

Continuing Professional Development

CPD of DDH Delegates

Disclaimer: This presentation and comments are not to be taken as CAA policy.

146.51 Personnel requirements



(b) The applicant must—

- (1) establish a procedure for initially assessing, and for maintaining, the competency of personnel involved in planning, performing, supervising, inspecting, or certifying the design activities performed by the applicant's organisation; and
- (2) provide those personnel with written evidence of the scope of their authorisation.

AC146.51 Personnel requirements

CIVIL AVIATION AUTHORITY
OF NEW ZEALAND

The procedures for the maintenance of an employee's competence should be shown in the organisation's documents. Continuation training should consider the type of work the employee is undertaking...

Many industry bodies, institutes, and associations require a certain level of continuing professional development (CPD). Examples of these bodies that required CPD are the Institute of Professional Engineers New Zealand and the Royal Aeronautical Society. Organisations should consider the CPD of its employees when structuring the continuation training procedures.



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**ORDER
8110.37F**

National Policy

08/31/2017

SUBJ: Designated Engineering Representative (DER) Handbook

Chapter 3. DER Administration

1. FAA Expectations for DERs.

a. Training. Training requirements for DERs are listed in FAA Order 8100.8() and may be supplemented by a managing office. Several types of training are available. The FAA offers on-line initial training for DERs and recurrent DER training as both seminars and on-line courses. A DER can also attend FAA training courses, workshops, and interactive video teletraining (IVT) programs, based on availability. There are links to these training programs on the FAA website at www.FAA.gov.



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

National Policy

**ORDER
8100.8D**

Effective Date:
10/28/2011

SUBJ: Designee Management Handbook

g. DER Recurrent Seminar Attendance. DERs must attend a recurrent seminar every 2 calendar years to maintain their knowledge of the regulations and policies and as a condition for renewal. DERs may satisfy the 2 year requirement by attending a DER seminar in the calendar year it is due. Failure to meet this requirement results in immediate suspension and possible termination of delegated authority with no appeal rights in accordance with chapter 11 of this order. A recurrent seminar consists of a general session, and a technical session for each of the technical delegations. Attendance at the seminar must include a general session, and a technical session for each engineering designation held by a DER.



2021

2021 Course Catalog v4

Engineering Designee Training Program

December 2020
Rev April 2021

Structures Library

Prerequisite Course

[\(27200162\) 2021 Engineering Designee Recurrent General Training Overview \(1 Hour\)](#)

Electives (Select 1)

[\(27200019\) Fundamentals of Risk Analysis \(3 Hours\)](#)

[\(27200048\) Aircraft Seat Dynamic Impact Test Procedures-History and Background \(8 Hours\)](#)

[\(27200056\) Introduction to Fatigue and Fatigue Management \(1 Hours\)](#)

[\(27200095\) Structures: Finite Element Modeling and Analysis Validation - Part I \(1 Hour\)](#)

[\(27200096\) Structures: Finite Element Modeling and Analysis Validation - Part II \(1 Hour\)](#)

[\(27200098\) Structures: Certification Compliance for Bird Strike Requirements \(1 Hour\)](#)

[\(27200110\) Mechanical: Post Maintenance Functional Tests \(1.5 Hours\)](#)

[\(27200130\) Structures: Composite Guidance - Present and In-Development \(1.5 Hours\)](#)

[\(27200131\) Part 23: A Performance-based Approach to Type Certification of Small Airplanes \(2.5 Hours\)](#)

[\(27200137\) Structures: Cargo – Certification of Cargo Related Projects \(2 Hours\)](#)

[\(27200140\) Structures: Aeroelastic Stability \(1 hour\) \[NEW\]](#)

[\(27200141\) Structures: Radome Certification \(1.5 Hours\)](#)

