



# CILT(UK) Competency Framework

# A guide to professional competencies in logistics, transport and global supply chain operations



## Background

Logistics, transport and supply chain operations are fast-paced, innovative and critical to our daily lives. They should be preferred professions of choice for talented individuals looking for roles that make a difference to society's safety, prosperity and freedom of movement.

Through collaboration of stakeholders, this robust and relevant competency framework can help organisations, employers, employees and those considering entering the profession to understand the competencies required for success.

Having clear career pathways and roadmaps to results in current and potential employees having a positive choice; one where they can select from a number of roles by having an understanding of what is required to be relevant and successful.

Many organisations have competency frameworks and this resource will serve to inform and enhance what already exists within the areas of logistics, transport and supply chain.

Our approach actively helps organisations nurture talent, guide those already in the industry and support the next generation; the people who promote profitable solutions and propel the national economy.

## Who should use the framework?

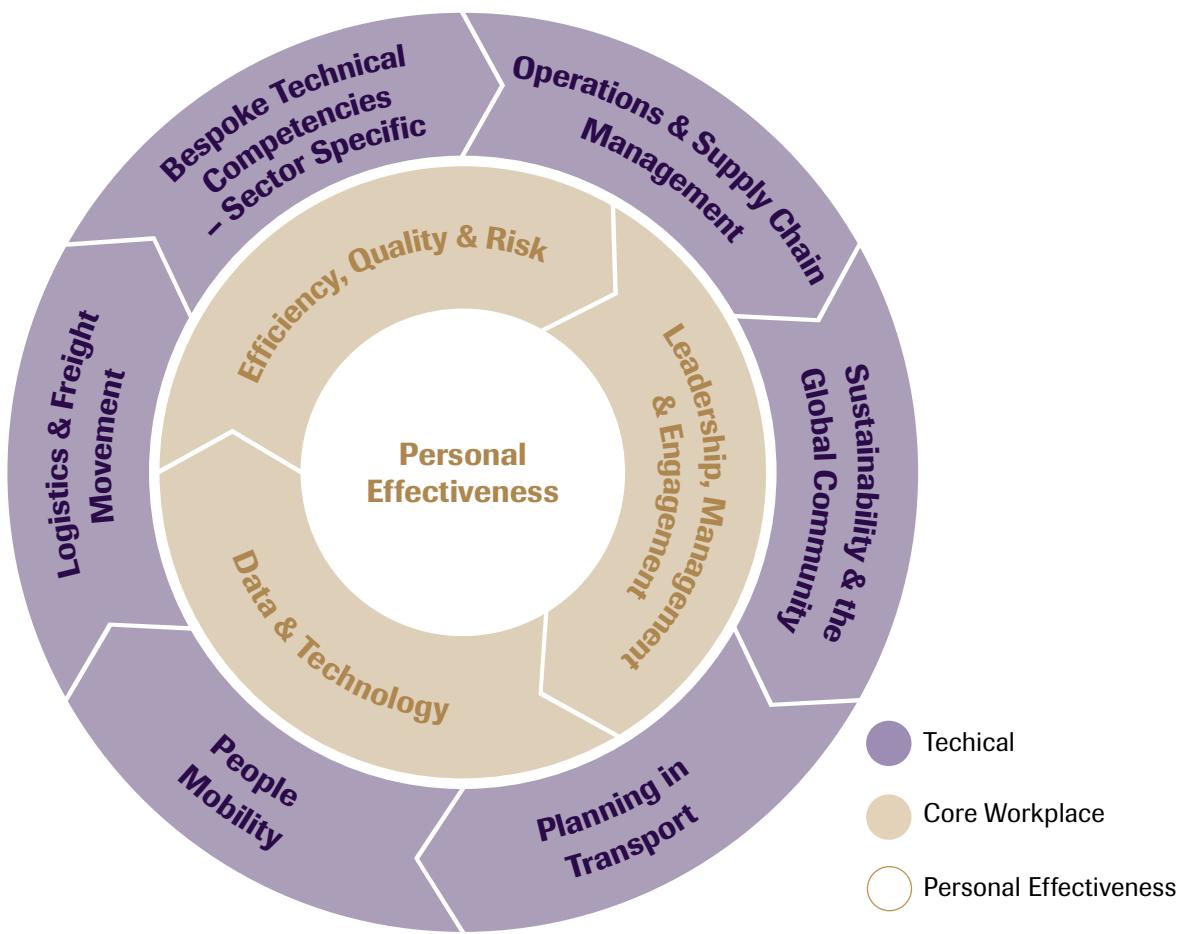
- **Employers** – understanding skills gaps, informing job descriptions and selecting learning for staff development
- **Employees** – identifying competencies for development and looking at requirements for a career in the profession
- **Individuals** – considering entering the profession to understand the competencies required for success
- **Organisations** – to establish the scope of competencies across the profession and define skills needed to deliver operational goals

For each job role, there are different types of skills, knowledge and behaviours that make up the required competencies to deliver what is needed.

This standard is informed by the professional body to guide role profiles, job descriptions, career development and learning needs and solutions.

# Framework

The framework is split into three key competency areas:



## Technical

<b>Operations &amp; Supply Chain Management</b>	Logistics   Warehousing   Inventory Management   Integrated Business Planning Solutions   Process & Production   Scheduling
<b>Sustainability &amp; the Global Community</b>	Sustainable Logistics   Environmental Resilience   Global Context & External Influences   Social Economic Resilience
<b>Planning in Transport</b>	Infrastructure & Network Resilience   Intelligent Mobility   Transport Planning   Network Planning & Management   Logistics
<b>People Mobility</b>	Demand   Planning & Scheduling   Modes   Inclusion, Access and Integration   Legislation and Funding   Transport Planning
<b>Logistics &amp; Freight Movement</b>	Logistics   Transport Planning   Multimodal Freight Transport   Intermodal Integration   Customs   Urban Freight
<b>Bespoke Technical Competencies</b>	Drivers   Pilots   Process Operators   Regulator Roles   Technical Experts   Logisticians

Split into six areas, the technical competency subjects for logistics, transport and supply chain operations, focus on the skills, knowledge and experience required for the broad scope of roles and activities across the profession.

Within logistics, transport and supply chain, a number of role competencies are influenced heavily by the sector. Examples of these roles would be different types of drivers with specific licenses, these are referred to as Bespoke Technical Competencies.

## Core Workplace

<b>Leadership, Management &amp; Engagement</b>	Organisational Culture   Change Management   Performance Measurement   Relationship Management   Market Principles
<b>Data &amp; Technology</b>	Data Acquisition   Data Handling   Data Analysis   Technology   Automation   Innovation
<b>Efficiency, Quality &amp; Risk</b>	Continuous Improvement   Optimisation   Lean Principles   Project Management   Quality   Risk   Safety

These are competencies required across any profession or sector, and are often referred to as transferable skills. The majority of any role is made up of these types of skills, along with personal effectiveness competencies.

Core workplace skills are critical to a high performing individual. They allow easy transition

across directorates, sectors and industries, where new technical skills and knowledge can be learnt to become competent in a specific role.

The CILT(UK) Competency Framework shows core workplace competencies as three key areas covering the breadth of skills and knowledge required.

## Personal Effectiveness

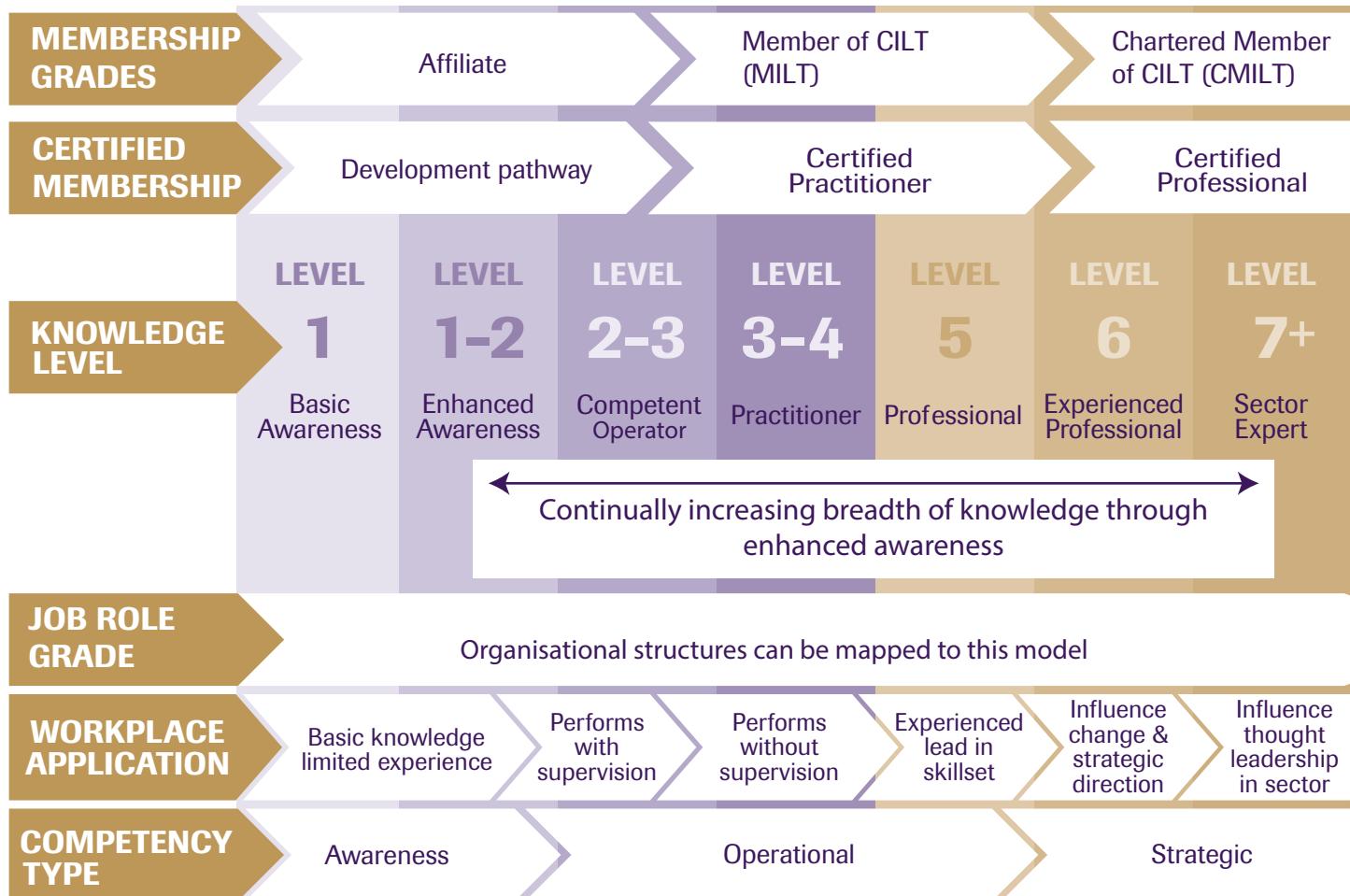
<b>Professional, Customer Centric &amp; Continuous Improvement Ethos</b>	Influencing   Listening & Speaking   Integrity & Ethics   Reliability   Team Working   Considering Risk
--	---

