

# EU Excert 2017 Conference:

## Sharing Experience To Improve Our Competency In Safety

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# The Roxel Group sites



**Summerfield, Birmingham**  
Main Site of Roxel UK  
70 ha, approx

**Main Activities**

- Propellant technology
- Motor design and R&D
- Motor manufacture



**La Ferté Saint Aubin, Orléans**  
350 ha, approx

**Main Activities**

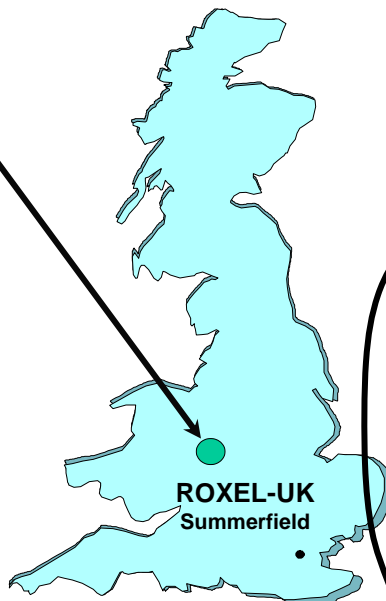
- Aeronautic components
- Mechanical parts
- Composite materials



**Le Plessis-Robinson, Paris**  
Roxel Group Head Office

**Activities**

- Group Management
- Sales & Business Development
- Finance
- Legal
- Communication



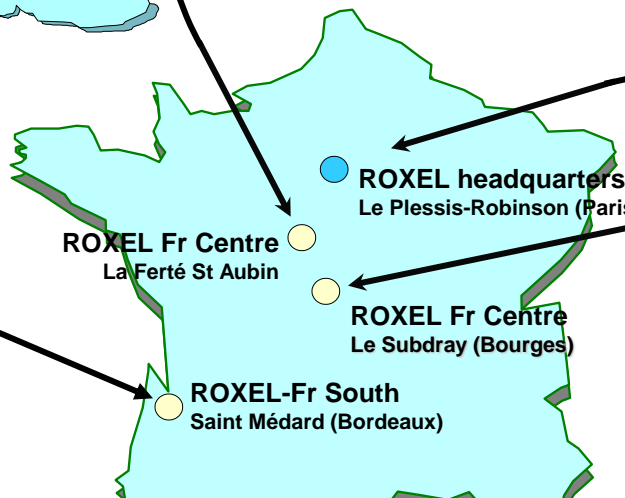
**ROXEL-UK**  
Summerfield



**St Médard en Jalles, Bordeaux**  
450 ha, approx

**Main Activities**

- Propellant technology
- Motor design and R&D
- Motor manufacture



**ROXEL headquarters**  
Le Plessis-Robinson (Paris)

**ROXEL Fr Centre**  
La Ferté St Aubin

**ROXEL Fr Centre**  
Le Subdray (Bourges)

**ROXEL-Fr South**  
Saint Médard (Bordeaux)



**Le Subdray, Bourges**  
150 ha, approx

**Main Activities**

- Air breathing technology
- Inert materials R&D
- Motor assembly and special trials

**ROXEL**  
**Research, Design, Manufacture, Testing, Support and Disposal of  
Solid Propellants and Tactical Solid Rocket Motors**

# Deployment of Occupational Standards



## COGES4.10 Solve explosives process problems

### Performance criteria

*You must be able to:*                      **Identify explosives process problems**

- P1 work safely at all times, complying with health and safety, environmental and other relevant regulations, legislation and guidelines
- P2 confirm that the correct process instructions are being used
- P3 confirm that the equipment being used is in a safe and functional condition
- P4 confirm the integrity of the materials being used
- P5 ensure that the specified operating parameters have been maintained
- P6 identify the possible stage(s) in the process where the problem has occurred
- P7 identify the likely cause(s) of the problem
- P8 evaluate the likely consequence(s) of the problem
- P9 identify the most appropriate and cost-effective solution to the problem
- P10 report problems beyond your level of authority to the appropriate person
- P11 complete correctly the required documentation

*You must be able to:*                      **Implement and evaluate solutions**

- P12 work safely at all times, complying with health and safety, environmental and other relevant regulations, legislation and guidelines
- P13 ensure that you have the necessary authority to implement the solution
- P14 implement the chosen solution, with a minimal amount of disruption
- P15 evaluate the implementation of the solution, and make recommendations for further improvements
- P16 report problems beyond your level of authority to the appropriate person
- P17 report on the implementation of your solution to the appropriate people
- P18 complete correctly the required documentation

- 2003: EUExcert pilot project to develop a competency framework
- 2011: “EUExcert Association” was founded to continue the work
- 2014 EUExImp (European Explosives sector implementation) focusing on the implementation of occupational standards
- **But, is the deployment of National Occupational Standards enough?**

# Competency Frameworks (source: CIPD)

## **Benefits**

- Employees have a well-defined set of behaviours required in their work and are clear about how they are expected to perform their jobs.
- The appraisal and recruitment systems are fairer and more open.
- Recruiters are able to assess transferable skills and identify required behaviours regardless of career background.
- There is a link between effective individual inputs to work and organisational performance.
- Processes are measurable and standardised across organisational and geographical boundaries

## **Criticisms**

- Focus on the past and therefore cannot keep up to date with rapidly-changing environments
- Fail to deliver on anticipated improvements in performance
- Unwieldy and not user-friendly
- Create clones, as everyone is expected to behave in the same way.