Acoustics Library

Prerequisite Course

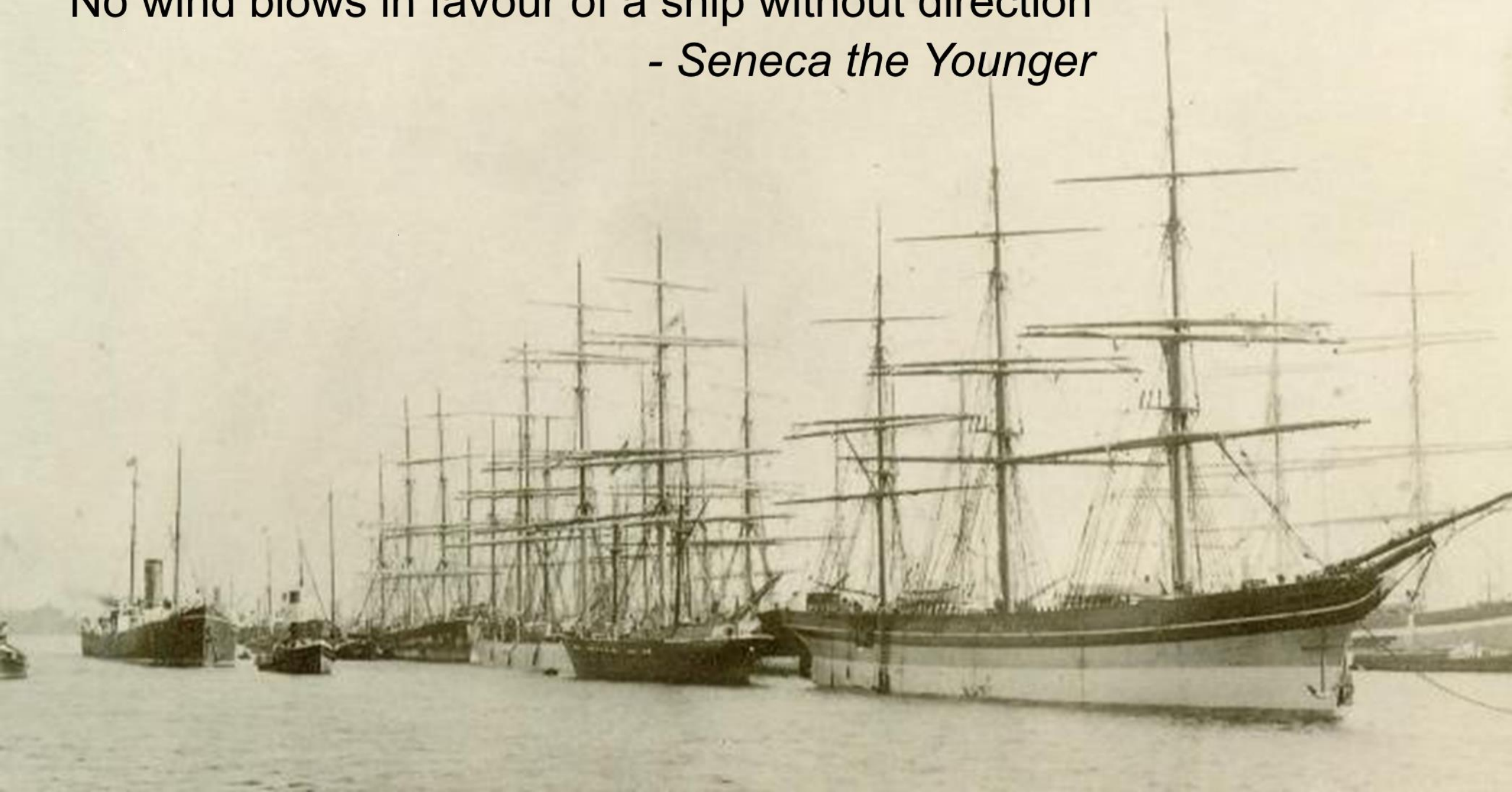
[\(27200162\) 2021 Engineering Designee Recurrent General Training Overview \(1 Hour\)](#)