These competencies are not exclusive to the workplace, but developed personal effectiveness is highly valuable to employers, as it is often challenging to teach and assess in role.

Personal effectiveness competencies have an influence on the culture of an organisation; effectiveness means making the right decisions at the right time, to produce the desired results, which is essential for business.



# Measuring Levels of Skill, Knowledge and Experience



Knowledge levels relate to both academic levels and vocational competence levels. The workplace application descriptors help to understand what level of competence a person needs based on the level of accountability required for a task or role. Seniority does not equate to advanced knowledge and experience in every task that a person oversees.

For example, a senior manager in an organisation could have level 6 skills, knowledge and experience in core workplace competency and level 3 in a number of technical areas, with enhanced awareness in others.

Taking this further, a Warehouse Manager will not necessarily have insight into the technical specifics of every task carried out in an operation. They might be responsible for ensuring that all tasks are carried out correctly, and so need an awareness of how each task fits into the bigger picture, but they do not need to be experts in every one.

The framework shows three competency types: awareness, operational and strategic.

**Awareness** gives an overview of a topic or subject, useful to increase knowledge of other departments or areas of the profession, and may help better operational decisions to be made.

**Operational** covers the practical tasks and actions needed to deliver output. In this framework, each operational competency can relate to level 3 through to level 5 dependent on the level of accountability needed or the level of skills and experience held.

**Strategic** focuses on research and strategic planning. When considering strategic competency, a person may well need to enhance their awareness in a number of areas to better inform their work, rather than study those areas at an advanced level.

The indication of Certified Membership maps into the new professional standards to be launched by CILT(UK).

# Table of Contents

<b>Technical Operations and Supply Chain Management</b>
<b>SC1 Supply Chain Principles and Concepts</b>
<b>SC1.1</b> Supply Chain Networks, Design and Optimisation 8
<b>SC1.2</b> Warehousing and Inventory 9
<b>SC1.3</b> Distribution 10
<b>SC2 Operations Management and Supply Chain Performance</b>
<b>SC2.1</b> Process, Production, Planning and Flow 11
<b>SC2.2</b> Integrated Business Planning Systems (MRPII, ERP and APS) and their Components (Master Planning, MRP, DDMRP, CRP) 12
<b>SC2.3</b> Service, Value Adding and the Competitiveness of Supply Chains 13
<b>SC2.4</b> Scheduling, Forecasting and Demand Satisfaction 14
<b>Sustainability and the Global Community</b>
<b>SUS1 Sustainable Development</b>
<b>SUS1.1</b> Social, Economic and Environmental Resilience of the Supply Chain 15
<b>Logistics and Freight Movement</b>
<b>FM1 Principles of Logistics and Freight Operations</b>
<b>FM1.1</b> Freight Transport Operations and Services 16
<b>FM1.2</b> Urban Freight Transport Operations 18
<b>FM2 Regulation and Enforcement of the Movement of Goods</b>
<b>FM2.1</b> Mechanisms for Controlling Freight Operations 19
<b>FM2.2</b> Incoterms and Contractual Obligations 20
<b>FM2.3</b> Local, National and International Distribution Networks 21

<b>Planning in Transport</b>
<b>TP1 Infrastructures and Network Solutions</b>
<b>TP1.1</b> Transport Infrastructure and Network Resilience 22
<b>TP1.2</b> Transport Nodes and Connecting Links 23
<b>TP1.3</b> Demand and Capacity Management 23
<b>TP1.4</b> Information Systems and Intelligent Mobility 24
<b>TP2 Planning within Transport</b>
<b>TP2.1</b> Policy Planning for Transport 25
<b>TP2.2</b> Transport and Spatial Planning 26
<b>TP2.3</b> Transport Planning 26
<b>TP2.4</b> Market Intelligence and Economic Appraisal 27
<b>People Mobility</b>
<b>PAS1 Passenger Transport Operation and Principles</b>
<b>PAS1.1</b> Passenger Movement Principles 28
<b>PAS1.2</b> Modes, Modal Choice and Transport Integration 29
<b>PAS2 Services and Interoperability</b>
<b>PAS2.1</b> Passenger Movement Costing, Pricing, Obligations and Subsidies 30
<b>PAS2.2</b> Passenger Transport Ownership, Control, Policies and Legislation 31
<b>PAS2.3</b> Access and Inclusion through Transport 32

## Core Workplace Leadership, Management and Engagement

### LE1 Leadership and Management

<b>LE1.1</b> Leadership, Organisational Culture and Change Management	33
<b>LE1.2</b> Performance Measurement and Management	34
<b>LE1.3</b> Costing, Finance and Resourcing	35

### LE2 Customer Engagement

<b>LE2.1</b> Customer Service and Relationship Management	36
<b>LE2.2</b> Marketing and Market Principles	37

## Data and Technology

### DT1 Data Collection, Analysis and Forecasting

<b>DT1.1</b> Data Collection, Analysis and Forecasting	38
<b>DT1.2</b> Data Handling – Methodologies and Data Presentation	39
<b>DT1.3</b> Data Governance – Legal, Social and Ethical	39

### DT2 Technology, Modelling and Simulation

<b>DT2.1</b> Technology, Automation and Innovation	40
--	----

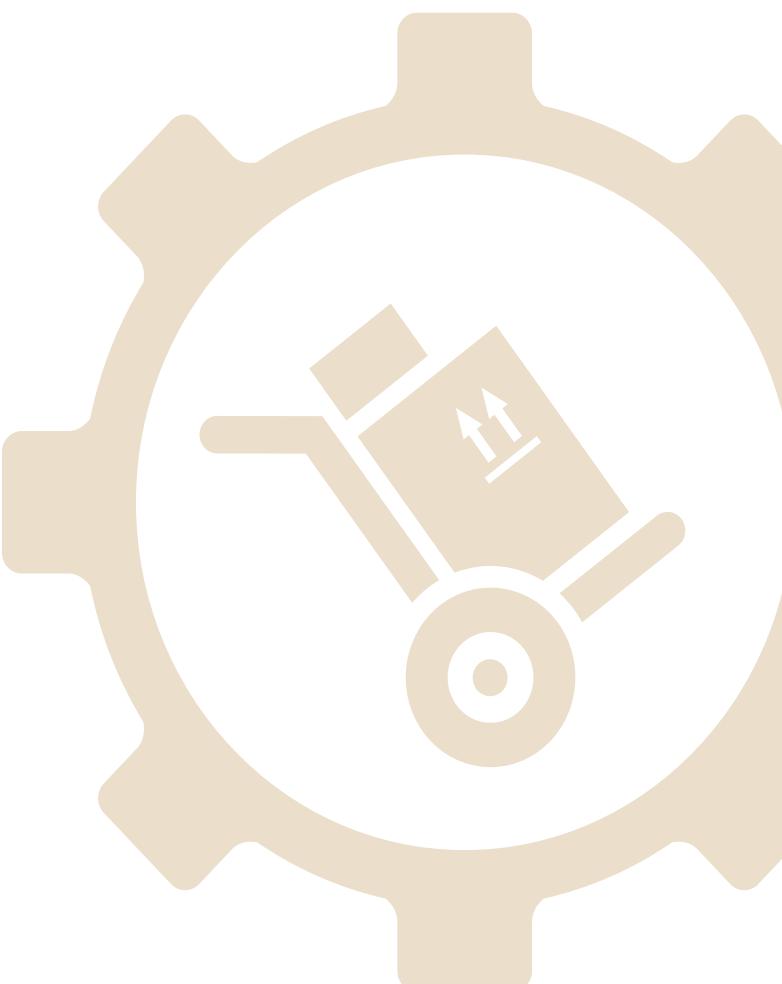
## Efficiency, Quality and Risk

### EQ1 Operational Effectiveness

<b>EQ1.1</b> Continuous Improvement, Optimisation and Lean Principles	41
<b>EQ1.2</b> Project Management	42
<b>EQ1.3</b> Quality Management	43

