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PRESENTED BY

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DANGEROUS GOODS COMPETENCY - BASED TRAINING AND ASSESSMENT (DG-CBTA)

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Namibia Civil Aviation Authority



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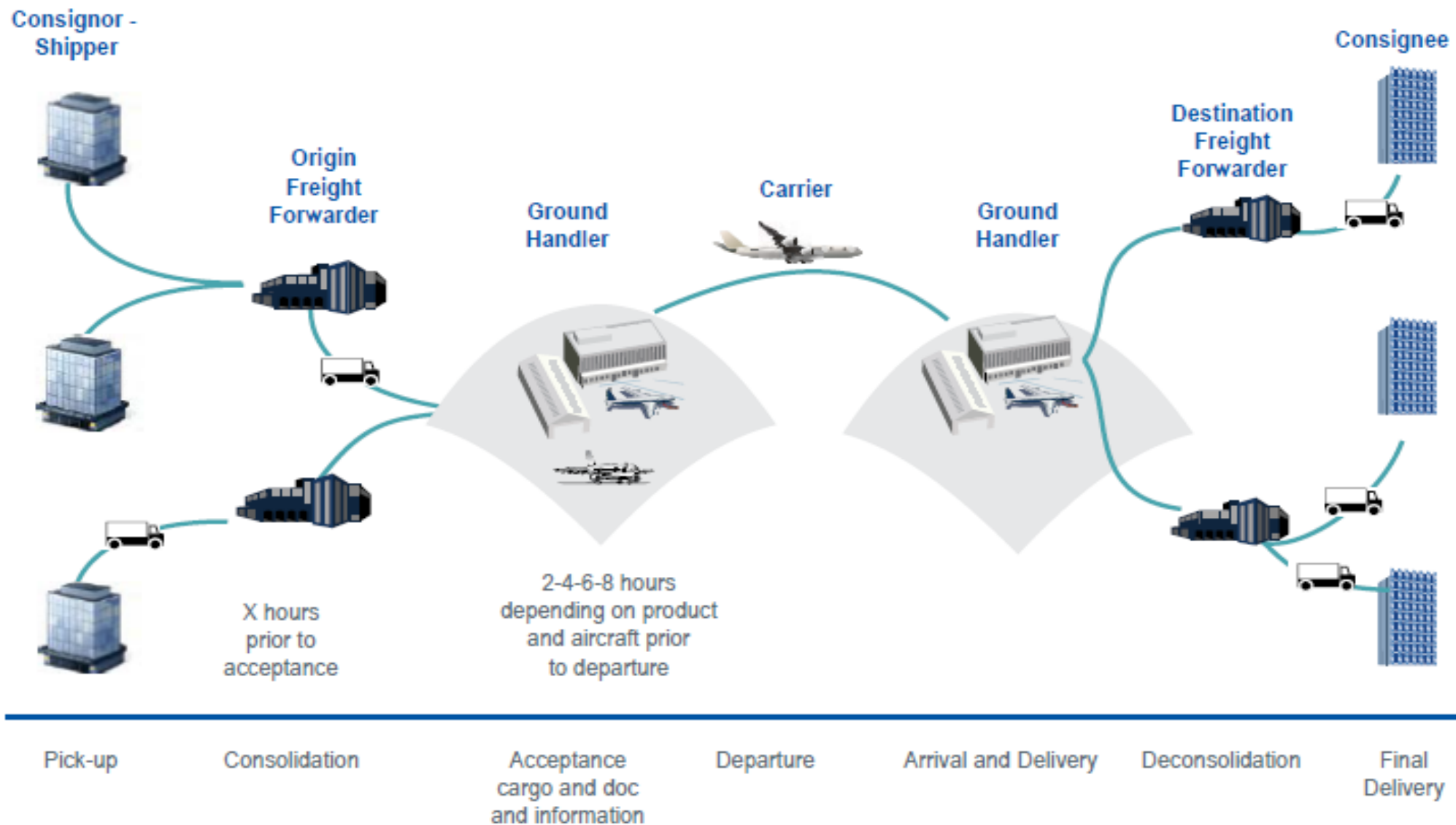


Figure 1 - Air cargo movement overview.

Applicability Scope

Organisations and their Personnel

Operators/Airlines

Large commercial operators, helicopters, small operators, drone operations, balloon operations



Airports

International and domestic serving airports
Cargo, baggage and passenger movements



Cargo Agents/Shippers/Freight Forwarders

Cargo entities and facilities both at airport and off the airport



Designated Postal Operators

Mail and cargo centres



Training Organisations

Aviation Dangerous Goods training service providers.