Electives (Select 1)

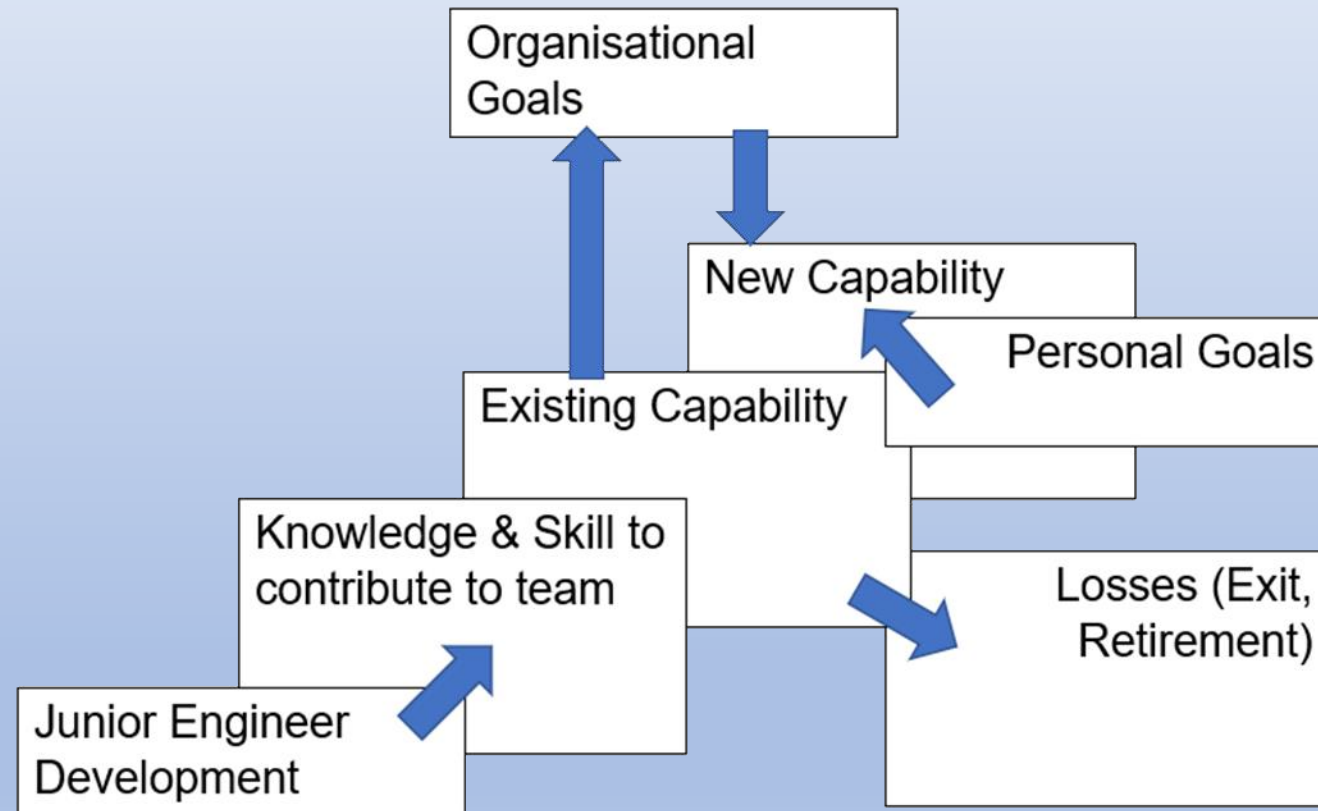
[\(27200002\) Understanding the US/EU Aviation Safety Agreement \(4 Hours\) \[Available Apr 2021\]](#)

Please note that the Code does not specify a minimum amount of time to be spent on CPD each year. Instead, it focuses on the outputs of CPD activity for the maintenance and enhancement of competence appropriate to the individual and their job role. CPD requirements for engineers and technicians will vary according to their discipline and the stage of their career.