### EQ2 Risk Management

<b>EQ2.1</b> Risk Identification, Reduction and Safety Management	44
---	----



# Operations and Supply Chain Management

## SC1 Supply Chain Principles and Concepts

### SC1.1 Supply Chain Networks, Design and Optimisation

#### Awareness

Competency	Knowledge areas
<b>SC1.1.1A</b> Describe the evolution of the supply chain concept and the flows involved	Supply chain concept and its evolution   Types of supply chains and flows   Key components of supply chains   Upstream and downstream flows and linkages   Reverse logistics
<b>SC1.1.2A</b> Outline the main activities that drive supply chain operations	Customer Relationship Management   Demand management   Order fulfilment   Manufacturing flow management   Procurement   Product development and commercialisation   Returns management
<b>SC1.1.3A</b> Describe the logistics concept in supply chain operations	Forward and reverse flows   Storage of goods and services   Customer requirements

#### Operational

Competency	Knowledge areas
<b>SC1.1.10P</b> Research and recommend opportunities that will yield the highest benefits for the organisation	Comparing trade-offs   Organisational costs   Capacity   Customer service
<b>SC1.1.20P</b> Implement planning, monitoring and control activities to conduct effective global operations	Lean, waste, agility   Performance measurement, monitoring and controls   Information flows   Benchmarking   Network management information systems
<b>SC1.1.30P</b> Manage partnerships and stakeholders to ensure appropriate supply chain collaboration	Productive collaboration: Forecast accuracy; service levels; sales growth   Collaborative relationships   Process management
<b>SC1.1.40P</b> Plan the structure of networks for different types of operation	Network design   Facility location planning   Market potential & entry strategies   Information systems   Financial control   Controllable & uncontrollable elements   Global logistics operations   Distribution systems   Omni-channel
<b>SC1.1.50P</b> Plan the transition of an existing network structure	Systematic Network Planning (SNP)   Variables   Sensitivities   Scenario creation   Role and location of existing facilities   Staging post & cross-docking facilities   Facilities to assist transport activities   Definitions of 'time'
<b>SC1.1.60P</b> Prepare contingency plans for network interruptions	Value of cross-functional processes   Resource requirements   Network planning   Service levels: organisational and customer requirements

#### Strategic

Competency	Knowledge areas
<b>SC1.1.1S</b> Evaluate the impact of governmental and non-governmental organisations, regulatory bodies and international conventions on supply chain management	Legislation   Ethics   Environment   Political landscape   Economies   Globalisation   Technology   Humanitarian   Climate change   Social welfare
<b>SC1.1.2S</b> Assess the risks that affect supply chain operations, suggesting ways to mitigate against them	External influences and the impact on global business strategy   Internal decisions

# Operations and Supply Chain Management

## SC1 Supply Chain Principles and Concepts

### SC1.2 Warehousing and Inventory

#### Awareness

Competency	Knowledge areas
<b>SC1.2.1A</b> Describe the purpose, characteristics and components of inventory and inventory systems	Role and functions of stock control   Stockholding   Inventory measurement   Inventory classification
<b>SC1.2.2A</b> Define the role and function of warehouses	Types of storage equipment and Materials Handling Equipment (MHE)   Receiving goods   Storing and locating goods   Housekeeping

#### Operational

Competency	Knowledge areas
<b>SC1.2.10P</b> Plan, organise and control warehouse operations, minimising the effects of unplanned activity	HSE responsibilities   Space utilisation and layout   Flow patterns   Stock allocation and segregation   Maintenance and servicing equipment   Daily order picking   Resource management   Relevant legislation
<b>SC1.2.20P</b> Manage stock levels following best practice methodology	Safety stock calculations   ABC analysis (Pareto rule)   Stocktaking methodology
<b>SC1.2.30P</b> Plan inventory using a range of reporting systems to forecast the impact of different variables on stock levels	Forecasting methods   Stock segregation   Inventory risks   Packaging   Lead times   Data accuracy   KPIs   Reporting   Data analysis   Stock handling   Safety stock calculations   Trade-offs
<b>SC1.2.40P</b> Respond to organisational and customer requirements relating to packaging adhering to legislative guidance and requirements	Packaging   Customer service levels   Sustainability   Value adding
<b>SC1.2.50P</b> Operate relevant available technology to support physical warehouse operations and warehouse management	Technology   Software systems   Data transfer   Data capture   Software systems   Systems integration
<b>SC1.2.60P</b> Manage the disposal of surplus, waste, damaged or otherwise unusable stock	Waste Management   Reverse logistics   Circular economy   Equipment   Training   Recycling

#### Strategic

Competency	Knowledge areas
<b>SC1.2.1S</b> Evaluate the role of the warehouse in effective logistics strategy recommending improvement to current operations	Data selection   Data analysis   Customer requirements   Legal and security requirements   Competitive advantage
<b>SC1.2.2S</b> Research and implement various options and strategies applicable to inventory deployment to meet an organisation's customer service objectives	Network availability   Warehouse capacity   Retail stock holding capacity   Customs requirements   Channel performance   Supplier direct delivery   Fulfilment costs   Click and collect   Customer driven supply chain concept   Focus on service

# Operations and Supply Chain Management

## SC1 Supply Chain Principles and Concepts

### SC1.3 Distribution

Awareness	
Competency	Knowledge areas
<b>SC1.3.1A</b> Describe the process of distributing goods to customers	Consignment tracking systems   Customer benefits   Third Parties: police, customs and excise, immigration, port/terminal authorities, freight forwarders, agents, 3PL/4PL

Operational	
Competency	Knowledge areas
<b>SC1.3.10P</b> Coordinate the distribution planning of goods and services	Dispatch process   Distribution Requirements Planning (DRP)   Characteristics of goods   Safety and security   Sources and destinations   Modal choice   Modal nodes   Third parties
<b>SC1.3.20P</b> Manage the operation of a distribution centre, ensuring service levels are met	Resource planning   Budget control   Stock management   HSE management   Transport management

Strategic	
Competency	Knowledge areas
<b>SC1.3.1S</b> Evaluate various ways of managing a distribution network to inform improvements in operational efficiency	Regulation   Freight transport controls   Freight operations: Global, national, local operations   Control techniques: Custom procedures, consignment and crew security   Incoterms
<b>SC1.3.2S</b> Analyse criteria that will influence the siting, volume and size of distribution locations	Legal requirements   Accessibility   Modal nodes   Rent, rates & taxes   Workforce availability, skills & costs   Transport infrastructure and traffic flow   Proximity to various modal operations   Markets & local environment factors   Building availability



# Operations and Supply Chain Management

## SC2 Operations Management and Supply Chain Performance

### SC2.1 Process, Production, Planning and Flow

#### Awareness

Competency	Knowledge areas
<b>SC2.1.1A</b> Describe the range and capabilities of systems that support planning and scheduling across the supply chain	Demand management   Sales and Operations Planning (S&OP)   Master Production Schedule (MPS)   Rough Cut Capacity Planning (RCCP)   Material Requirements Planning (MRP)   Bills of Material (BOM)   Capacity Requirements Planning (CRP)   Production   Vendor requirements   Distribution Requirements Planning (DRP)   Total Quality Management (TQM)   Service Level Agreements (SLAs)   Cost control   Forecasting techniques

#### Operational

Competency	Knowledge areas
<b>SC2.1.1OP</b> Manage production planning and the production planning cycle, analysing service levels and costs to maximise profitability	Demand management   S&OP   MPS   RCCP   MRP Calculations   CRP   Production   Vendor requirements   DRP   TQM   SLAs   Cost control   Forecasting techniques   Relationship between manufacturing types and control systems
<b>SC2.1.2OP</b> Operate and monitor shop-floor control systems and order processing methods	Shop Floor Control (SFC)   Cost-effective customer service   Shop floor layouts   Lean manufacturing implementation   Manufacturing types

#### Strategic

Competency	Knowledge areas
<b>SC2.1.1S</b> Analyse the implications of globalisation on production planning processes	Future demand   Product development   Global trends   Global influences: PESTLE   Strategic investments and growth
<b>SC2.1.2S</b> Research the development of manufacturing and control systems, comparing the basic principles of production planning to current and future manufacturing and control systems	Critical roles   Production and control flows   Strategic impacts of the manufacturing environment   Strategic impacts of manufacturing systems

# Operations and Supply Chain Management

## SC2 Operations Management and Supply Chain Performance

### SC2.2 Integrated Business Planning Systems (MRPII, ERP and APS) and their Components (Master Planning, MRP, DDMRP, CRP)

#### Awareness

Competency	Knowledge areas
<b>SC2.2.1A</b> Summarise the evolution of business planning systems	Material Requirements Planning (MRP)   Manufacturing Resource Planning (MRPII)   Enterprise Resource Planning (ERP)

#### Operational

Competency	Knowledge areas
<b>SC2.2.1OP</b> Develop production schedules based upon Materials Requirement Planning (MRP) and Capacity Requirements Planning (CRP) process outputs and business needs	Master Production Schedule (MPS)   Projected Available Balance (PAB)   Available to Promise (ATP)   MRP and CRP calculations   Inputs to MRP and CRP   Impact and usage of MRP and CRP outputs   Impact of JIT/Lean operations
<b>SC2.2.2OP</b> Develop the MRP and CRP process in the light of changing business and operational requirements and constraints	MRP and CRP calculations   Inputs and outputs of MRP and CRP   MRP within the total company system   Evolution of ATP   Theory of Constraints
<b>SC2.2.3OP</b> Implement the Sales and Operations Planning (S&OP) process to produce value added finished goods	S&OP implementation methodology   S&OP process   Inputs and outputs of S&OP   Factors involved in S&OP   "What if?" analysis   Cross-functional processes
<b>SC2.2.4OP</b> Construct and develop an achievable Master Production Schedule (MPS) and a Final Assembly Schedule (FAS)	MPS calculations   MPS impacts: inventory, lead times   Measurement and management   FAS: 2 level master scheduling, mixed model scheduling   Environment: Make to order, assemble to order, make to stock
<b>SC2.2.5OP</b> Evaluate resources to be included in the resource planning process	Rough Cut Capacity Planning (RCCP)   Bills of materials (BOM)   Bills of Resource   Resource Planning: People, materials, equipment, information
<b>SC2.2.6OP</b> Develop a plan for the implementation of a resource planning system	ERP: Business planning   MPS   S&OP   MRP   Resource Planning   RCCP   CRP   Shop floor control   Data analysis   HR   Finance and procurement   MRPII/ERP configurations