Packers

Packers of Dangerous Goods for air transport.



Package Testing Organisations

Testing organisations for air transport packages.



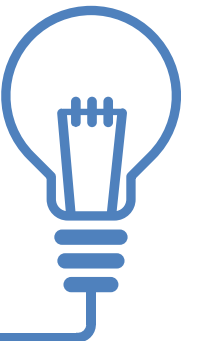
Couriers

Parcels or cargo for air transport



Comparison (old Approach vs New Approach)

Old	New
Job title based Table 1.5.A and 1.5.B	Competency Based with well defined functions
Legal Basis- NAMCARs Part 92, CATS, Technical Instructions –IATA DGR	Same basis with amendments – align with Competency Based Framework
Training Programme- Can be part Operations Manual, Training Procedures Manual, Dangerous Goods Procedures Manual	Remains the same
Knowledge based assessments	Addition of practical /on the job assessment
CAA approved Instructors with Category 6	CAA approved Instructors with advanced proficiency – requires hands on, on the job experience for functions being trained



Challenges

Assessments
based on
knowledge with no
practical evidence
that a person
declared
competent can
actually do the job

Increase in
Dangerous Goods
incidents due to
changes mainly in
technology,
undeclared and mis-
declared Dangerous
Goods.

- Inability of the
current **screening
methodologies** to
detect Dangerous
Goods.





Competency Based Training

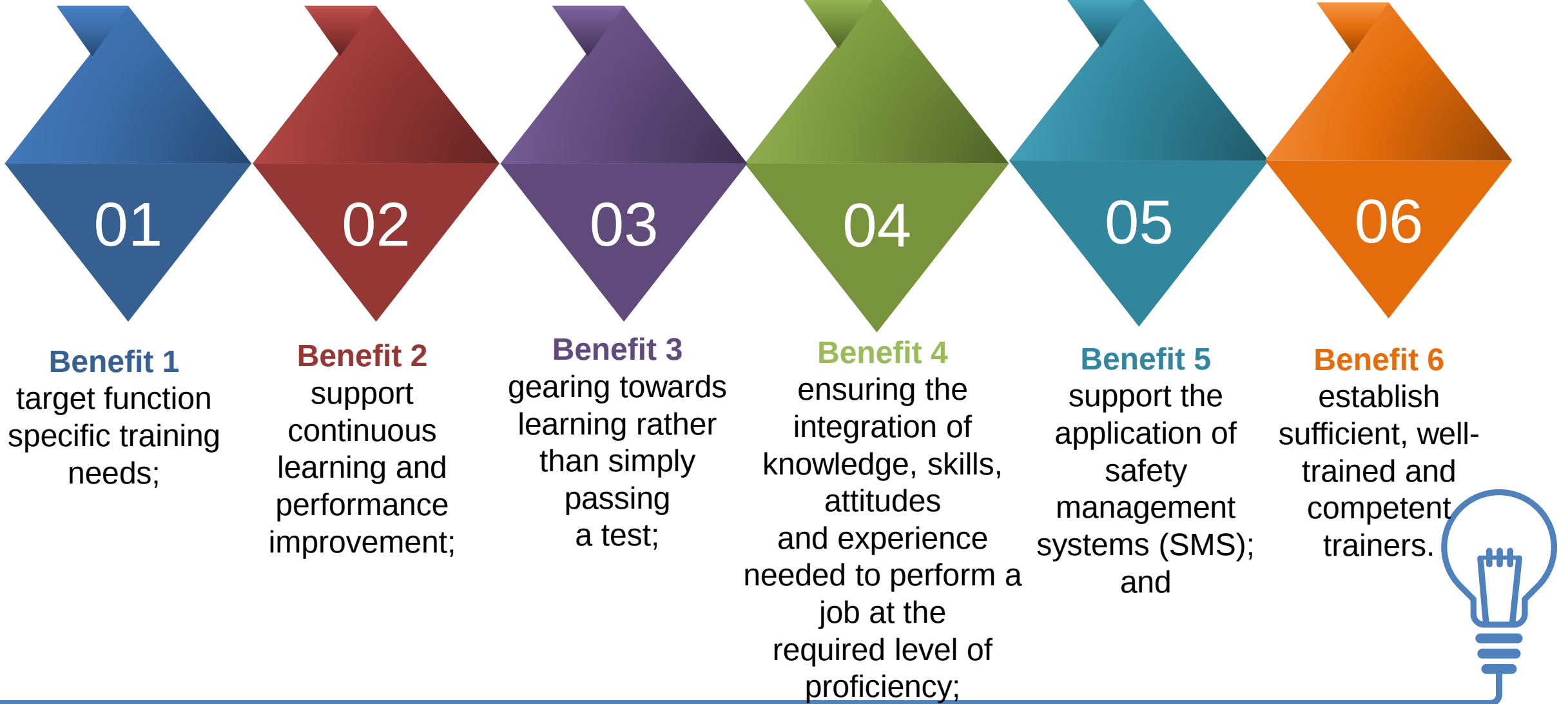
What is a Competency Based Training and Assessments (CBTA)

