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**Company Perspective :**  
**Establishing Effective Training Arrangements**

**Presented at:**

Focus Group: Optimising Human Performance  
PRISM : Chinoin, Budapest, Hungary  
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**Presented by:**

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Ciba Specialty Chemicals UK



# Who are we

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- Ciba Specialty Chemicals is a leading company dedicated to producing high-value effects for its customers' products.
- Our specialty chemicals added in small quantities, enhance the performance, look and feel of the final product
- Business success is driven by our long-term strategy of innovation and continuous operational improvements

# A dynamic global presence

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- Sales of CHF 7.9 bio in 2000, geographically balanced
  - 37% Europe, 37% W. Hemisphere, 26% E. Hemisphere
- Leading market provider of:
  - Antioxidants, Color, Optical Brighteners, UV Absorbers, Colloid Chemistry, Antimicrobials
- Sales in 120 countries
- Manufacturing in 29 countries
- 20,000 employees worldwide

# Ciba Specialty Chemicals

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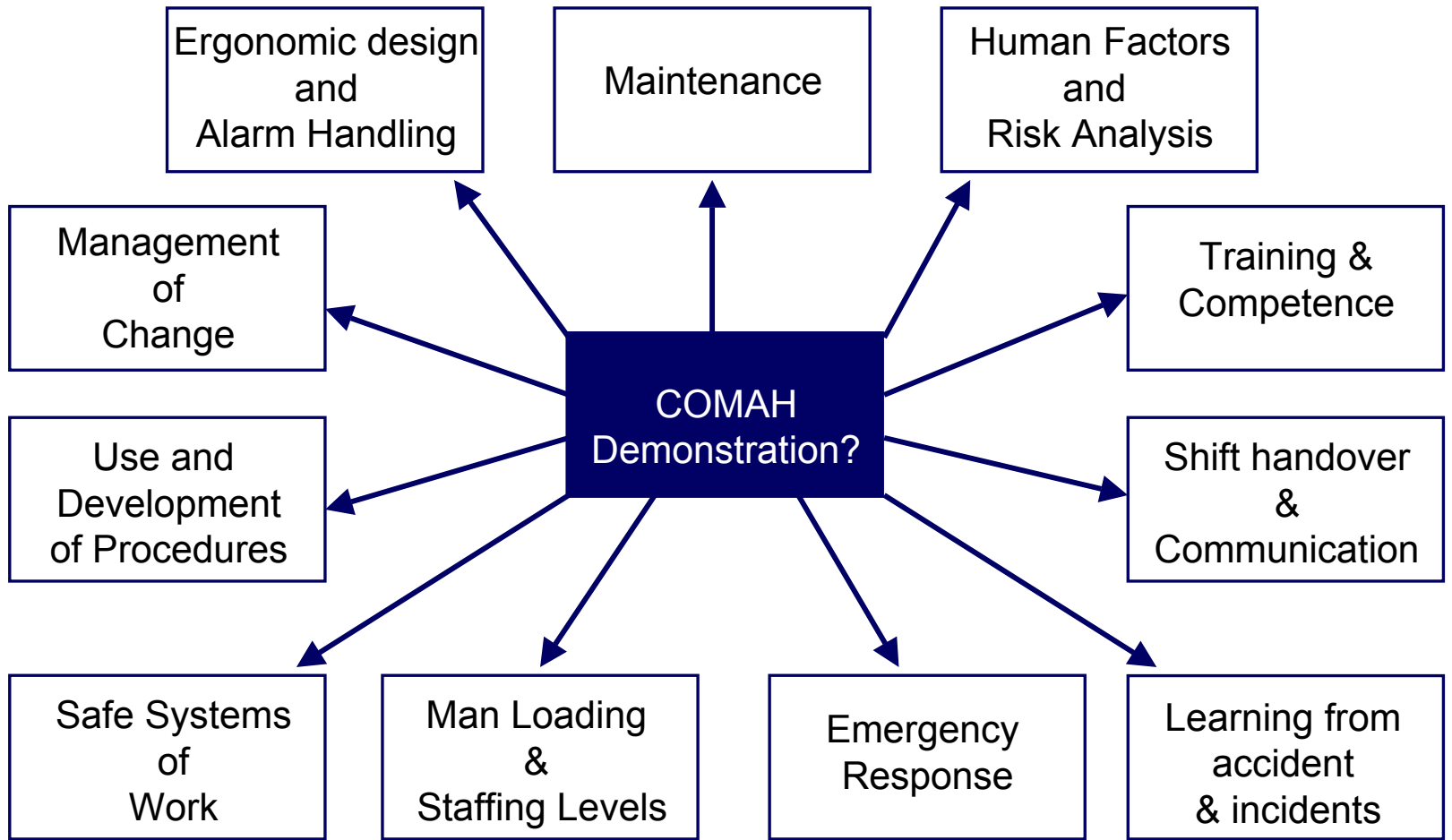
## Water and Paper Treatment Bradford and Grimsby