#### Strategic

Competency	Knowledge areas
<b>SC2.2.1S</b> Rationalise the growth of MRPII into enterprise-wide and supply chain systems	Traditional inventory replenishment methodology   Influences and impacts on the application of MRPII systems   Influences and impacts on the application of ERP systems
<b>SC2.2.2S</b> Relate the theories of Optimised Production Technology (OPT) and the Theory of Constraints to business practice	Theory of Constraints   Lean   Waste   Bottlenecks   Advanced Planning and Scheduling (APS)

# Operations and Supply Chain Management

## SC2 Operations Management and Supply Chain Performance

### SC2.3 Service, Value Adding and the Competitiveness of Supply Chains

#### Awareness

Competency	Knowledge areas
<b>SC2.3.1A</b> Describe how supply chain activities can add value to customers	Customer service performance   Value-adding and non-value adding operations and tasks   Customer perceptions of value-adds within service operations

#### Operational

Competency	Knowledge areas
<b>SC2.3.1OP</b> Demonstrate how Customer Relationship Management (CRM) is used to develop good relationships and categorise customers into different supply chain combinations	Vendor Managed Inventory (VMI)   Reverse logistics   Value adding: Customer care, customer support   Relationship Management: Cooperation, customer partnerships, joint ventures, complaints management   Customer categorisation  Strategic partnership agreements
<b>SC2.3.3OP</b> Apply techniques for converting customer requirements into product and service design	Drivers of product and services   New product and service criteria   Change management: engineering, processes, Shop Floor Control (SFC)   Product quality   Customer satisfaction
<b>SC2.3.4OP</b> Design and implement contingency plans to deal with performance failures in the supply chain	Trade-offs   Performance failure management   Total logistics lead time   Service levels   Customer profiling   Customer expectations   Supply chain interruptions

#### Strategic

Competency	Knowledge areas
<b>SC2.3.1S</b> Interpret and analyse competition and collaboration between supply chain entities in the context of global supply and demand	SLAs   Productivity and utilisation performance measurements   Collaboration for decarbonisation   Product life cycles and their impacts   Strategic approaches and added value   European and global market demand   Segmentation   Consumer behaviour
<b>SC2.3.2S</b> Analyse logistics concerns encountered by online retailing and omni-channel operations	Market trends   Channels of operation
<b>SC2.3.3S</b> Critically compare the importance of various resources in the success of a supply chain	Information systems   Performance data   Channels of operation

# Operations and Supply Chain Management

## SC2 Operations Management and Supply Chain Performance

### SC2.4 Scheduling, Forecasting and Demand Satisfaction

#### Awareness

Competency	Knowledge areas
<b>SC2.4.21A</b> Summarise various aspects of demand planning and management	Types of demand   Basic scheduling concepts   Dependent and independent demand

#### Operational

Competency	Knowledge areas
<b>SC2.4.10P</b> Plan the requirements of capacity, components and materials against time	Master Scheduling   Rough Cut Capacity Planning (RCCP)   Resource management   Forecasting techniques   Time series analysis
<b>SC2.4.20P</b> Apply forecasting techniques to determine future requirements feeding into demand planning and demand management	Forecasting techniques: short term; long term   Forecasting systems   Consensus forecasting with cross-functional components   Demand planning
<b>SC2.4.30P</b> Manage customer expectations through delivery promising, order servicing and sales based ordering	Performance monitoring: vendor managed inventory (VMI), effective consumer response (ECR)   Demand management   Demand features on a forecast   Supply requirements by location   Demand smoothing   MPS
<b>SC2.4.40P</b> Apply forward and backward scheduling techniques where relevant	Production load levelling techniques   Infinite and finite scheduling techniques

#### Strategic

Competency	Knowledge areas
<b>SC2.4.1S</b> Investigate the practical scheduling implications of using theoretical models	Simulation   Closed-loop planning systems   Advanced planning and scheduling (APS) techniques

# Supply Chain Sustainability and the Global Community

## SUS1 Sustainable Development

### SUS1.1 Social, Economic and Environmental Resilience of the Supply Chain

#### Awareness

Competency	Knowledge areas
<b>SUS1.1.1A</b> Describe the impact of sustainable good practice in logistics operations and discuss areas in which change is needed	Long-term initiatives   Organisational responsibilities   Corporate Social Responsibility (CSR)   Policy challenges and concerns   Organisational conflict: demand vs environment   Change management   Environmental impact   Green and sustainable logistics   The importance of sustainable logistics and transport operations   Pollution controls to reduce harm

#### Operational

Competency	Knowledge areas
<b>SUS1.1.10P</b> Operate and manage basic environmental impact assessment methods	Environmental Impact Assessments (EIA)   Environmental standards   Carbon footprinting
<b>SUS1.1.20P</b> Develop and monitor KPIs to improve environmental impact whilst maintaining the sustainability of business operations	Key Performance Indicators (KPIs)   Environmental monitoring and controls
<b>SUS1.1.30P</b> Demonstrate improvement techniques offering solutions that balance fuel, energy, resource and cost	Fuel   Energy   Resources: physical; human   Costing techniques   Data management
<b>SUS1.1.40P</b> Implement and manage operational practices and procedures to provide more sustainable business operations	Sustainable modal and multi-modal operations   Environmental monitoring tools and techniques   Environmental Impact Assessments (EIA)

#### Strategic

Competency	Knowledge areas
<b>SUS1.1.1S</b> Evaluate the environmental implications related to the different modes and types of freight transport operations	Sustainable modal and multimodal operations   Environmental Impact Assessments (EIA)   Government policy and data sources   Monitoring tools
<b>SUS1.1.2S</b> Evaluate the contribution and impact of an organisation in promoting a sustainable environment	Corporate Social Responsibility (CSR)   Environmental impact   Environmental standards
<b>SUS1.1.3S</b> Analyse available fuel types and their impact on sustainable business practice	Society   CSR   Fossil fuels   Alternative fuels   Vessel selection   Infrastructure   Fleet management
<b>SUS1.1.4S</b> Analyse the interactions between transport and land use	Transport planning   Economic issues   Social issues   Technical issues   Environmental   Developmental issues
<b>SUS1.1.5S</b> Critically evaluate current government policies on the environmental impact of transport and analyse the thinking behind current environmental policies	Environmental issues: noise; air; safety; visual impact; vibration; global warming   Environmental impact targets   Fuel   Legislation and policies

# Logistics and Freight Movement

## FM1 Principles of Logistics and Freight Operations

### FM1.1 Freight Transport Operations and Services

#### Awareness

Competency	Knowledge areas
<b>FM1.1.1A</b> Describe the role of freight transport in society	Definitions   Types of movements   Regular, non-regular and demand driven
<b>FM1.1.2A</b> Identify the key characteristics of logistics operations and freight transport systems	Basic operational structures of different modes of transport   Components of the freight transport system   Constraints on supply   Modal choice   Trade-offs   Collection and distribution centres   Facilities and resources   Infrastructure   Freight service users
<b>FM1.1.3A</b> Describe the main types and classification of goods being moved	Types of freight   Market segments: raw materials, finished goods and parcel   Dangerous and hazardous goods   Specialist goods
<b>FM1.1.4A</b> Describe the characteristics of the major and principle minor modes of transport	Types of freight: air; water; road; rail; pipelines; drones; conveyors   International transport modes and facilities
<b>FM1.1.5A</b> Describe various modal management structures and how they are controlled and operated	The purpose, function, structure and organisation of different types of freight
<b>FM1.1.6A</b> Define the relevance of appropriate third parties in freight planning	Freight Forwarders   3PL/4PL   Agents
<b>FM1.1.7A</b> Describe the nature of the demand for freight transport	Market forces   Seasonal demand   International agreements   Strategic alliances   Labour market



“ We are living in a much more turbulent world and because of how connected global supply chains are, we have to be constantly on our toes and aware of what could be around the corner.