It is a focused training system approach that seeks to produce a competent workforce by:

1. Identifying key competencies and level of proficiency to be achieved;
2. Determining the most effective way to achieve competencies and;
3. Establishing valid and reliable assessment tools to evaluate the achievement of the competencies



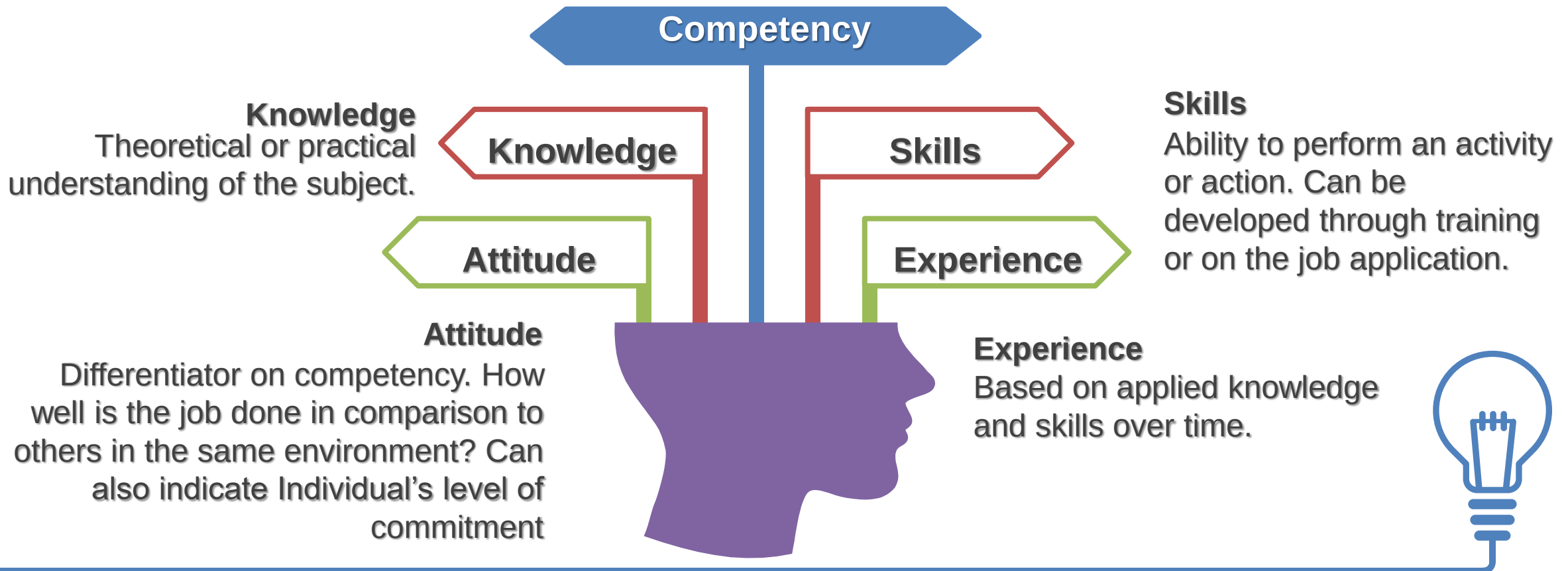
Benefits of CBTA



Competency Factors

A Competency is a dimension of human performance that is used to reliably predict successful performance on the Job

The Four Competency Factors



Competency Factors



Knowledge

- The nine classes of dangerous goods
- Information required on the dangerous goods transport document
- Components of an acceptance check



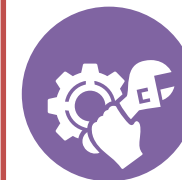
Skill

- How to determine if the substance/material is dangerous goods
- How to complete the dangerous goods documentation
- How to check a package (e.g. can it be accepted for transport?)