## What is Competency?

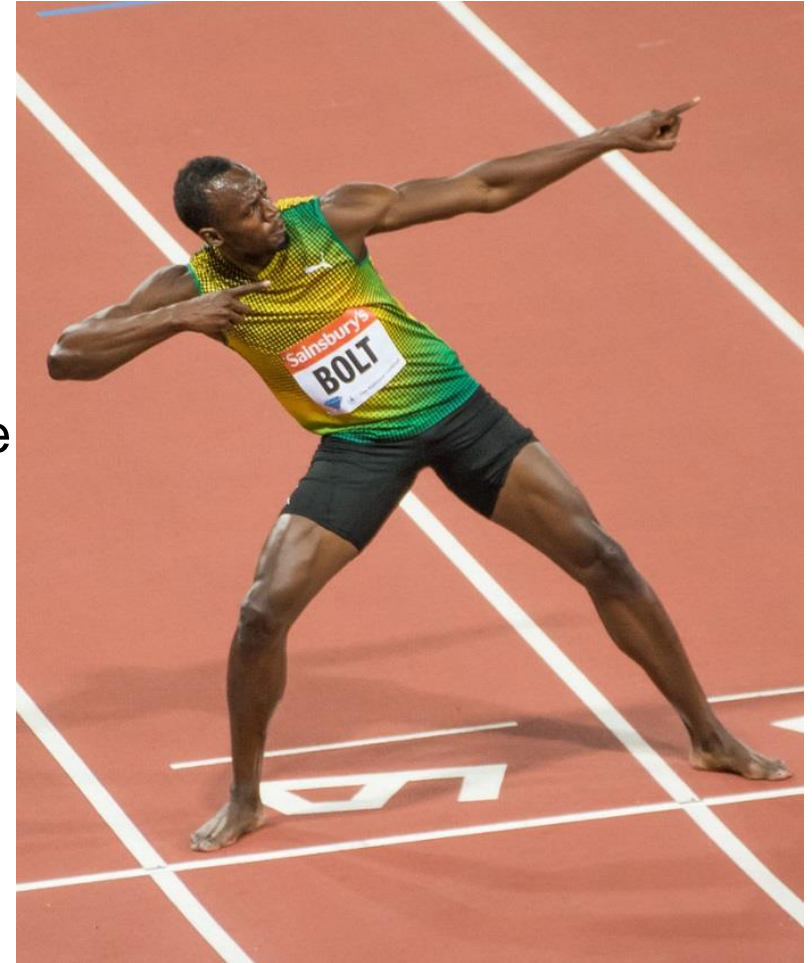
**Oxford English Dictionary:** “the ability to perform consistently; the ability to do something well”.