*Omera Khan FCILT  
Professor of Supply Chain Management,  
Royal Holloway- University of London*

## Operational

Competency	Knowledge areas
<b>FM1.1.1OP</b> Coordinate freight transport operation planning	Transport Management Systems   Optimisation tools, techniques and technology   Structure and organisation   Principles underpinning regulatory systems   World geography: political boundaries; time zones; travel times
<b>FM1.1.2OP</b> Coordinate processes and procedures to support the movement of goods	International documentation and cargo booking procedures   Modes of transport   Monitoring of shipments   Regulatory systems applying to freight forwarding   International commercial terms (Incoterms)   Dangerous and Hazardous goods: classification; restrictions   Specialist goods   Outsourcing: 3PL/4PL   Safety and security   Freight interchanges: depots; terminals   Modal nodes
<b>FM1.1.3OP</b> Coordinate efficient and realistic planning of loads	Demand and supply patterns   Flow variation factors   Trade-off Analysis   Transit of goods   Infrastructure restrictions   Local legislation   Load type   Load attributes   Drivers hours   Safe loading and unloading
<b>FM1.1.4OP</b> Prepare resource plans for the movement of goods	Types and requirements of movement   Availability of resources: maintenance; crew; hours; cost; environmental

## Strategic

Competency	Knowledge areas
<b>FM1.1.1S</b> Interpret the role of freight transport in relation to current economies, trade and society	Urban freight transport   Alternative fuel technologies   Freight transport systems   Economic activity expansion and growth   Current trading patterns   Modal component resource requirements   Environmental implications of different modes
<b>FM1.1.2S</b> Consider the wider planning implications and requirements relating to a new service or adapting an existing service	Land planning   Cost planning   Resource planning   Environmental planning   Customs
<b>FM1.1.2S</b> Evaluate various ways of managing a distribution network to inform improvements in operational efficiency	Regulation   Freight transport controls   Freight operations: Global, national, local operations   Control techniques: Custom procedures, consignment and crew security   Incoterms

# Logistics and Freight Movement

## FM1 Principles of Logistics and Freight Operations

### FM1.2 Urban Freight Transport Operations

#### Awareness

Competency	Knowledge areas
<b>FM1.2.1A</b> Define urban freight summarising issues and challenges	The relationship between land use planning and transport   Changing patterns of demand for leisure   Rural and urban dwelling patterns   Changing employment patterns   Environmental impacts   Humanitarian logistics

#### Operational

Competency	Knowledge areas
<b>FM1.2.1OP</b> Evaluate freight traffic impacts when planning	Vehicle emissions   Autonomous vehicles   Load management   Surcharges   Social and economic   Safety   Speed   Noise   Air quality   Congestion   Maintenance of infrastructure   Humanitarian Logistics
<b>FM1.2.2OP</b> Coordinate stakeholder engagement for urban freight transport operations	Stakeholder groups   Urban freight   Humanitarian Logistics
<b>FM1.2.3OP</b> Innovate schemes and business models for urban freight	Consolidation   E-commerce   Sharing economy   (Joint) procurement plans and actions   Humanitarian Logistics

#### Strategic

Competency	Knowledge areas
<b>FM1.2.1S</b> Investigate advances and research in urban freight management and planning, apply relevant improvements and share best practice	Diversity of freight   Regional differences   Surveying techniques   Trends in freight transport operations   Problem solving in urban freight transport   Humanitarian Logistics



# Logistics and Freight Movement

## FM2 Regulation and Enforcement of the Movement of Goods

### FM2.1 Mechanisms for Controlling Freight Operations

#### Awareness

Competency	Knowledge areas
<b>FM2.1.1A</b> Outline the main regulatory and monitoring mechanisms related to the movement of goods	Types of movement: regular; non-regular; demand driven   Freight and society   Freight transport components   Market segments   Types of freight   Reasons for movement
<b>FM2.1.2A</b> Classify the types of costs incurred in freight transport services	Type of costs   Charges, tariffs and rates   Volume discounts   Differential pricing
<b>FM2.1.3A</b> Describe the systems used to record details of the movement of goods	Journey records   Transaction records   Budgeting   Cost controls and measures   IT systems

#### Operational

Competency	Knowledge areas
<b>FM2.1.1OP</b> Coordinate the systems used to track and manage vehicle journeys	Vehicle tracking systems   Vehicle features   Modal nodes
<b>FM2.1.2OP</b> Monitor documents used to record freight transactions	Trade payment terms   International commercial terms (Incoterms)   Insurance   Financial transactions
<b>FM2.1.3OP</b> Accurately classify goods using correct best practice and standards	Types of goods   Physical features   Constraints   Dangerous and hazardous goods   Specialist goods

#### Strategic

Competency	Knowledge areas
<b>FM2.1.1S</b> Analyse the impact of regulatory constraints and risk implications of the movement of dangerous, oversized or hazardous freight	Dangerous and hazardous goods   Specialist goods   Legislation   Regulation   Transport network   Humanitarian Logistics

# Logistics and Freight Movement

## FM2 Regulation and Enforcement of the Movement of Goods

### FM2.2 Incoterms and Contractual Obligations

#### Awareness

Competency	Knowledge areas
<b>FM2.2.1A</b> Describe the role and functions of Incoterms	International commercial transactions   International freight forwarding
<b>FM2.2.2A</b> Know the types of trade and terms of payment commonly in use for international commerce and their implications	Economic activity   Trading patterns   Value   Cultural, ethical and environmental considerations

#### Operational

Competency	Knowledge areas
<b>FM2.2.1OP</b> Oversee the process, controls and constraints of planning the movement of goods in the national and international contexts	Incoterms   International transactions   Trade patterns   Network planning   Modal choice   Legislation   Regulation   Types of goods
<b>FM2.2.2OP</b> Prepare relevant commercial documentation for an international commercial transaction	Contract management   Financial processes
<b>FM2.2.3OP</b> Coordinate adherence to the relevant regulations and controls for international transit	Transit   Regulations   International freight forwarding   Network planning   Legislation   Contract management   International logistics   International trade law   International commerce   Incoterms   Humanitarian Logistics   Cultural, ethical and environmental considerations

#### Strategic

Competency	Knowledge areas
<b>FM2.2.1S</b> Assess the risk in an international transaction and apply suitable contracts, arrangements and processes to mitigate	Insurance   Risk analysis   Contract management   International transactions   International standards

## FM2.3 Local, National and International Distribution Networks

### Awareness

Competency	Knowledge areas
<b>FM2.3.1A</b> Describe the role and functions of custom unions and free trade areas	International trade: Free trade areas, custom unions   Political, cultural, ethical and environmental considerations
<b>FM2.3.2A</b> Identify the organisations who regulate transport and enforce those regulations locally, nationally and internationally and the reasons for regulation	Geographical regulation: UK, Europe, International   Customs Authorities   Border Agencies   Custom tariffs   Modal choice

### Operational

Competency	Knowledge areas
<b>FM2.3.1OP</b> Know the range of statutory regulations and legal requirements when moving goods internationally	International trade   Regulations   Legislation
<b>FM2.3.2OP</b> Coordinate customs procedures and preparation and control of documentation for moving freight and crew across frontiers	Custom procedures   Resource management   Contract management   Document management

### Strategic

Competency	Knowledge areas
<b>FM2.3.1S</b> Compare the impact of regulations in custom unions and free trade areas on costs	Regulations   PESTLE analysis   International transactions
<b>FM2.3.2S</b> Assess the implications of quantity regulation and quality regulation for operators, vehicles/carrying units and transport staff on efficient operations	Dangerous and hazardous goods   Specialist goods   Quality control   Modal choice   Regulation   Goods characteristics   Driver welfare   Disruptors
<b>FM2.3.3S</b> Analyse the different sources and destinations of goods advising on appropriate use of resources	Resource management   Types of goods   Physical features   Constraints   Dangerous and hazardous goods   Specialist goods   Supply chain visibility   Network planning

# Planning in Transport

## TP1 Infrastructures and Network Solutions

### TP1.1 Transport Infrastructure and Network Resilience

#### Awareness

Competency	Knowledge areas
<b>TP1.1.2A</b> Describe transport infrastructure and how it applies to different modes	Modal choice: characteristics, vehicle features, modal nodes and links   Hierarchy of infrastructure

#### Operational

Competency	Knowledge areas
<b>TP1.1.1OP</b> Consider the resources and needs required by different types of infrastructure to meet passenger requirements	Suitability: accessibility; affordability; dependability; speed; frequency; comfort; convenience; capacity; safety and security   Infrastructure: interchanges; networks; environmental impact; capital and operating costs; features; amenities
<b>TP1.1.2OP</b> Identify options to meet needs and demands for travel and evaluate using relevant criteria	Transport demand   Travel demand   Modal choice: active travel; vehicular travel   Equality and accessibility   Construction design management   Health and safety
<b>TP1.1.3OP</b> Apply the principles of network design and the appropriate modelling techniques	Network design   Modelling and appraisal techniques   Problem solving

#### Strategic

Competency	Knowledge areas
<b>TP1.1.1S</b> Understand the impact and management of synergies and conflicts between passenger and freight transport within and between the modes	Infrastructure design   Infrastructure capacity   Synergies of different modes of transport   Conflicts of different modes of transport   Transport Planning   Economies of scale   Customer service
<b>TP1.1.2S</b> Define the role of infrastructure in providing the facilities needed for operation and identify the resources required by different types of infrastructure	Integrated development strategies   Transport planning   Intermodal and intramodal transport

# Planning in Transport

## TP1 Infrastructures and Network Solutions

### TP1.2 Transport Nodes and Connecting Links

#### Operational

Competency	Knowledge areas
<b>TP1.2.1OP</b> Carry out the relevant elements of travel planning	Travel planning   Travel choice   Travel patterns   Legislation and funding

#### Strategic

Competency	Knowledge areas
<b>TP1.2.1S</b> Critically analyse barriers faced in moving goods and people, with a view to improving the transport experience	Modal choice: behaviour, integration   Travel planning   Society   Legislation   Market segmentation   Customer service
<b>TP1.2.2S</b> Influence the integration and the interchange requirements needed to produce a “seamless journey”	Transport integration   Journey components   Costs   Legislation and funding

### TP1.3 Demand and Capacity Management

#### Awareness

Competency	Knowledge areas
<b>TP1.3.1A</b> Identify and describe the factors influencing different journey types and why people need to travel	Passenger types   Passenger characteristics   Passenger journey types   Service requirements   Service characteristics   Safety and security

#### Operational

Competency	Knowledge areas
<b>TP1.3.1OP</b> Demonstrate the principles of creating, measuring and satisfying demand	Travel patterns   Regular journeys   Resource management   Trend analysis   Travel behaviour   Forecasts   Data analysis
<b>TP1.3.2OP</b> Improve services through analysis of capacity and resource requirements of the transport infrastructure	Network operational problems: mobility; hazards; collision black spots; congestion; limitations; demand and supply conflicts   Performance monitoring   Resource management