Attitude

- Being motivated to ensure safety and to comply with applicable regulations
- Wanting to adhere to regulations in asking relevant and effective questions
- Appreciating feedback from team members (e.g. adapts when faced with a situation where no guidance or procedure exists)



Experience

- Showing accuracy at execution
- Less time to execute
- How often? Where? When?



Levels of Proficiency



Competency factors	Level of proficiency			
	Introductory	Basic	Intermediate	Advanced
Knowledge	1	2	3	4
Skills	1	2	3	4
Experience	0	1	2	3
Attitude	3	4	4	4
Coding	*	**	***	****



Levels of Proficiency



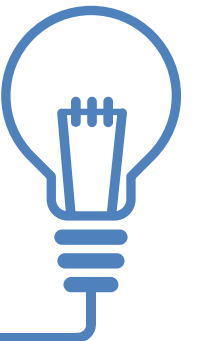
Appendix H

Function: Personnel responsible for handling cargo in a warehouse, loading and unloading ULD and loading and unloading aircraft cargo compartments.			Managing cargo pre-loading
	0.5	Interpreting the hazard communication	★
		0.5.1	Recognize the different marking basic requirements
		0.5.2	Recognize the variety of labeling and their meaning
		0.5.3	Identify the required documentation for DG shipments and their role in the process.
	0.6	Familiarizing with basic Emergency Response	★
		0.6.1	Create awareness about general emergency procedures
		0.6.2	Recognize country specific emergency procedures including exemptions and approvals
		0.6.3	Apply the employer emergency response requirements
4	Managing cargo pre-loading		★★★
	4.1	Plan loading	★★★
		4.1.1	Determine stowage requirements
		4.1.2	Determine segregation, separation, aircraft/compartment limitations
	4.2	Prepare load for aircraft	★★★
		4.2.1	Check packages for indications of undeclared dangerous goods
		4.2.2	Check for damage and/or leakage
		4.2.3	Apply stowage requirements (e.g. segregation, separation, orientation)

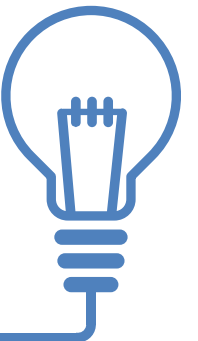
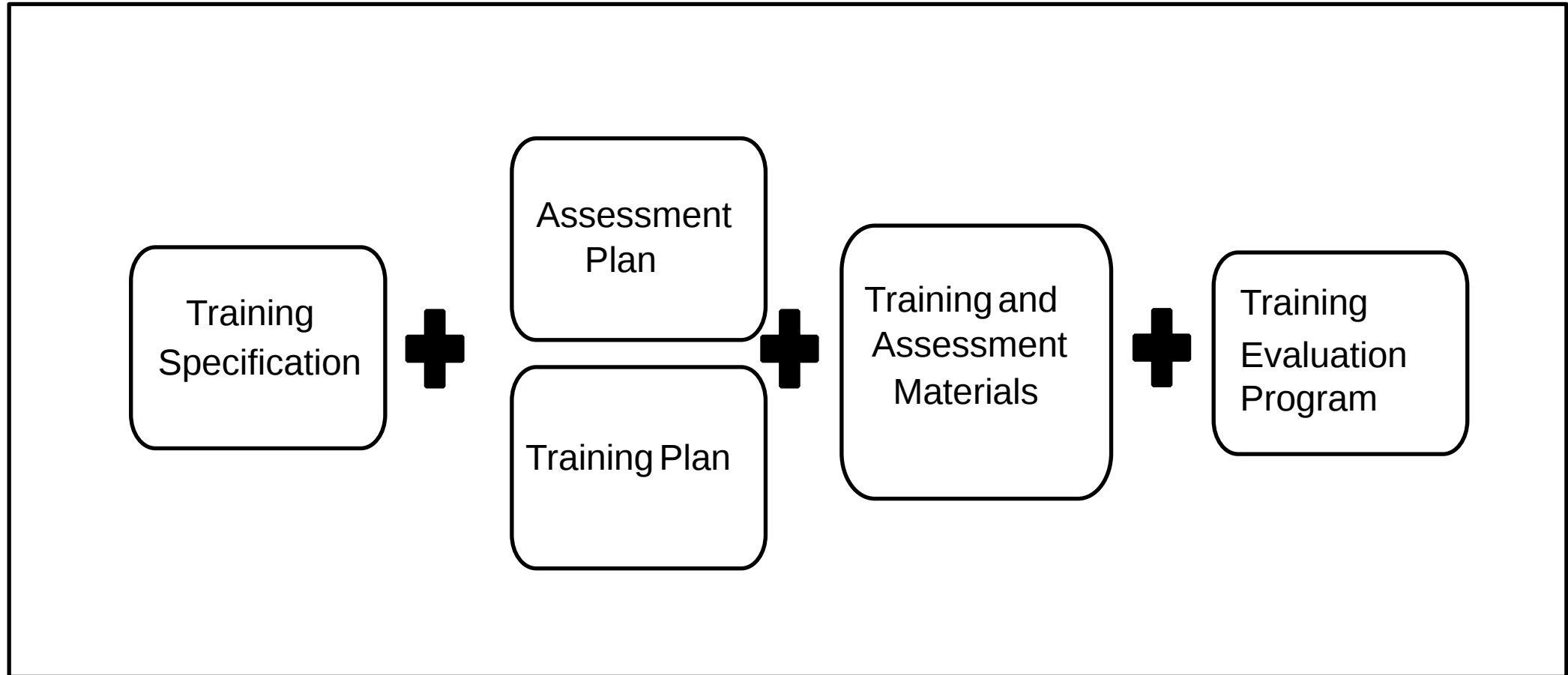