"No wind blows in favour of a ship without direction"
- *Seneca the Younger*



Context; “Let’s make it personal”





Paul Larsen,
Vestas Sailrocket 2,
78.26 mph



See ker









AAV 3006G PAL

Parcelair

146.51 Personnel requirements

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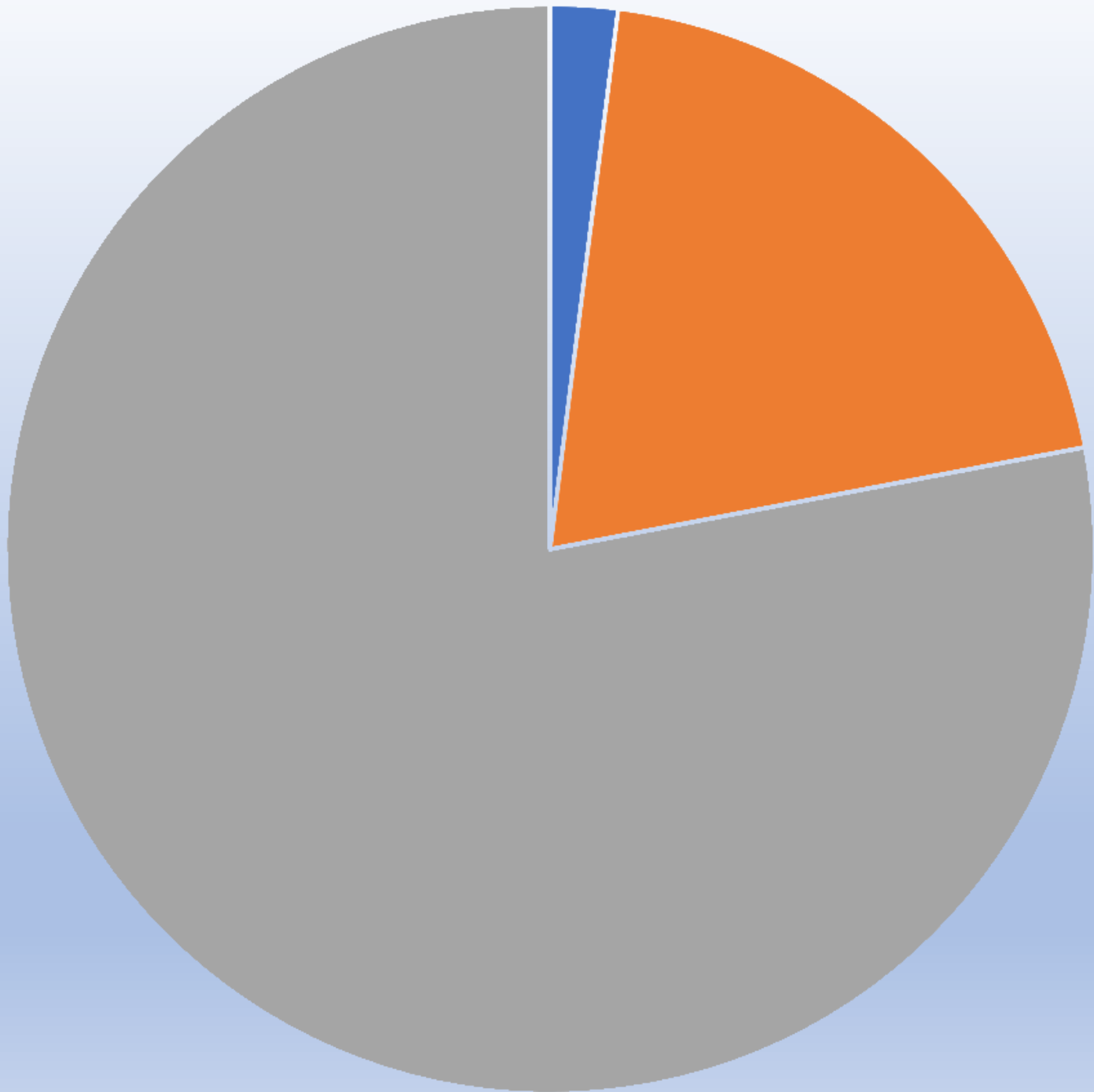
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What is engineering competence?