#### Strategic

Competency	Knowledge areas
<b>TP1.3.1S</b> Analyse the relationship between supply and demand in a given transport system, understanding the economic concepts of supply and demand	Travel demand management tools   Transport patterns: leisure; employment; private sector   Transport trends

# Planning in Transport

## TP1 Infrastructures and Network Solutions

### TP1.4 Information Systems and Intelligent Mobility

#### Awareness

Competency	Knowledge areas
<b>TP1.4.1A</b> Describe the methods used to communicate information on routes and times to passengers	Communication   Information management   Technology   Travel planning

#### Operational

Competency	Knowledge areas
<b>TP1.4.1OP</b> Plan services using relevant systems to meet customer needs	Technology   Transport Planning   Customer Service   Market segmentation   Accessibility   Intelligent transport system
<b>TP1.4.2OP</b> Follow the principles of network design and the appropriate modelling techniques	Network design   Modelling and appraisal techniques

#### Strategic

Competency	Knowledge areas
<b>TP1.4.1S</b> Understand the importance of information provision and communication between the parties involved in passenger transport to improve usage	Communication   Information management   Technology   Travel planning   Stakeholder management: engagement; community



# Planning in Transport

## TP2 Planning within Transport

### TP2.1 Policy Planning for Transport

#### Awareness

Competency	Knowledge areas
<b>TP2.1.1A</b> Define the concepts of development planning, transport assessments and accessibility mapping	Transport planning principles and concepts   Travel choice   Travel behaviours   Freight and supply   Land use
<b>TP2.1.2A</b> Define the role of government in transport and understand the differences in planning legislation and policy	Translation of travel needs and demands into policy   Processes of performance monitoring and policy review

#### Operational

Competency	Knowledge areas
<b>TP2.1.10P</b> Manage approval procedures for a range of transport projects	Local authority powers   Planning requirements   Transport and Works Act   Equality Act   Public consultation   Public enquiries   Project Management
<b>TP2.1.20P</b> Implement policy reviews and monitor performance against expected outcomes	Government requirements   Targets   Local transport plans   Value   Policy review
<b>TP2.1.30P</b> Develop operating strategies that take advantage of the opportunities provided by government policy	UK policy and regulation   International governmental policy impact

#### Strategic

Competency	Knowledge areas
<b>TP2.1.1S</b> Analyse the modes of transport favoured by a particular political power-base and the effect this may have on the availability of subsidy	Political theories   The role of government   Pressure groups   Scenario planning
<b>TP2.1.2S</b> Analyse the level of influence held by different societal groups on the political decision-making process affecting transport policy making and the impact of pressure groups on a given transport decision	Social inclusion   Pressure groups   The role of government   Scenario planning
<b>TP2.1.3S</b> Review the relationship between transport planning and policy making, evaluating the impact of government and EU policy on transport planning and operations	UK Governmental policy   EU Governmental policy   International governmental policy   Transport policy   Planning and highways

# Planning in Transport

## TP2 Planning within Transport

### TP2.2 Transport and Spatial Planning

#### Operational

Competency	Knowledge areas
<b>TP2.2.1OP</b> Contrast the conflict of interest between business and population needs for transport	Market segmentation   Market analysis   Relationship between land-use and transport planning

#### Strategic

Competency	Knowledge areas
<b>TP2.2.1S</b> Evaluate the role of transport proposals within an integrated development strategy understanding the administrative framework of land-use and transport planning	Statutory planning systems and guidance   Transport integration   Transport systems

### TP2.3 Transport Planning

#### Awareness

Competency	Knowledge areas
<b>TP2.3.1A</b> Illustrate how passenger and goods transport planning and provision are linked and influence one another	Passenger and freight planning   Measures applied where linkage between passenger and goods transport occur

#### Operational

Competency	Knowledge areas
<b>TP2.3.1OP</b> Develop and implement a four-stage transport plan and apply appropriate analytical methods to given scenarios	Scenario Planning   Trip generation   Trip distribution   Modal split   Assignment
<b>TP2.3.2OP</b> Forecast the impact of change on transport networks, understanding the advantages and disadvantages of the different forecasting techniques	Economic concepts of demand and supply   Forecasting techniques   Transport modelling
<b>TP2.3.3OP</b> Develop plans from a given strategy using best practice	National, regional and local policy and strategy   Local transport plans   Government guidance   Transport investment and funding

#### Strategic

Competency	Knowledge areas
<b>TP2.3.1S</b> Analyse the demand for transport, understanding the nature and purpose of transport planning and ensuring access and mobility needs are considered	Travel demand management   Transport planning   Accessibility to transport and life chances

# Planning in Transport

## TP2 Planning within Transport

### TP2.4 Market Intelligence and Economic Appraisal

#### Strategic

Competency	Knowledge areas
<b>TP2.4.1S</b> Define strategies to promote economic development through the provision of transport	Economic concepts of supply and demand   Transport and economic development   Travel demand management
<b>TP2.4.2S</b> Analyse the transport market for goods and people to develop services better suited to the target market, understanding the concept of market segmentation	Market segmentation   Market analysis   Appraisal tools
<b>TP2.4.3S</b> Compare and contrast alternative funding mechanisms, understanding their strengths and limitations	Private funds   Public sector funds

“ Future supply chains will have to be very responsive, cope with mass customisation not mass production and most of all, be sustainable.

*Dave Manning FCILT  
Managing Director DM Integration Ltd*

# People Mobility

## PAS1 Passenger Transport Operation and Principles

### PAS1.1 Passenger Movement Principles

#### Awareness

Competency	Knowledge areas
<b>PAS1.1.1A</b> Describe passenger movement structure internationally, nationally, regionally and locally	Passenger management principles   Types of service   Categories of passengers   The role of public and private sector organisations   Components and functions of a passenger transport system
<b>PAS1.1.2A</b> Describe the nature of the demand for passenger transport	Passenger market segments   Demand service solutions   Service requirements   Categories of passengers

#### Operational

Competency	Knowledge areas
<b>PAS1.1.10P</b> Apply the appropriate standards of efficiency, safety and security when operating passenger services	Risk assessment   Safety and security precautions   Perceptions: modal choice; accidents; on-board; off-board   Health and safety   Equality Act
<b>PAS1.1.20P</b> Operate and utilise relevant passenger transport information systems	Intelligent transport information systems   Passenger experience   IT systems   Load consolidation   Route planning and scheduling
<b>PAS1.1.30P</b> Develop plans to meet demand for regular passenger transport operations	Scheduled and non-scheduled services   Sources of demand   Demand for international passenger movements   Constraints on route planning   Constraints on supply   Demand management: traffic management techniques; pricing; traffic control   Routes, schedules and timetables
<b>PAS1.1.40P</b> Implement and maintain customer/passenger focused quality management systems and strategies	Policy, public consultation and data collection techniques   Methods of evaluating planning and procuring transport services   Performance monitoring

#### Strategic

Competency	Knowledge areas
<b>PAS1.1.1S</b> Evaluate the mechanisms for maximising resource utilisation	Organising routes into networks   Planning vehicles   Planning staff duties

# People Mobility

## PAS1 Passenger Transport Operation and Principles

### PAS1.2 Modes, Modal Choice and Transport Integration

#### Awareness

Competency	Knowledge areas
<b>PAS1.2.1A</b> Describe and compare the characteristics of different modes of passenger transport	Physical characteristics   Operational characteristics   Capital   Modal integration   Inclusion and diversity
<b>PAS1.2.2A</b> Define the purpose and role of terminals and interchanges describing the spatial and land locations	Role and functions of interchanges   Role and functions of terminals   Facility requirements   Passenger requirements   Operator requirements

#### Operational

Competency	Knowledge areas
<b>PAS1.2.10P</b> Assess the main factors when planning interchanges in the transport network	Multimodal interchanges   Safety and security   Time   Capacity   Modal requirements   Maintenance   Whole life cycle
<b>PAS1.2.20P</b> Analyse the suitability of the various modes of transport for the movement of people	Travel planning: modal combination; availability; time tables; scheduling; requirements   Intramodal and intermodal techniques and practices   Alternative modes   Land use

#### Strategic

Competency	Knowledge areas
<b>PAS1.2.1S</b> Understand the drivers of passenger choice using appropriate market analysis	Market intelligence   Passenger types   Passenger characteristics   Passenger journey   Service requirements   Service characteristics   Safety and security   Inclusion and diversity
<b>PAS1.2.2S</b> Identify and analyse modal trends informing a modal split analysis	Transport planning   Modal choice   Accessibility and inclusion   Demographic statistics   Society   Modelling and appraisal



# People Mobility

## PAS2 Services and Interoperability

### PAS2.1 Passenger Movement Costing, Pricing, Obligations and Subsidies

#### Awareness

Competency	Knowledge areas
<b>PAS2.1.1A</b> Outline the funding streams available within different modes of passenger transport operations	Revenue   Funding streams   Social inclusion   Relationships between cost, pricing and profit   Stakeholder and requirement
<b>PAS2.1.2A</b> Outline the aims and objectives of the public sector, the private sector and private investors within the passenger transport industry	Revenue: controls and budgets   Social inclusion   Demand control   Pricing

#### Operational

Competency	Knowledge areas
<b>PAS2.1.1OP</b> Apply the different methods of calculating charges to customers and be able to differentiate between charges using given cost data	Principles of generalised cost   Pricing   Cost data   Economics and appraisal
<b>PAS2.1.2OP</b> Know the accounting principles and financial control methods used by passenger transport operations	Principles of generalised cost   Financial controls   Accounting principles

#### Strategic

Competency	Knowledge areas
<b>PAS2.1.1S</b> Summarise the methods used to measure operational performance, differentiated pricing of products to create or control demand and how to identify and control peak demand	Key Performance Indicators (KPIs)   Pricing   Demand Management

# People Mobility

## PAS2 Services and Interoperability

### PAS2.2 Passenger Transport Ownership, Control, Policies and Legislation

#### Awareness

Competency	Knowledge areas
<b>PAS2.2.1A</b> Identify organisations that regulate transport into and out of the UK describing their role and function	Customs and immigration   Quantity regulation and quality regulation   Vehicles/carrying units and transport staff   Regulatory bodies: international and national

#### Operational

Competency	Knowledge areas
<b>PAS2.2.10P</b> Apply, where relevant, the legal controls and constraints of national and international movements of people	Legislation   International conventions   International transport   Legal requirements   Customs   Regulation   Efficiency, safety and security

#### Strategic

Competency	Knowledge areas
<b>PAS2.2.1S</b> Analyse the relevant activities of local authorities in terms of impact on passenger transport provision	Local Authorities   Regulation   Fares and ticketing   Information and marketing   Infrastructure   Routes



“Transport planners have plenty to juggle, but we know our transport systems are fundamental to the success of modern-day communities.