Levels of Proficiency

TASK/ MODULE	LEVEL OF PROFICIENCY	TYPE OF TRAINING
Understanding the basics of dangerous goods	Introductory	E-learning
Processing/ accepting cargo	Intermediate	Classroom instructor lead Virtual simulation
Collecting safety data	Basic	Group discussion & Tutorial Applications (scenarios)

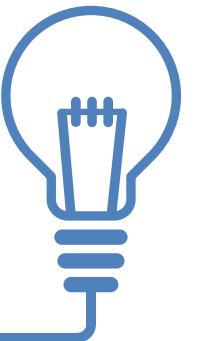


Components of CBTA

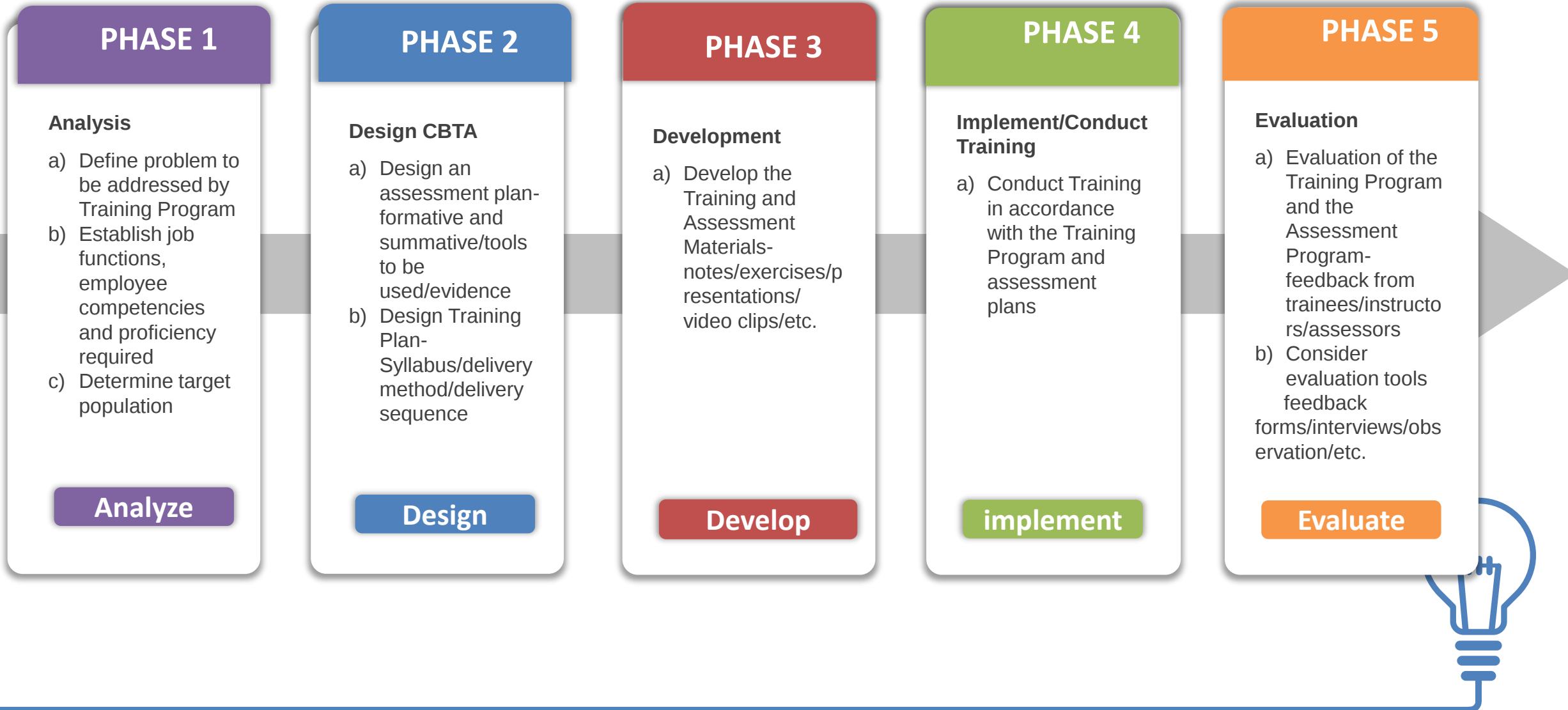


Components cont.

- ❑ **A training specification** - describes the purpose of training, the tasks list and the requirements that must be fulfilled when designing the training.
- ❑ **An assessment plan** - provides the process and tools for gathering valid and reliable evidence at different stages during training.
- ❑ **A training plan** - describes the training required to achieve the competencies
- ❑ **Training and assessment materials** - human, material, and organisational resources needed to implement training and assessment plans; and
