard templates on Cogent website.
2. 1st Line Supervisor roles linked from Career Pathway site.
3. Power point or short video loop for memory stick/dvd.

Media
1. Press notices and tele-briefings to business and industry correspondents in Pembrokeshire, Swansea, Port Talbot to –Newport arc; Valleys, mid-Wales, North East Wales and bordering English media in Cheshire, Deeside and Liverpool.
2. Interview/s with Cogent Gold Standard Ambassador on radio/TV as possible.

Appendix 12 Terms of Reference

Terms of Reference

- Implement the Project Vision, Aims and Objectives.

- Act as a point of reference on project implementation and roll out.

- Serve as a forum to review project costs, programme and risk register in line with the constraints of Project Plan. Also to aid in the discharge of mitigating project risks.

- Sign-off any consultant appointments to the project.

- Oversee the development of all required materials & tools to ensure a cost-effective implementation

- Aid the development of a standard approach for the roll out of the Gold Standard so that standards are uniform and maintained across the sector.

- Aid in the marketing, in particular, the promotion and dissemination of the Gold Standard work.

- Gain the support and commitment of employers and employees across the sector to the Gold Standard.