PERSONNEL COMPETENCY REGISTRATION SCHEME
FOR HAZARDOUS AREA ENGINEERS AND TECHNICIANS

Thank you for agreeing to review the documentation associated with this competency scheme.

The scheme will only gain acceptance if it has broad industry support and it is seen as credible with a high degree of independence and integrity.

The document describes in outline how the scheme would work as based on the international standard IEC 17024.

As mentioned we are in active discussion with Comp"Ex" and will mail out further information on this at a later date.

We have already taken into account views we have canvassed from industry. Never the less I would like you to read the document and send it back with your thoughts embedded. (It has been set up with tracker so that you can do this.)

I would like you comments by Friday 10th December.

I will then scrutinise these and compile a second draft.

Where we have consensus I will amend the text.

If we have wildly differing views I will send out the options for your consideration.

If we cannot agree by correspondence we may well have to call a meeting of interested parties.

Thank you for your co-operation.

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PERSONNEL COMPETENCY
REGISTRATION SCHEME
FOR
HAZARDOUS AREA ENGINEERS
AND TECHNICIANS

Competency Plus

Scheme Guidelines

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1   **Introduction**

This document describes the **Competency Plus** Scheme, its purpose and the means whereby personnel working in hazardous areas can demonstrate their competency for the tasks they carry out through formal, personal registration.

This also shows how the established Comp"Ex" Scheme dovetails into the overall plan giving a smooth transition between the two. *(To be agreed with Comp"Ex")*

The Scheme is applicable to all grades of personnel including plant operators through to senior management. It provides the means for the formal assessment and registration of the competency of personnel, and the approval of organisations providing training.

Job disciplines and course units are defined covering the range of appropriate competency requirements, which provide the basis for both training and assessment. The competency requirements are detailed in knowledge syllabuses for each unit. These have been created by experts in training personnel in the relevant fields.

The registration is carried out by Sira Certification Service (SCS), a division of Sira Test & Certification Ltd which has a long history of testing and certifying equipment for use in explosive atmospheres and of carrying out hazardous area zoning.

The registration process involves assessment by experts of candidates' knowledge of, and experience in, a particular field of work thus defining a scope of competency to be shown on the competency certificate.   SCS maintains a register of registered personnel and the scope of their registered competencies.   In order to maintain registration, individuals must demonstrate on-going retention or improvement of expertise through periodic re-assessments.

Personnel wishing to become registered apply to SCS, details of the process being described in this document.

In addition to the registration of individuals' competencies, the Scheme describes the processes for assessing and approving organisations that provide training against the Scheme knowledge syllabuses. This helps ensure that personnel are adequately and consistently prepared for the assessment process. SCS maintains a register of training providers thus approved.

2   **Background to the Scheme**

DSEAR Implements the ATEX 137 Worker Directive 1999/92/EC and the Chemical Agents Directive 98/24/EC in the UK.

DSEAR is a set of regulations concerned with protecting people from fires, explosions and similar events arising from dangerous substances used in the workplace. The regulations apply to employees and the self employed.

DSEAR applies at most workplaces where a dangerous substance is present or could be present. Dangerous substances include petrol, liquefied petroleum gas, paints, varnishes, solvents and dusts which, when mixed with air, could form an explosive atmosphere.

DSEAR states " Before a workplace containing places classified as hazardous is used for the first time, the employer shall ensure that its overall explosion safety is verified by a person who is **competent** in the field of explosion protection as a result of his experience or any professional training or both."

In essence, the *Competency Plus* Scheme:

- Delivers two grades of competency:
  - ➤ **Practitioner:** carries out tasks involving engineering judgement within a field defined by detailed written specifications
  - ➤ **Expert**: carries out tasks involving exercise of engineering judgement within broad parameters and general principles

- Encourages collaboration between regulators, relevant trade associations and industry to ensure a common competency standard
- Is accredited to European Standard IEC 17024
- Ensures continuous surveillance and assessment of hazardous area personnel
- Promotes a high level of reliability and confidence in hazardous area personnel
- Is ongoing and under regular revision
- Dovetails into the established Comp"Ex" Scheme *(To be agreed with Comp"Ex"*)

3 Overall operation of the Scheme

The *Competency Plus* Scheme is operated by Sira Certification Service (SCS) and encompasses the elements shown in Figure 1. To gain registration of competence for a given discipline an individual must demonstrate both knowledge of, and adequate experience in, the requirements for that discipline. The resulting certificate will identify the scope of competencies demonstrated.