**Daniel Parker-Klein MILT**  
Director of Public Policy and Communications,  
The Chartered Institute  
of Logistics and Transport  
Director, PTRC Education  
& Research Services Ltd

# People Mobility

## PAS2 Services and Interoperability

### PAS2.3 Access and Inclusion through Transport

#### Awareness

Competency	Knowledge areas
<b>PAS2.3.1.A</b> Describe the role of transport in society and the interaction between the development of transport and of society	Passenger journey   Passenger characteristics   Social inclusion   Societal changes   Accessibility   Equality and diversity

#### Operational

Competency	Knowledge areas
<b>PAS2.3.10P</b> Identify the factors that impact on transport needs	Modal journey   Demographics   Geography and land use   Demand and supply   Environment   Accessibility   Mobility   Social Inclusion

#### Strategic

Competency	Knowledge areas
<b>PAS2.3.1S</b> Investigate the link between access to transport and life chances	Quality of life   Accessibility   Social inclusion   Passenger journey   Equality and diversity
<b>PAS2.3.2S</b> Analyse the effect of transport policy on social exclusion	Policy   Social inclusion   Society: socio-economic grouping; historic activity; current and future trends   Accessibility   Mobility
<b>PAS2.3.3S</b> Research the interaction between the evolution of transport, society and how changes in society affect transport decisions	Society: socio-economic grouping; historic activity; current and future trends

# Leadership, Management and Engagement

## LE1 Leadership and Management

### LE1.1 Leadership, Organisational Culture and Change Management

#### Awareness

Competency	Knowledge areas
<b>LE1.1.1A</b> Reflect on performance, identifying and acting on learning and development needs	Tools to analyse own performance   Professional development planning
<b>LE1.1.2A</b> Summarise how a business develops, communicates and deploys its policies, strategies and plans throughout the organisation	Types of management structure   Strategic roll out   Mission and vision statements   Objectives, goals and measures   Communication techniques

#### Operational

Competency	Knowledge areas
<b>LE1.1.1OP</b> Empower individuals to perform, encouraging and supporting their use of improvement techniques	Concepts and implications in the context of continuous change   Correct leadership style for given situations   Building high performing teams   Continuous improvement techniques
<b>LE1.1.2OP</b> Recognise signs of conflict and take preemptive action to address potential conflict situations that could impact operational effectiveness	Aims of conflict management   Formal dispute resolution   Conflict management strategies   Change and transition curve   Conflict analysis
<b>LE1.1.3OP</b> Develop and implement organisational strategy and plans	Managing change   Impact of different business models and propositions   Strategic planning tools and theories   Ethical and value based leadership practice   Organisational vision, culture and values   Horizon scanning and conceptualisation   Disruptive technologies

#### Strategic

Competency	Knowledge areas
<b>LE1.1.1S</b> Demonstrate an understanding of multi-generational workforce trends	Needs of the different generations to adapt organisational strategy, policies, procedures and processes accordingly

# Leadership, Management and Engagement

## LE1 Leadership and Management

### LE1.2 Performance Measurement and Management

#### Awareness

Competency	Knowledge areas
<b>LE1.2.1A</b> Know the types of targets and indicators that are used to monitor performance	Reasons why performance must be measured   Measuring your own performance   Self-assessment and reflection   Parameters

#### Operational

Competency	Knowledge areas
<b>LE1.2.10P</b> Coordinate the use of management information in the development of organisational objectives	Business reporting tools and methodology   Balanced scorecards   Effective parameters
<b>LE1.2.20P</b> Manage the training and development of teams and individuals using appropriate tools and methodologies	Training needs analysis   Levels of competence   Scope of accountability   Prioritisation of needs   Learning styles   Administration of training   Training evaluation
<b>LE1.2.30P</b> Oversee a fair and objective performance management process ensuring performance is reviewed using effective, valid and reliable data	SMART objectives aligned   Individual personal development   Benchmarking techniques   Reward and recognition practices   Counterproductive behaviours   Key Performance Indicators (KPIs) to achieve departmental and organisation goals

#### Strategic

Competency	Knowledge areas
<b>LE1.2.1S</b> Monitor progress and trends towards the achievement of strategic objectives	Accurate, relevant and consistent reporting of metrics   Needs and limitations of the market, environment and stakeholders

# Leadership, Management and Engagement

## LE1 Leadership and Management

### LE1.3 Costing, Finance and Resourcing

#### Awareness

Competency	Knowledge areas
<b>LE1.3.1A</b> Understand the need and impact of sound financial mechanisms for organisations to succeed and remain competitive	Components and processes for commercial transactions   Summarise the principles of budgets, variance and cash flow

#### Operational

Competency	Knowledge areas
<b>LE1.3.10P</b> Operate effective and compliant financial reporting	Legal requirements   Budget control methodology   Income and expenditure   Profit and loss
<b>LE1.3.20P</b> Develop and manage specifications for procuring resources, gaining support from colleagues and specialists where necessary	Contracts and statements of work   Procurement best practice   Acquisition process   Procurement life cycle   Procurement performance   Public procurement
<b>LE1.3.30P</b> Develop and agree budgets with accurate forecasting	Cash flows   Assets   Liabilities   Sales   Surplus   Forecasting   Monitoring techniques to apply any re-forecast   Cost and management accounting   Capital expenditure

#### Strategic

Competency	Knowledge areas
<b>LE1.3.1S</b> Analyse the factors associated with various trading methods and risk to financial security	The role of legislation and implications of global trade   Applying economic theory to decision-making   Influence financial strategies   Tools used to trade and move money securely



# Leadership, Management and Engagement

## LE2 Customer Engagement

### LE2.1 Customer Service and Relationship Management

#### Awareness

Competency	Knowledge areas
<b>LE2.1.1A</b> Identify the need for organisations to build and maintain relationships with customers	Characteristics of different types of customers and their requirements   Measuring effective customer service   What is 'good' service?

#### Operational

Competency	Knowledge areas
<b>LE2.1.10P</b> Operate an effective customer service process with Service Level Agreements (SLAs)	Responses to change in service from different customer groups   Appropriate tools to enhance the customer experience   Communicate customer needs and wants
<b>LE2.1.20P</b> Influence stakeholders to achieve collaborative outcomes, using appropriate strategy, tactics and behaviours	Engagement techniques   Planning to influence   Influencing techniques   Commercial awareness   Negotiating techniques
<b>LE2.1.30P</b> Coordinate effective management of Customer Relationship Management (CRM)	Complex relationships across multiple and diverse stakeholders   Stakeholder mapping and management   Relevant models for the analysis of strategic relationships   Software systems
<b>LE2.1.40P</b> Compile and present information and updates to internal and external stakeholders	Using common business software   Presentation skills to deliver communications   Data vs Information   Effective communication methods
<b>LE2.1.50P</b> Operate adequate and effective processes for handling customer concerns	Complaint management techniques   Quality management systems   Effective escalation processes

#### Strategic

Competency	Knowledge areas
<b>LE2.1.1S</b> Analyse customer insight data to determine and drive customer service outcomes to improve customer relationships.	Feedback   Survey methodology   Data collection techniques   Reviews and social media

# Leadership, Management and Engagement

## LE2 Customer Engagement

### LE2.2 Marketing and Market Principles

#### Awareness

Competency	Knowledge areas
<b>LE2.2.1A</b> Identify the objectives of marketing activities for organisations in the public, private and not-for-profit sectors	Internal dependencies that influence the success of marketing, eg IT, finance, sales, operations   Mission, vision and values   Unique Selling Points (USPs)
<b>LE2.2.2A</b> Describe brand theory	Innovation in product and service design   Brand awareness   Retail brand ethos and values   Brand management   Perceived value   Target markets   Brand equity

#### Operational

Competency	Knowledge areas
<b>LE2.2.10P</b> Practice the principles of product development and maintaining product/service portfolios	Legislative and regulatory frameworks affecting marketing operations   Market research   Product life cycles   Future proofing   Competitive markets
<b>LE2.2.20P</b> Contribute to marketing activity plans	Marketing tactics to acquire or retain one or more customer segments   Analysis of external and internal marketing data to inform discussions about planning   Marketing principles and methodology

#### Strategic

Competency	Knowledge areas
<b>LE2.2.1S</b> Research the customer journey and the customer segments relevant to their market	Target audience decision making process   How the customer journey is impacted   Current and future customer needs and purchasing trends   Marketing communication channels and media   Research techniques and analysis
<b>LE2.2.20P</b> Investigate the impact of brand and brand values on employee and customer engagement and understanding	Research techniques and analysis   Market leaders and best practice principles   Management methodologies   Corporate governance