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| <ul style="list-style-type: none"><li>• Bradford</li></ul> | <ul style="list-style-type: none"><li>• 1300 employees</li><li>• 55 acres</li><li>• Top tier COMAH site</li><li>• Approximately 220,000 te/annum</li></ul> |
| <ul style="list-style-type: none"><li>• Grimsby</li></ul>  | <ul style="list-style-type: none"><li>• 50 employees</li><li>• 50 acres</li></ul>  |

# Introduction

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1. Background
2. Competence Assurance
3. Training Organisation
4. Manufacturing Documentation
5. Training Records Database



# Background and Project Initiation

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- Key Drivers
  - COMAH Compliance
  - Learning from Incidents
  - Organisation Change
- Audit of Existing Training Arrangements (1<sup>st</sup> Q 2001)
- 13 Audit Recommendations

# Audit Recommendations

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1. Training needs analysis programme to be completed in all areas.
2. Develop and implement an overall training matrix.
3. Further develop appraisal system as an effective mechanism to identify Personal training and development needs at all levels and implement it.
4. All appraisers to receive training in appraisal skills.
5. Develop use of the Training Records Database to help with the demonstration of competence linked to the training needs identified in 1 above.
6. Develop a document management system to highlight new and significant changes to the user.
7. Plant trainers to be selected and appointed in all areas.



# Audit Recommendations

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8. All selected trainers to undertake appropriate training (e.g. training technique / presentation skills).
9. Design and implement competency and appointed in all areas.
10. Update operational documentation to include best practice. Examples include: plant manuals, plant dossiers, procedures, work instructions and risk assessments. All procedures to be written by a suitably qualified person
11. Develop methods to assess competency and effectiveness of all training, for example: the use of questionnaires, tests, observations, reassessment and refresher training.
12. Provide sufficient resources to allow timely and effective training.
13. Establish a working group to manage the recommendations and determine the detail and assign resources accordingly.

# Training Arrangements Steering Group

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- Project Teams :
  - Training Needs Analysis
  - Development of Appraisal System
  - Training Records Database
  - Manufacturing Documentation
  - Training Organisation
  - Competence