- ❑ **Training Evaluation Program** - A process to evaluate the effectiveness of the training program



Implementation Framework



Role Players

Employer

Should ensure that training is designed and developed to establish clear links among the competencies to be achieved, learning objectives, assessment methods, and course materials.

Trainee

Trainees are active participants in the learning process and the achievement of competencies as opposed to passive recipients of knowledge.

Competency-based training should directly contribute to improving trainees' performance on the job.

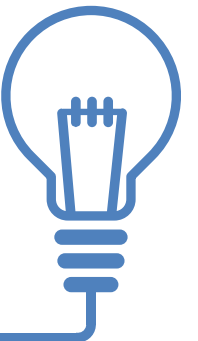


Trainer

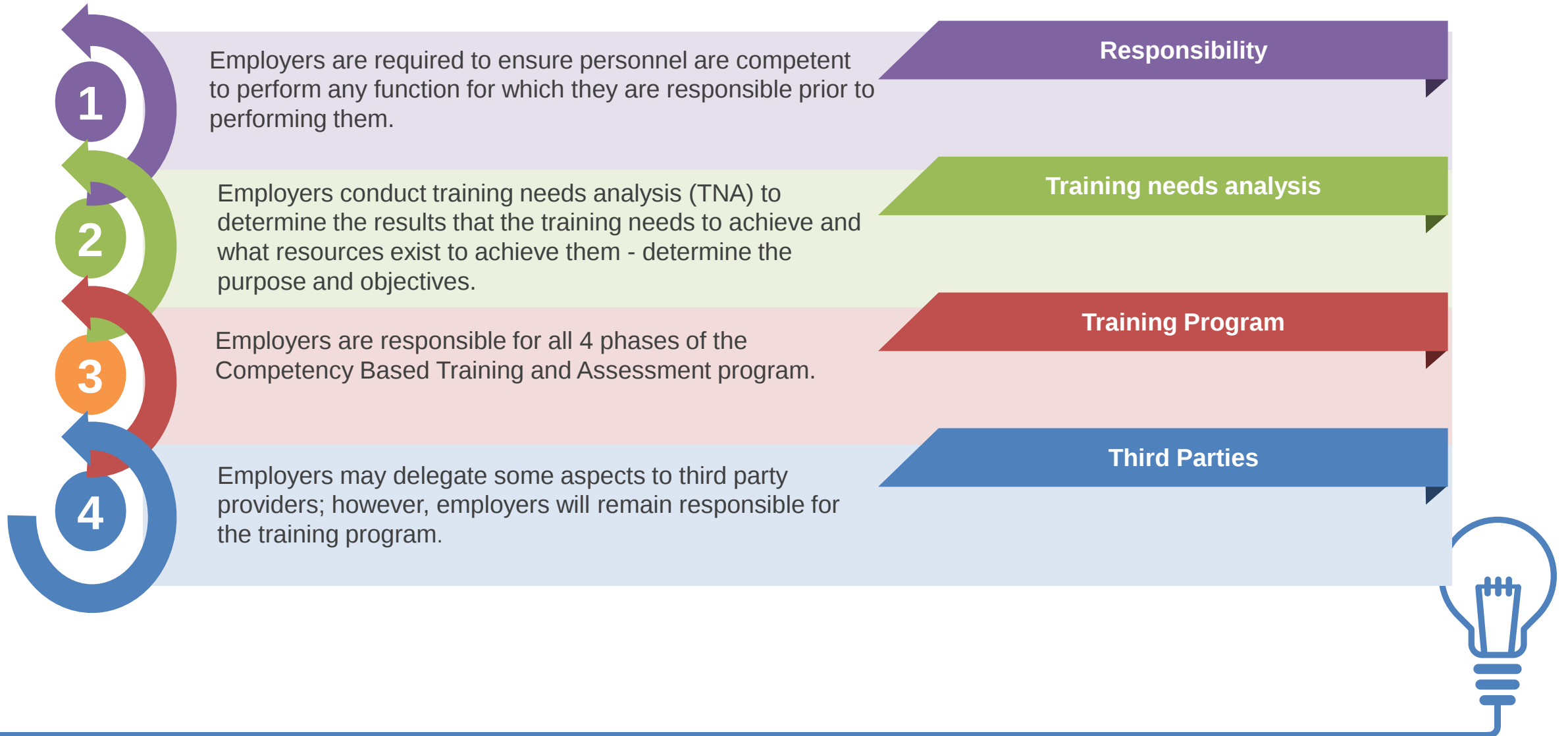
Facilitates the trainee's progression towards the achievement of competencies and collect information about the training effectiveness. Establish which training materials support continuous improvement.