# Data and Technology

## DT1 Data Collection, Analysis and Forecasting

### DT1.1 Data Collection, Analysis and Forecasting

#### Awareness

Competency	Knowledge areas
<b>DT1.1.1A</b> Define data and information	Classify data formats, structures and data delivery methods including “unstructured” data   Identify different types of data

#### Operational

Competency	Knowledge areas
<b>DT1.1.1OP</b> Identify relevant business data that needs to be collected and transitioned from a range of data systems	Best practice and processes for data quality checking and cleansing   Routine data analysis tasks   Collation and evaluation of organisationally relevant information   Tools used for data integration   Identified intelligence gaps
<b>DT1.1.2OP</b> Understand the variety of data available that aids problem solving and decision making and improves organisational performance	Ethically sourced data   Open source data

#### Strategic

Competency	Knowledge areas
<b>DT1.1.1S</b> Encourage appropriate intelligence collection that complies with legal frameworks for sensitive and classified material	Ways to improve behavioural change   Understanding of legal case studies and transitional impact



# Data and Technology

## DT1 Data Collection, Analysis and Forecasting

### DT1.2 Data Handling – Methodologies and Data Presentation

#### Awareness

Competency	Knowledge areas
<b>DT1.2.1A</b> Define the principles of data driven analysis and how to apply them	Data structures   Database system design, implementation and maintenance

#### Operational

Competency	Knowledge areas
<b>DT1.2.2OP</b> Apply industry-standard tools to undertake analytical investigations of data	Variety and range of data   Data quality issues   Benefits and value of analytics techniques   Data visualisation   Operational elements of statistical analysis

#### Strategic

Competency	Knowledge areas
<b>DT1.2.1S</b> Analyse data handling models to inform and improve organisational outcomes	Reports to understand the threats, harm and risks faced by organisations

### DT1.3 Data Governance – Legal, Social and Ethical

#### Awareness

Competency	Knowledge areas
<b>DT1.3.1A</b> Identify how your role effects and is affected by the requirements of GDPR within your organisation	Ethical data usage   Legislation and regulations

#### Operational

Competency	Knowledge areas
<b>DT1.3.1OP</b> Interpret and apply data and information security standards, policies and procedures	Managing sensitive material   Controls for internal delegation   Control of information and records
<b>DT1.3.2OP</b> Ensure organisational compliance with regulations, standards and codes of good practice	Records management   Information assurance and data protection   Protect against and mitigate physical and cyber security risks   ISO standards

#### Strategic

Competency	Knowledge areas
<b>DT1.3.1S</b> Investigate the implications for loss of sensitive material to mitigate against and improve processes relating to effective data management	Methods required to protect against physical and cyber security risks   Best practice   ISO standards

# Data and Technology

## DT2 Technology, Modelling and Simulation

### DT2.1 Technology, Automation and Innovation

#### Awareness

Competency	Knowledge areas
<b>DT2.1.1A</b> Identify the main elements used in Information Communications Technology (ICT)	Technology in communications: network components; applications; systems; devices; platforms; software   Digital Technology

#### Operational

Competency	Knowledge areas
<b>DT2.1.1A</b> Contribute to workplace transformations of technology based business change programmes	Understanding of the business context   Benefits of automation   Project methodology   Cultural change

#### Strategic

Competency	Knowledge areas
<b>DT2.1.1S</b> Investigate how innovation and digital technology impact on data and knowledge management to inform business decision-making	Knowledge creation   Technology infrastructure   Big data   Artificial Intelligence (AI)   Smart technologies   Apps
<b>DT2.1.2S</b> Evaluate the impact of advances in systems technology	Globalisation   Society   Regulation   Detrimental Effects   Monitoring   Ethics   Collaboration



# Efficiency, Quality and Risk

## EQ1 Operational Effectiveness

### EQ1.1 Continuous Improvement, Optimisation and Lean Principles

#### Awareness

Competency	Knowledge areas
<b>EQ1.1.1A</b> Define business use and application of Continuous Improvement (CI) techniques	CI Principles   Overview of improvement techniques and general uses   Outputs of CI

#### Operational

Competency	Knowledge areas
<b>EQ1.1.1OP</b> Demonstrate application of business improvement concepts to a wide range of business functions	Process thinking to improve performance   Effective root cause analysis and mistake proofing techniques   Evidence-driven problem definition   Statistical process control   Lean principles and methodology
<b>EQ1.1.2OP</b> Use qualitative and quantitative analysis of data to carry out benchmarking to support an improvement programme	Statistical techniques   Type of data   Scales   Correlation   Types of averages   Benchmarking methodology

#### Strategic

Competency	Knowledge areas
<b>EQ1.1.1S</b> Promote ways that an organisation can improve customer insight to enable focused improvement activities	Feedback mechanisms   Target market   Customer value data   Stakeholder communication   Constraints

# Efficiency, Quality and Risk

## EQ1 Operational Effectiveness

### EQ1.2 Project Management

#### Awareness

Competency	Knowledge areas
<b>EQ1.2.1A</b> Define the principles of project management	Project management   Key steps a project moves through

#### Operational

Competency	Knowledge areas
<b>EQ1.2.10P</b> Prepare a business case to secure the provision of resources needed for projects and initiatives	Research, assess and prioritise stakeholder needs   Dependencies and constraints   Define project outcomes
<b>EQ1.2.20P</b> Use widely recognised project management tools ensuring compliance of agreed contractual obligations for the provision of goods and services, managing any variances	Project appraisal and evaluation   Structured project reviews   Change control process   Project appraisal and evaluation   Contractual obligations for the provision of goods and services

#### Strategic

Competency	Knowledge areas
<b>EQ1.2.2S</b> Assess organisational maturity, identifying additional capabilities	Performance assessments   Maturity grids   Standard frameworks   Setting base standards   Business process optimisation

# Efficiency, Quality and Risk

## EQ1 Operational Effectiveness

### EQ1.3 Quality Management

#### Awareness

Competency	Knowledge areas
<b>EQ1.3.1A</b> Describe the concept of quality management in a business	Key aspects of the quality improvement cycle   Total Quality Management (TQM)

#### Operational

Competency	Knowledge areas
<b>EQ1.3.1OP</b> Operate Total Quality Management (TQM) philosophies and frameworks	Tools and techniques of TQM
<b>EQ1.3.2OP</b> Select and use appropriate tools and techniques for controlling, improving and measuring quality	Implementation of certified management systems   KPIs   Benchmarking   Best practice   Scorecards

#### Strategic

Competency	Knowledge areas
<b>EQ1.3.1S</b> Embed quality management into the culture of an organisation	Core values   Leadership emphasis   Message credibility   Peer involvement   Encouraging employee ownership of quality issues   Promoting empowerment

“Technology will dramatically change the profession. If you’re not embracing technology properly, then the competitors that do are the ones who are going to win.”

*Daniel Hulme  
CEO, Satalia*

# Efficiency, Quality and Risk

## EQ2 Risk Management

### EQ2.1 Risk Identification, Reduction and Safety Management

#### Awareness

Competency	Knowledge areas
<b>EQ2.1.1A</b> Describe the main health and safety considerations in logistics and transport operations	Work related road safety   Lifting and material handling aids   Shift work   Manual handling   Specialist goods handling   Safety of loads on vehicles   Working at height   Site transport
<b>EQ2.1.2A</b> Summarise the importance of Health, Safety and the Environment (HSE) at work and how these contribute to achieving customer service standards	Scope and nature of workplace health and safety   Reasons for practicing good standards of health and safety   Role of workplace health, safety and fire law   Enforcement agencies and possible enforcement actions   Internal and external sources of health and safety information

#### Operational

Competency	Knowledge areas
<b>EQ2.1.10P</b> Operate to the requirements of the global risk management standard ISO31000 – principles, process and framework	Types of risks   Attributes of risk management   Governance   Process controls   Leadership   Criteria for success   Human and cultural factors   ISO standards
<b>EQ2.1.20P</b> Support relevant legal and regulatory requirements governing the safe running of organisations	Difference between 'risk' and 'hazard'   Purposes of risk assessment   HSE roles and responsibilities of relevant parties   Systems to effectively manage health and safety   Reasons for good standards: moral, legal, financial

#### Strategic

Competency	Knowledge areas
<b>EQ2.1.1S</b> Oversee compliance to the legal responsibilities of logistics employers and employees relating to health and safety	HSE management systems   Role and content of a health and safety policy   Effective hazard identification, risk assessment and control   Effective communication with workers   Monitoring and checking health and safety performance through techniques: accident data; inspections; surveys; audits
<b>EQ2.1.2S</b> Proactively identify risk and create plans for mitigation, identifying barriers/challenges and how to overcome them	Risk sources   Potential events, their consequences and their likelihood   Control Principles   Human and cultural factors   Evaluation





**The Chartered  
Institute of Logistics  
and Transport**

The Chartered Institute of Logistics and Transport (UK)

Earlstrees Court, Earlstrees Road

Corby, Northamptonshire

NN17 4AX, United Kingdom

T: +44 (0)1536 740104

E: [pd@ciltuk.org.uk](mailto:pd@ciltuk.org.uk)

**ciltuk.org.uk** >>



[linkedin.com/company/ciltuk](https://www.linkedin.com/company/ciltuk)



[facebook.com/cilt.uk](https://www.facebook.com/cilt.uk)



[twitter.com/ciltuk](https://twitter.com/ciltuk)



[youtube.com/user/ciltmedia](https://www.youtube.com/user/ciltmedia)

CILT(UK) is a registered charity in England and Wales (1004963).

April 2020