# Competence based model

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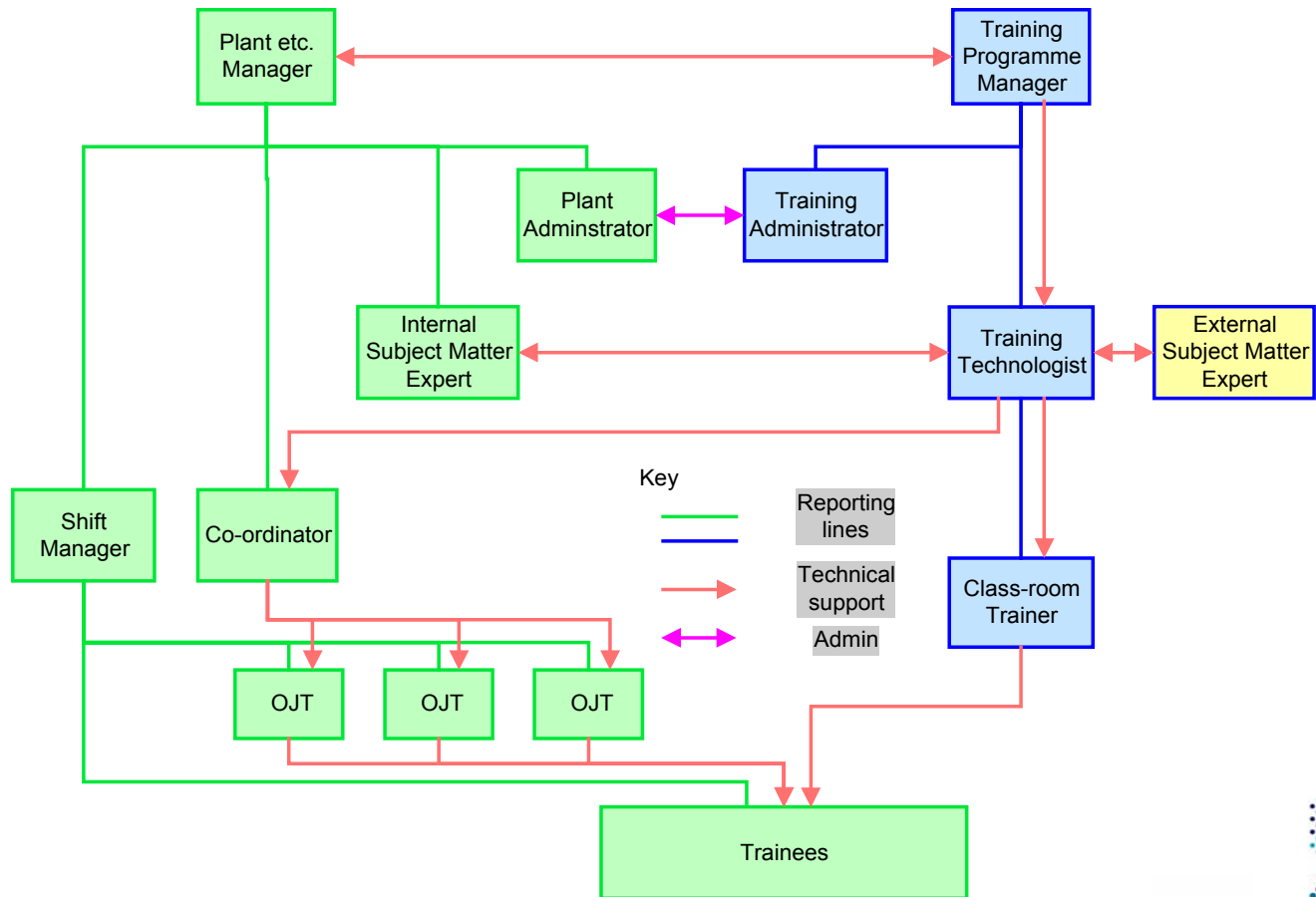
- Our current model is based on the systematic approach to training (SAT) adopted by the US Department of Energy (DOE)
- The approach was developed to support nuclear power plants
- The approach embodies the principles of priority and competence

# Priority and competence principles

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- The level of training will vary, with some tasks requiring no training at all
- This does not mean a reduction in quality
- The level of detail and formality are tempered by factors such as:
  - hazard and risk
  - cost benefit
  - productivity
- The development of training for any job / task should be appropriate for these factors
- This approach enables input from the COMAH report and assessments

# Technical Operations training proposal



# TREDS And Plant Dossier

## Plant Dossier

Bead Production	
<b>Plant Manual</b>	
Introduction	
Outline Products	
Outline Chemistries	
Plant Configuration (Diags)	
Works 6 - MMU to Drying	
Works 7 - Packing	
S/T Tank Farm	
<b>Safety</b>	
COMAH Report	
Risk Analyses	
HAZOP Studies	
Emergency procedures	
<b>Assessments</b>	
WHRA	
Noise	
Risk	

Product Information/Code
1.0 Production Line
1.1 Formulae
1.2 Material Flow
1.3 Process Data
1.3.1 Raw Materials
1.3.2 Yield
1.3.3 Thru'put
1.3.4 Quality Spec.
1.6 Product Use
1.7 Reason for Issue
1.8 Document Refs

102 Products Listed

Manufacturing Procedure - Line X
1.0 Overview
1.1 Manufacturing Principle
1.2 Schematic Diagram
1.3 Product Information Reference/Codes
2.0 EH & S
2.1 Safety
2.2 Health
2.3 Environment
3.0 Operators Instructions
3.1 Monomer
3.2 Reactor
3.3 Fume Cupboard
3.4 Drying
3.5 Luwa
3.5 Packing
3.6 Warehouse
3.7 Dayman
4.0 Quality
4.1 Quality Specific Information
5.0 Waste management
6.0 Risk Analysis