SCS is accredited by the United Kingdom Accreditation Service (UKAS) whose assessment ensures that the registration activities are carried out competently and meet the requirements of the standard: BS EN ISO/IEC 17024 "Conformity Assessment – General requirements for bodies operating certification of persons". UKAS is a member of the International Accreditation Forum, thus conferring global recognition of certificates issued by SCS.

4 Technical requirements for the Scheme

Technical competency requirements are determined by technical committees whose members are drawn from appropriate industries, trade associations and training providers under the guidance of an industry steering group. The committees set the knowledge syllabuses which form the basis for assessments and to which training providers will work and give guidance on what experience can be considered appropriate for various disciplines.
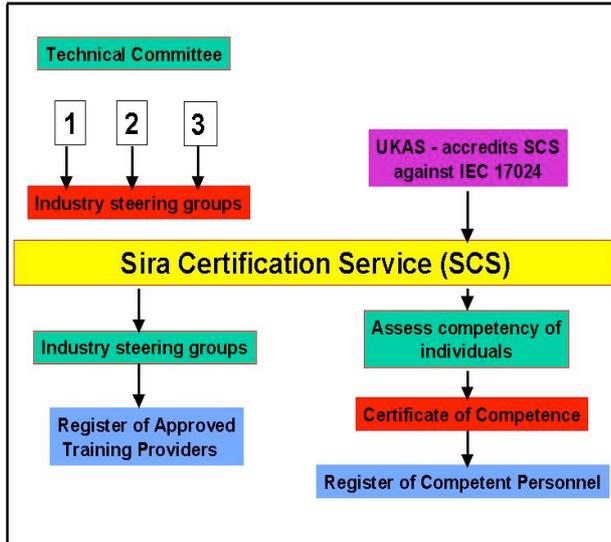
Figure 1 – Overall operation of the Scheme

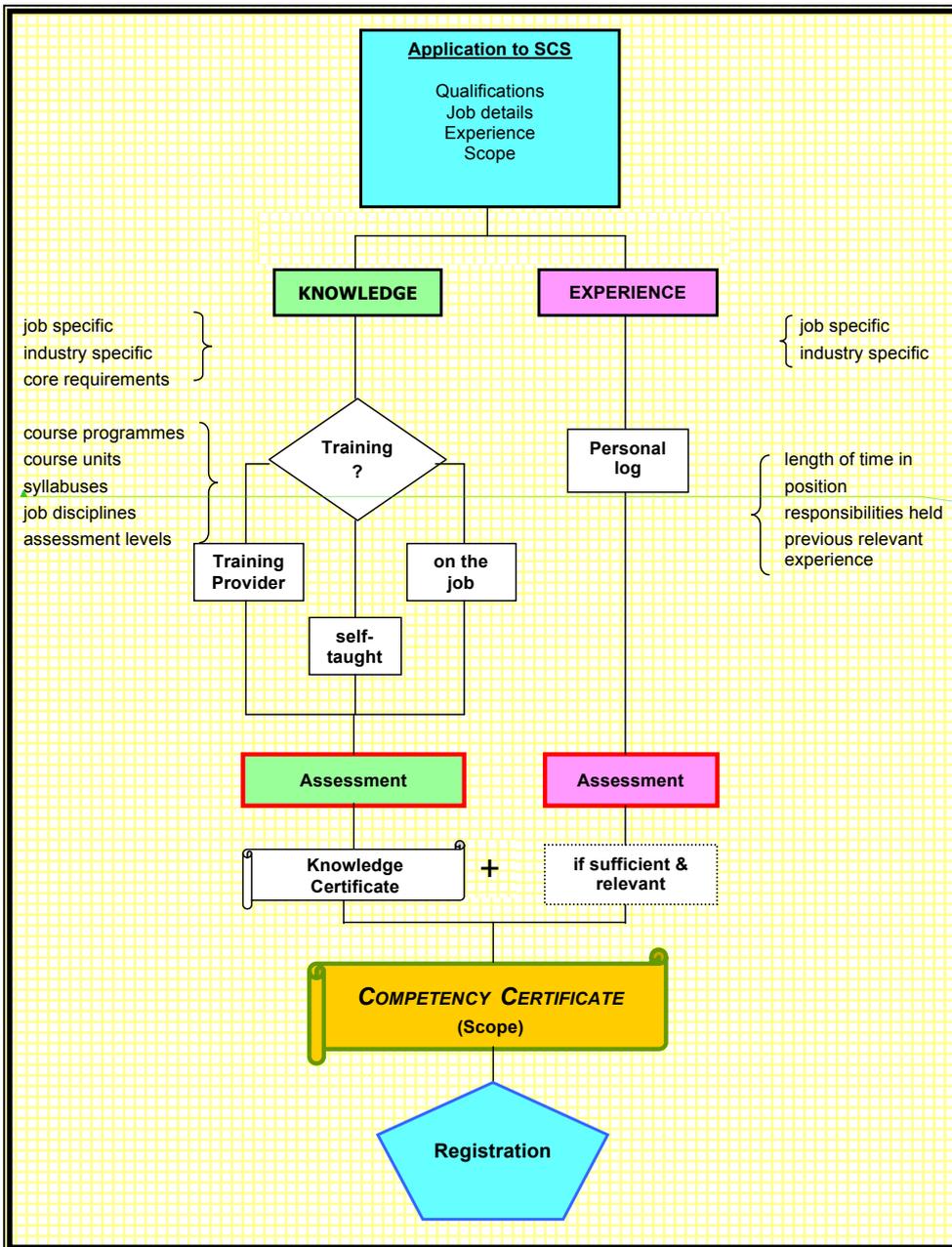## 5   How the Scheme works (see Figure 2 – the pathway to registration)