Regulator

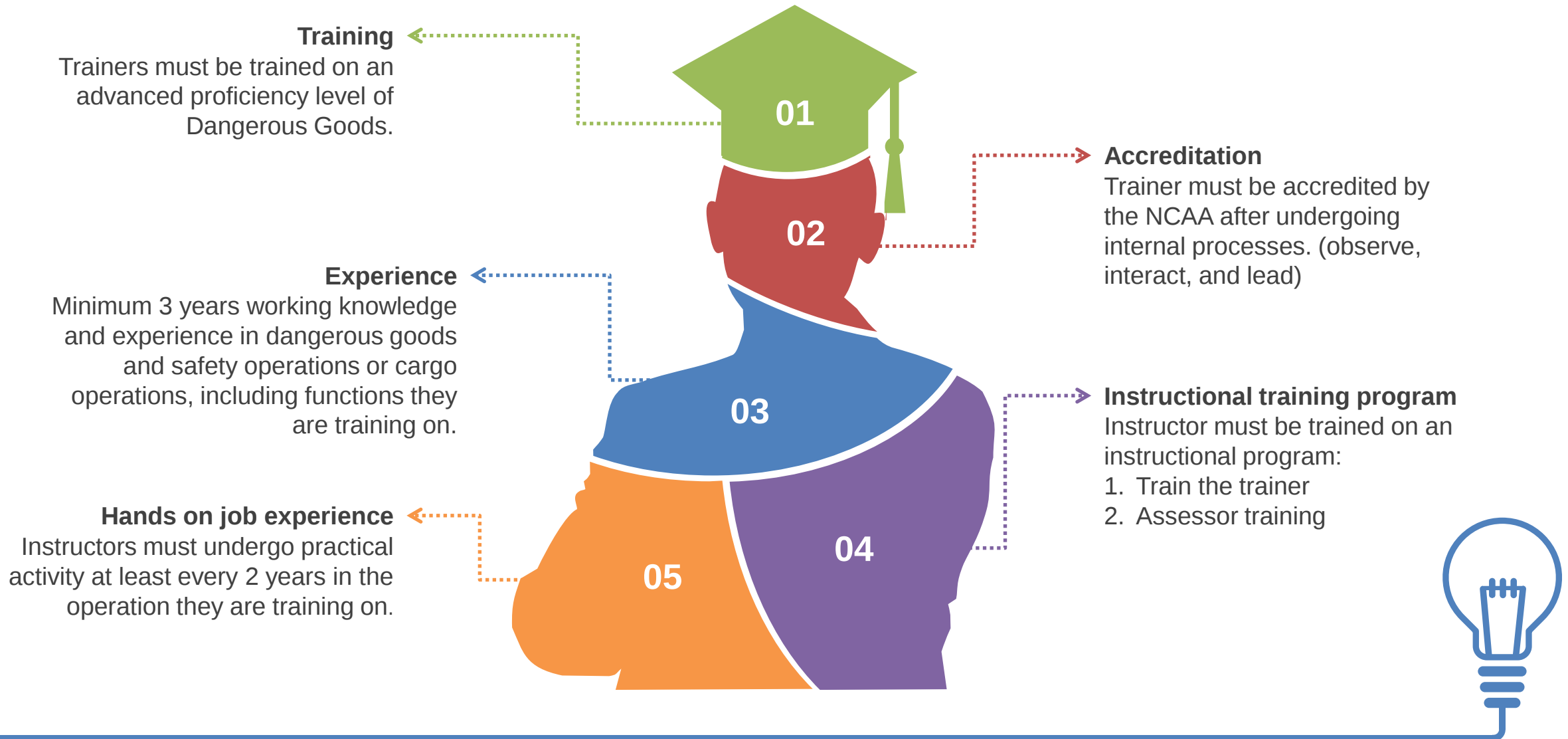
Oversees the training program to ensure that it produces personnel who can perform the functions for which they are responsible in a specific operational setting and in compliance with the national regulatory framework.