Each registration title requires demonstrations of competence in five broad areas:

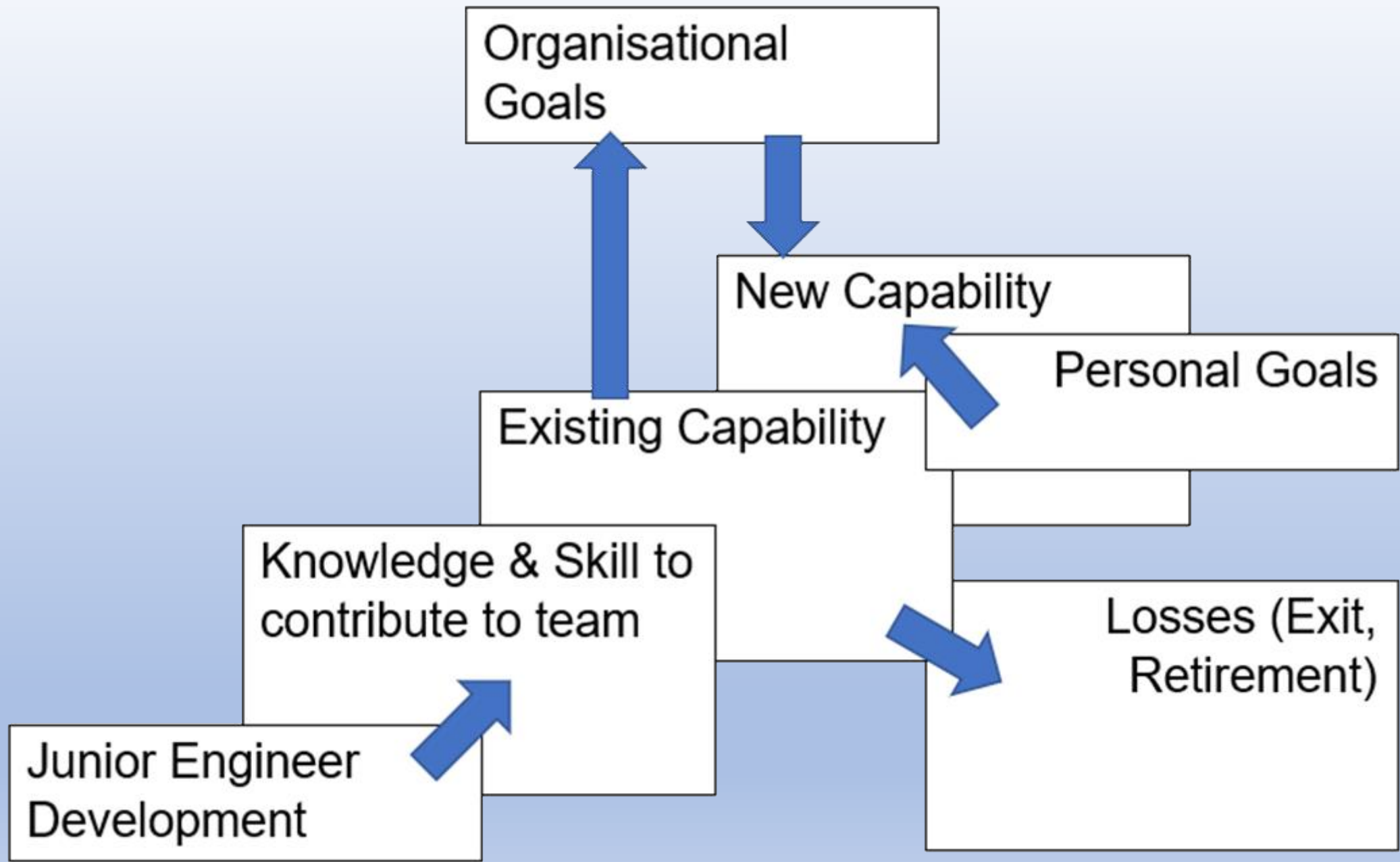
- A. Knowledge and understanding
- B. Design, development and solving engineering problems
- C. Responsibility, management and leadership
- D. Communication and interpersonal skills
- E. Professional commitment