5.1   Application for registration

Interested parties contact Sira Certification Service (contact details below) who will supply the Scheme **information pack** which includes:

- application form
- guidance notes for applicants
- sample template for recording work experience
- list of approved training providers and their scopes
- current fees for assessment and registration

Individuals wishing to be registered complete and return the application form to SCS, along with the application fee, giving details about themselves, their job, relevant experience, training they have received and the scope of competencies for which they require registration. Submitted details should be suitably authenticated. Applicants will then be advised by SCS on the assessment process they will undergo.

Note: Applicants are strongly advised to undergo training at an approved training provider, although this is not a mandatory requirement of the Scheme. Candidates may present themselves for assessment having received on-the-job training and/or having taught themselves, but they are most likely to be fully prepared for the assessment if they have attended approved training courses.

Application to SCS

Qualifications
Job details
Experience
Scope

KNOWLEDGE   **EXPERIENCE**

job specific   job specific
industry specific   industry specific
core requirements

course programmes
course units   **Training**   **Personal**   length of time in
syllabuses   **?**   **log**   position
job disciplines   responsibilities held
assessment levels   previous relevant
                                                               experience

Training   **on the**
Provider   **job**

self-
taught

Assessment   **Assessment**

Knowledge   **+**   **if sufficient &**
Certificate   **relevant**

COMPETENCY CERTIFICATE
(Scope)

Registration

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Figure 2 - The Pathway to Registration

5.2   Assessment of candidates

SCS is responsible for assessing the record of experience submitted by applicants and for the setting, holding and marking of assessments. For this work, an

Assessment and Experience Board and an approved panel of independent assessors assist SCS.

Assessments are carried out against the requirements of the relevant Competency Standard using techniques relevant to the course units and assessment levels which are appropriate for the scope of the job disciplines of the applicants.

They comprise:

- written assessments – 10 to 30 multiple choice questions
- practical assessments – one or more of the following, as appropriate
    - ⇒ questions set on a given diagram or photograph
    - ⇒ questions set on a given small artefact
    - ⇒ practical 'hands on' competency exercise
- assessment of work records

Assessment papers are set on both 'core' knowledge, which all job disciplines in a particular industry sector would be expected to have, and job-related technical subjects. Practical assessments are job related.