6 Production Lines (1,2,3,5,7& 8)

Group Task Analysis Main Elements

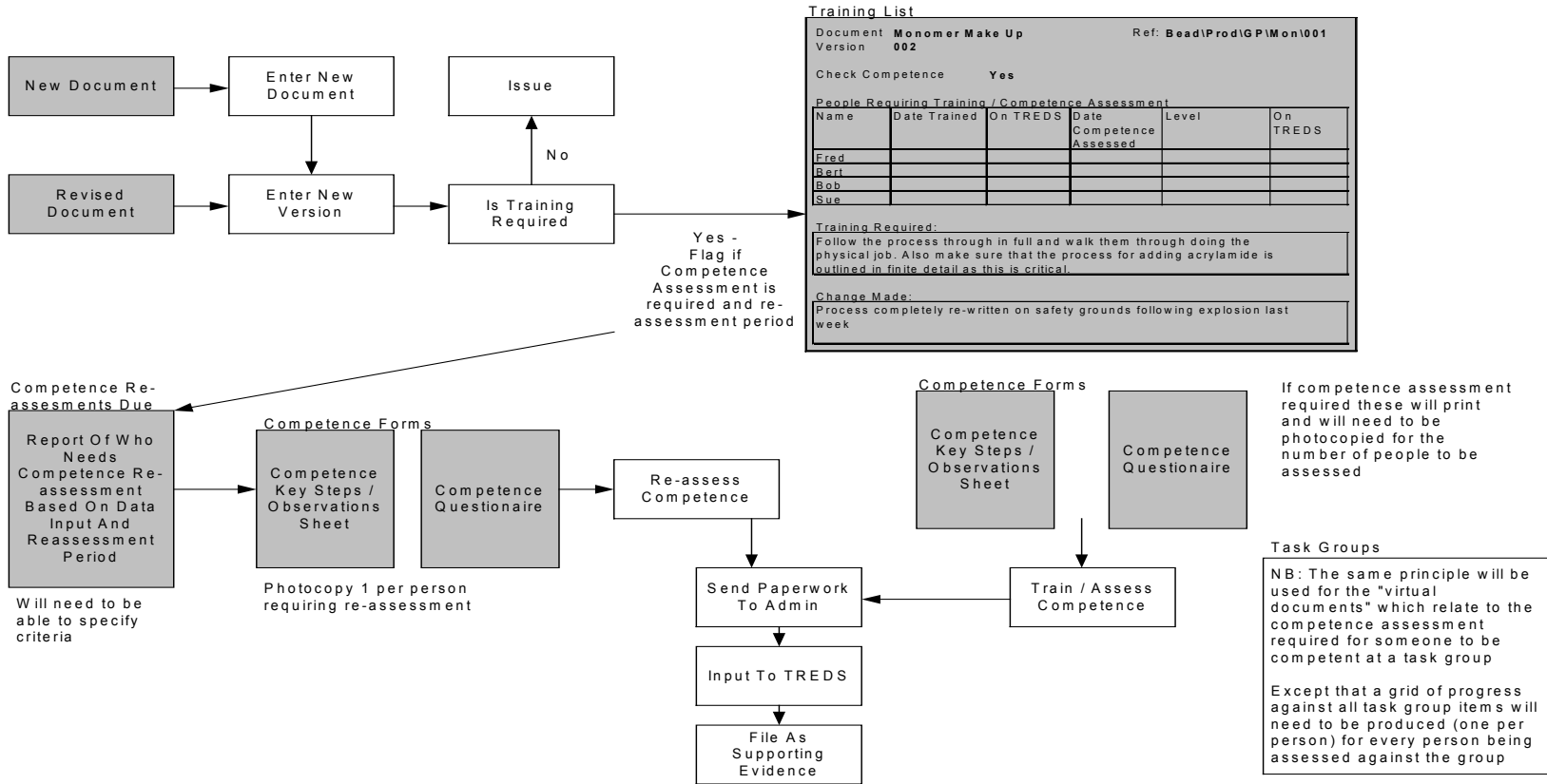
**Training Requirements  
On TREDS**

Code	Documents
PM	Plant Manual
EM	Emergency Manual
MGT	Management Procedure
DP	Divisional Procedure
GP	General Procedure
SP	Standing Procedure
PI	Process Instruction
UOP	Unit Operating Procedures
MP	Manufacturing Procedure
EP	Event Based Procedures
RA	Risk Assessment
CA	CoSHH Assessment
MA	Manual Handling Assessment
NA	Noise Assessment
DA	Display Screen Assessment
	Recipes
	Checksheets
	Batch Logs
	Process Logs
	Pre-Start Checks
	Shutdown Checks
	Non-Routine Operations