UK-SPEC, 4th edition, August 2020



CPD Code for Registrants

- Take ownership of their learning and development needs and develop a plan to indicate how they might meet these, in discussion with their employer, as appropriate
- Carry out a variety of development activities, both in accordance with this plan and in response to other opportunities which might arise
- Record their CPD activities
- Reflect on what they have learned or achieved through their CPD activities and record these reflections
- Evaluate their CPD activities against any objectives they have set and record this evaluation
- Review their learning and development plan regularly, following reflection and assessment of future needs
- Support the learning and development of others through activities such as mentoring and sharing professional expertise and knowledge



Professional Development Program



ENGINEERS
AUSTRALIA

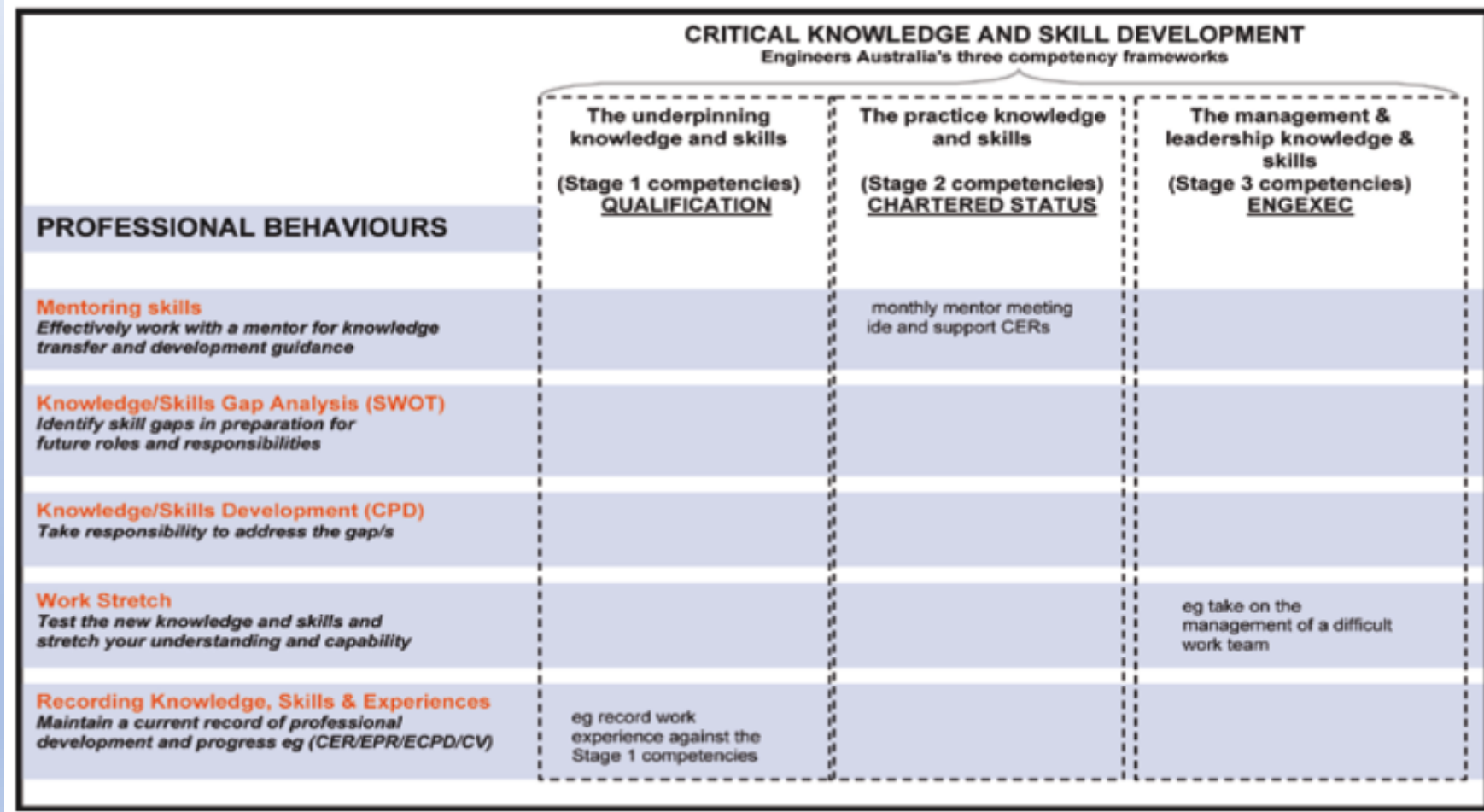
...the ability to

- effectively learn from a mentor,
- take responsibility to identify skills gaps and
- source appropriate development,
- seek some form of work stretch to test the new knowledge and skills gained and
- maintain a record of this development and new capability

are important practices to be nurtured throughout an engineers career.



ENGINEERS
AUSTRALIA



CPD Code for Registrants

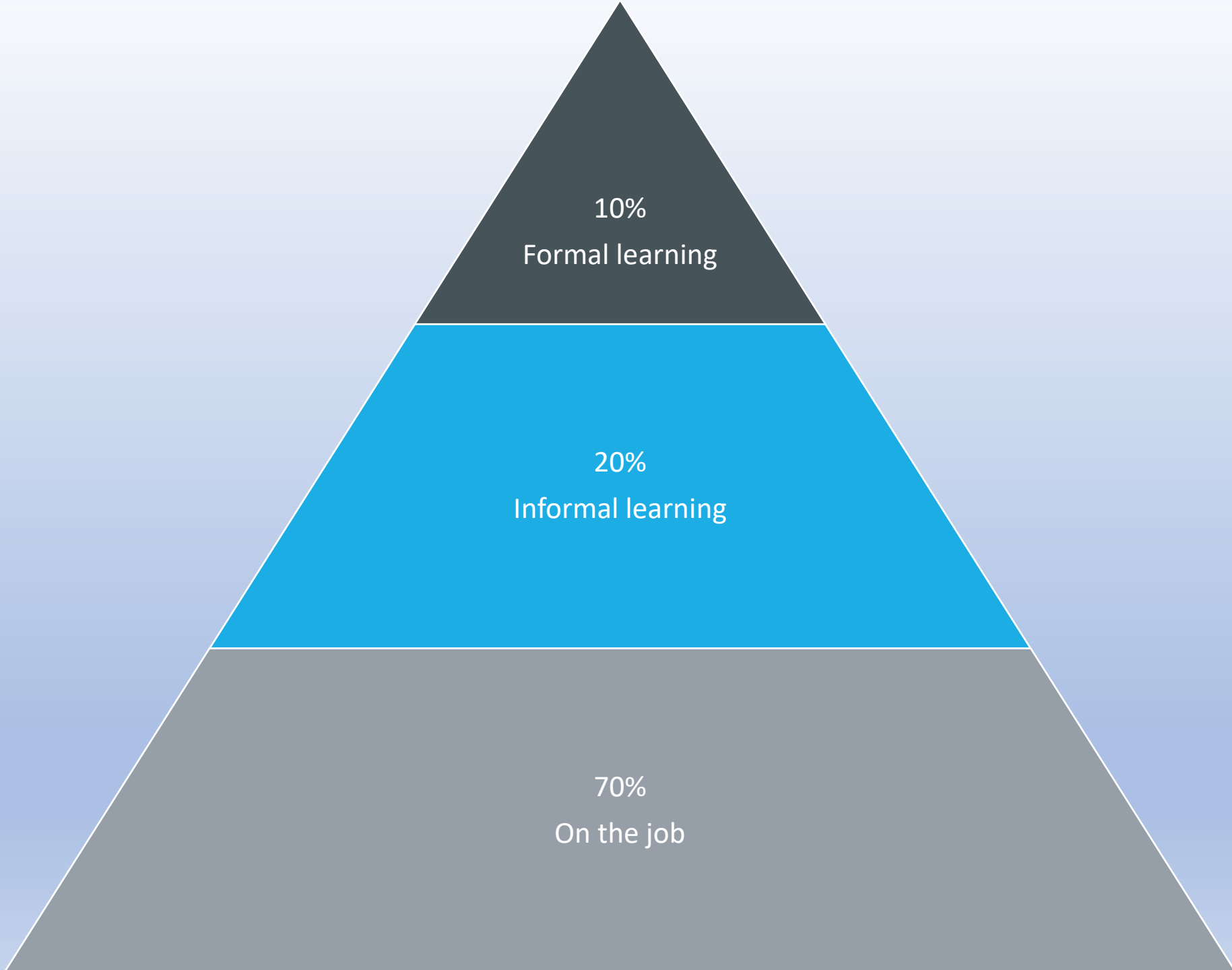
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10%
Formal learning