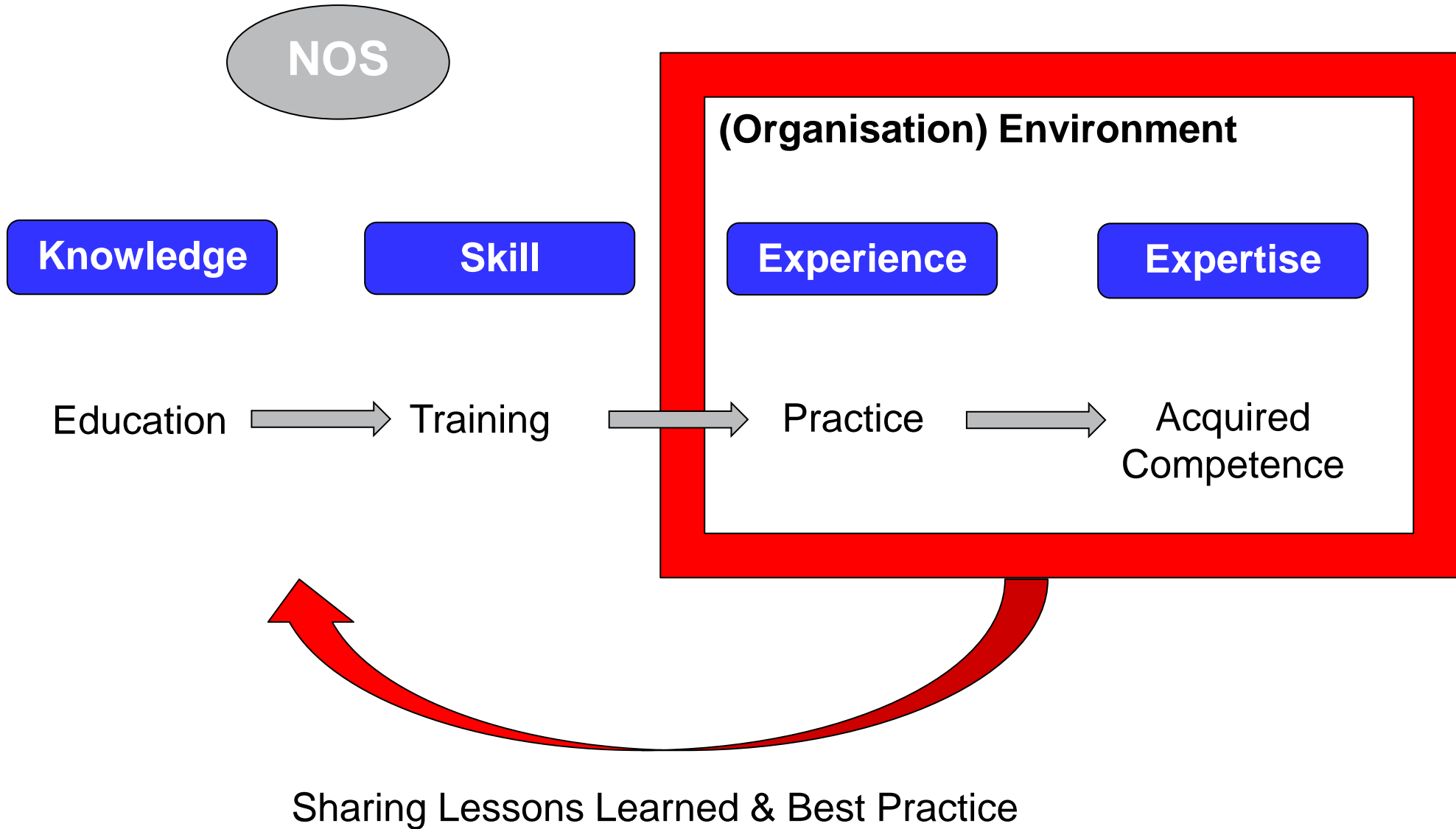
**CIPD:** The terms 'competency' and 'competencies' focus on the personal attributes or inputs of an individual. They can be defined as the behaviours (and technical attributes where appropriate) that individuals must have, or must acquire, to perform effectively at work

**UK Engineering Employers Federation (EEF):** A competency doesn't just measure someone's ability to carry out a particular task, it assesses how an individual combines their **knowledge**, **skills** and **motivation** within their **organisation** to become a high performer in areas such as: people management, team-working, customer service, results delivery and problem-solving (extract from EEF People Productivity White Paper).

# How To Excel At What We Do?

- Learn new technique - Education
- Training camps – Practice in training
- Personal Coach – Mentor
- General “fitness” – Breadth of Knowledge and Experience”
- Competitions - Benchmarking
- Post-race analysis – Lessons learned/applied





# Why Should We Share Our Experience in Safety?

- Ageing & reduced numbers in our sector over last 10-20 years
  - Many companies with high % employees with <5 years experience
  - Share learning from past accidents & near misses
- Reduce the accidents & improve the safety in our sector
- Demonstrate ALARP to ourselves & safety authorities

## Lessons Learned and Best Practice

**“In business we compete, but in safety we co-operate”**



# UK Sector Skills Strategy Group (SSSG)

- Expert Working Groups
  - Tasked with Specific actions
  - Generation of Guidelines
  - Sharing of Data & Experience
  - Networking of Experts & Site Visits
- Early Careers Forum
- Education & Training Working Group – using NOS to establish 8 training modules
- Annual Conferences
- Launched Trailblazer Degree Level “Apprenticeship”



## European Association for the Study of Safety in Production of Propellants (EASSP)

- Steering Committee and Technical Committee
- Generate & Maintain Codes Of Good Practice (COGP) and Technical Notes (TNs)
- Open sharing of Incidents and Near Misses
- Site Visits

To promote the interchange of information and experience of members in all matters affecting the environment and the safety and health of those engaged in the manufacture, transport, storage, use and disposal of propellants.

- Institute of Explosive Engineers



- International Society of Explosive engineers (ISEE)

- European Federation of Explosive Engineers (EFEE)

- UK Health & Safety Executive Strategy & “Helping Britain Work Well”



- SAFEX – explosives industry

**“We exist to eliminate worldwide the harmful effects of explosives on People, Property and the Planet (Environment) by encouraging our Members to learn from each other’s experiences”**

- NATO MSIAC (Munitions Safety Information Analysis Centre)

- FEEM (Federation of European Explosive Manufacturers)

- AFEMS (Association of European Manufacturers of Sporting Ammunition)

- Continue to develop and deliver training against NOS
- Communal sharing & experience of all safety related data
  - One community with sub sectors, all having access to one data set
  - Potential barriers
    - Stovepiped memberships - Prestige of our associations
    - Protection of data – do we all have same calibre of data
- Opportunity
  - All share data though a central forum (EU Excert, or Institute(s) of Explosive Engineers or ...)
  - Maintain communities, but all having access to data through shared database providing we are members/associate members

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