Details of the subjects and assessment methods are provided in the Training Syllabuses & Assessment Criteria documents.

(This will be sent out to you shortly)

Assessment of the scope of candidates' work experience is carried out by the Assessment and Experience Board. Due consideration is given to qualifications, job currently held, length of time in this position, responsibilities held, training received and previous relevant experience.

Candidates who pass the written assessments will be awarded a certificate of knowledge as either a practitioner or expert in the relevant job discipline, depending on their pass mark for the individual units covered:

0 – 59%	fail
60 – 79%	practitioner
80% +	expert

Note: If, for instance, 6 units are assessed, the candidate could fail some, reach practitioner level in others and be an expert in the remainder.

Once they have also demonstrated sufficient appropriate experience and expertise candidates will be awarded the certificate of competence.

Certificates are awarded by SCS to successful candidates, on a personal basis, and define the scope of competency that the individual has achieved in compliance with the criteria of the standard. The certificate is valid for three years, after which individuals must apply for re-assessment

5.3 Failed assessments

Where candidates fail one or more assessment, they will be invited to re-sit the failed papers at a time and place agreed between the candidate and SCS, at an additional cost.

5.4 Insufficient experience

Candidates who are new to a job may apply for registration and sit the assessments leading to the knowledge certificate whilst they are accumulating relevant work experience, which should be recorded in a personal log. Where the assessors are in doubt about any aspect of the work records submitted, SCS reserves the right to undertake a peer interview with the candidate at a time and place to be mutually agreed. This may involve an additional cost.

5.5 Assessment locations

SCS will organise assessments which candidates can attend to take written papers and practical evaluations, at suitable locations and frequencies which will be published in advance.

Alternatively, assessments may be conducted at the premises of approved training providers at the end of courses, but will be invigilated by an appropriate person appointed by SCS. Such a person may be a member of the provider's staff but will have demonstrated, to the satisfaction of SCS, sufficient independence from the training process to avoid conflicts of interest.

Assessment of an individual's work records will normally be carried out in the absence of the candidate at SCS premises. However, the candidate can choose to be present if he wishes or if the assessors require clarification of any aspect which can only be answered in person.

6 After registration

Registered personnel are required to keep up the level of competency for which they have been registered, and will be subject to on-going surveillance and re-assessment to ensure this. In support of this, individuals are strongly recommended maintain an authenticated personal record of their work activities.

Following initial registration, personnel will be issued with the SCS "**Regulations for the Holders of Sira Certificates"** as applied to this Scheme. It is a condition of registration that registered personnel abide by these Regulations.

6.1 EX register of personnel

SCS maintains an up to date Register of Competent Personnel, in a format that can be made available to the public on the SCS web site. This includes an outline of the scope of each person's registration.

6.2 Changes to registered scope

Registered personnel can apply to SCS at any time to extend the scope of their registration to include additional competencies. The same procedures will apply as

for initial assessment and registration and, when successful, their certificate will be renewed showing the extended scope and their registration details will be up-dated.

Registered personnel can also inform SCS if, for any reason, they wish to reduce the scope of their registration. Also, under the Scheme Rules, registered personnel are required to inform SCS if, for any reason, they fall below the level of competency for which they are registered. Such occasions would include not working within their registered scope for a period of two years or more.

6.3 Performance Feedback and Surveillance

Registered personnel are subject to ongoing random surveillance of their work through contact with their employer. The employer will inform SCS of any instances where registered personnel are found to have acted contrary to the requirements of registration.

SCS may also receive reports concerning an individual's work performance and competency, make appropriate investigations and if necessary suspend, withdraw or cancel certificates. A certificate holder may re-apply for registration and has the right of appeal against an SCS decision.

SCS will confirm that use of certificates issued under the Scheme complies with all their requirements as the Certification Body.

6.4 Reassessment of personnel

Individuals should maintain a comprehensive record of their on-going training and experience in a personal logbook, which should be endorsed by their line manager. An appropriate format is available from SCS.

There will be a reassessment of an individual's registration every three years. The re-assessment will comprise a review of the person's experience and training and the re-taking of written and/or practical assessments appropriate to their scope of competency and recorded experience.