20%
Informal learning

70%
On the job



CPD is anything that helps you expand your knowledge, maintain up-to-date technical skills and progress your engineering career. CPD activities can also grow your professional networks and are required to attain and maintain Chartered status and Registration.



Engineers Australia

Continuing Professional Development (CPD) Activities



TRAINING

SOFT SKILLS / TECHNICAL COURSES / E-LEARNING / DISTANCE LEARNING / WEBINAR TRAINING SESSIONS / IN-COMPANY COURSES / WORKSHOPS / SITE INDUCTIONS

SERVICES TO THE PROFESSION

VOLUNTEERING ON BOARDS AND COMMITTEES / REVIEWING TECHNICAL PUBLICATIONS / WRITING SUBMISSIONS FOR TECHNICAL STANDARDS



SELF STUDY

BOOKS / JOURNALS / ARTICLES / MANUALS / DIGITAL INFORMATION / SOURCES / INTERNET RESEARCH / DISCUSSION FORUMS / ONLINE COMMUNITIES



ACADEMIC STUDY

INDIVIDUAL COURSES / FORMAL POST GRADUATE AWARD



EVENTS & SEMINARS

CONFERENCES / NETWORKING EVENTS / EXHIBITIONS / SEMINARS / LECTURES / IN-HOUSE LUNCH & LEARNS



WORK EXPERIENCE

LEARNING NEW SKILLS / COACHING & MENTORING / SECONDMENT / ACTING / RESEARCH / PROJECT WORK / MANAGING OTHERS



Your CPD records must document a minimum of 150 hours of structured CPD over a three-year period.

CPD activities do not need to be accredited by Engineers Australia.

For information and specific requirements:

engineersaustralia.org.au/Training-And-Development/Continuing-Professional-Development

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Discussion document

A Proposed Occupational
Regulatory Regime for Engineers



Registered engineers would be expected to continue their professional development to maintain their skills and knowledge. By maintaining and improving the competency of engineers, continuing professional development is a valuable tool to protect the safety and wellbeing of the public. Continuing professional development is common in other regulated professions, including lawyers, registered architects, and plumbers, gasfitters and drainlayers.

Many professional engineers are already committed to continuing professional development, with Engineering New Zealand members committing to 40 hours a year. The regulator would be able to recognise substantially similar or better professional development schemes from appropriate organisations and membership bodies to prevent unnecessary cost and effort for regulated persons.

“The single biggest problem with communication is the illusion that it has taken place.”

-George Bernard Shaw