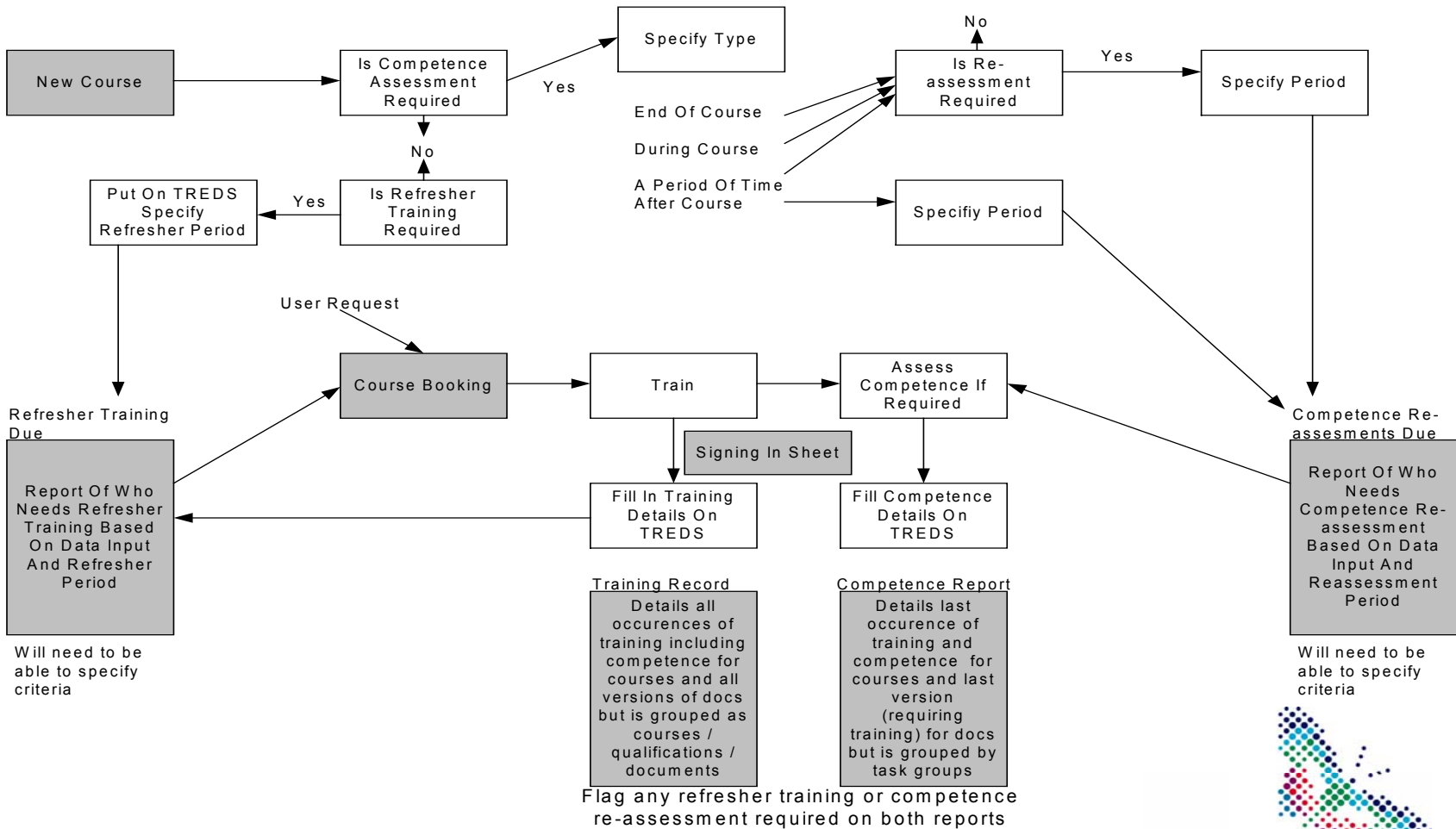
Procedures/Documents within  
Group Task Analysis Elements  
(Currently located in Issue Control)

**Documents On TREDS**

# TREDS And Documents



# TREDS and Courses



Flag any refresher training or competence re-assessment required on both reports



**Ciba**