6.5 Suspension or withdrawal of certificates

Registration may be suspended or withdrawn where the holder is deemed to be in gross breach of the SCS Regulations applicable to the holders of Sira certificates.

Where personnel have not worked at their registered level for two years, they shall be deemed to have forfeited their registration note to that effect will be appended to the Personnel Register. Registration can be regained following appropriate re-assessment.

6.6 Complaints and appeals

Where SCS receives a complaint about the conduct of registered personnel, for example: that the person is not maintaining a good professional standard, SCS will investigate the circumstances. As part of this, SCS reserves the right to carry out an observation of the individual at work if deemed necessary.

SCS also has procedures to deal with complaints and appeals against registration decisions.

6.7 Identity cards

Registered personnel can opt to be issued with credit-card sized ID cards. These show the individual's name, photograph and registration number plus a summary of the EX competency level and technical scope for which they are registered. Although there is no mandatory requirement for these, they can be carried by personnel to demonstrate their competency to regulatory body inspectors, and others, when working on sites which are required to meet DSEAR.

7 Training providers

Training can be carried out by any organisation working to the approved training syllabus. Training providers apply to SCS for assessment and approval to ensure that their courses cover the relevant syllabuses to an adequate standard and that they are conducted by suitably qualified tutors. An independent assessment panel assists SCS in this process.

Individuals applying for personnel competency assessment can come from any appropriate background, but may consider that training is required. In such cases, it is recommended that the applicant choose a training provider who has been approved by SCS as offering the course(s) required.

SCS maintains an up to date register of approved training providers.

Figure 3 – Approval of Training Providers
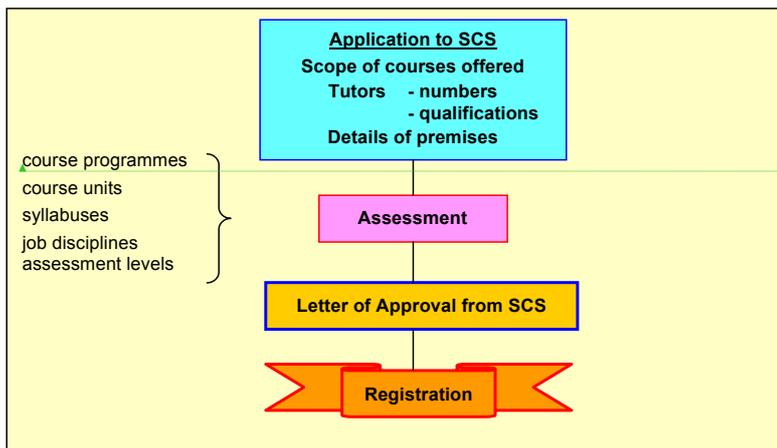
8   Relationship with Comp"Ex" Scheme

We are currently in discussion with Comp"Ex". As soon as we have agreement the documents will be circulated to you.

9   Useful contact details

Sira Certification Service (SCS)		
South Hill	Tel:	+44 (0) 20 8467 2636
Chislehurst	Fax:	+44 (0) 20 8468 1820
Kent BR7 5EH		
UK	web:	www.sira.co.uk

Appendix 1   Job Disciplines

These will be used as a guide only to which units may be relevant. It will always be the candidate's choice to select the units in which they wish to attain registered competency.

Control Systems Engineer – Plant Operations

Instrument and Process Control

Plant Operations Manager

Computer Instrument Technician

Electrical and Instrument Technician

Installation Technician / Instrument

Inspection and Maintenance Technician

Service Technician

Wireman

Computer Systems Designer

Design Engineer Electrical / Instrument

Electrical Engineer – Site Operations

Project Manager

Project Engineer

Graduate Engineer Electrical / Mechanical

Mechanical Engineer

Systems Engineer and Plant Operation

Nominated Repair & Overhaul Engineer

Consultant Engineer Electrical / Mechanical

Technical Director

Senior Management – General

Contract Manager

Environment Engineer

Occupational Health & Safety Officer

Safety Engineer

Safety & Health Officer

Sales Personnel

Stores Personnel

Supervisor Personnel

Manufacturers