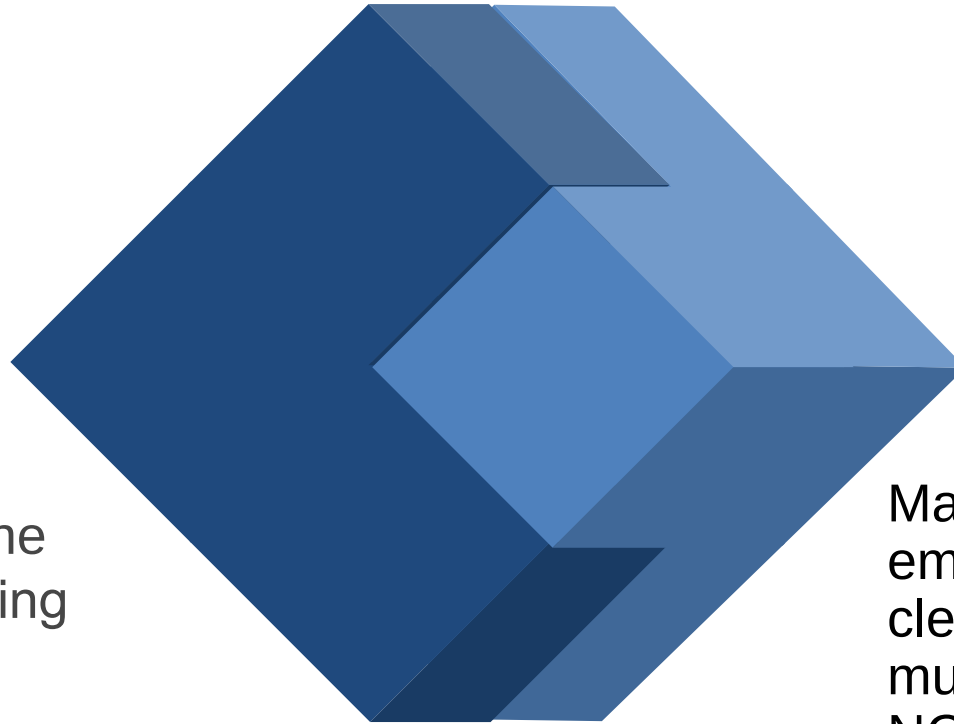
Employer



Trainers

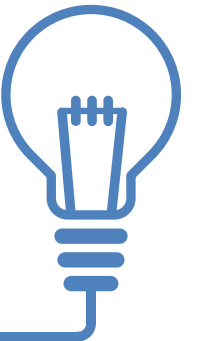


Third Parties



May conduct training and assessments in line with the employer's approved training program

May be contracted to carry out employer responsibilities but a clear contractual agreement must be in place and the NCAA must be informed



Assessors for Practical

Employer representative
e.g., Supervisor

1



Training Organization. E.g.,
Instructors, Designated
Examiners

2



Dangerous Goods
Responsible person

3



Assessor Qualification.

- ✓ Dangerous goods Category 6/ Advanced proficiency
- ✓ Knowledge of the operation



Discussion

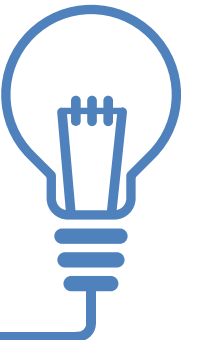


Employer

Third Party Training

Assessors

Other Concerns



Thank You



QUESTIONS?