



National Occupational Standard –
Commercial Transport Truck Operator



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BACKGROUND

To support the trucking and logistics industry in their use of National Occupational Standard for Commercial Transport Truck Operators (NOS-O), supplemental resources have been developed.

Visit truckinghr.com to access them all.

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INTRODUCTION

Occupational standards define the knowledge and skills required for effective workplace performance in various occupations. They specify what a person must know and do to successfully carry out the functions of a specific job in a typical work environment. Occupational standards are specific and focus mainly on knowledge and skill competencies but may also address attitude and motivation, and include statutory requirements.

This National Occupational Standard (NOS) defines the knowledge, skills, and abilities (“competencies”) that are necessary to be a commercial transport truck operator.

The occupation employs more than 300,000 Canadians – approximately 1.5% of the nation’s labour force.

The workplace of a commercial transport truck operator may be a motor carrier whose primary business activity involves moving cargo, or a business which operates commercial vehicles to support other activities.

The competencies required for this occupation vary significantly depending on the workplace, industry, and commodities involved. This standard identifies the competencies that are needed in most workplaces and typically acquired by operators in the first six to 24 months of employment.

Individuals who possess the competencies as defined in this standard can:

- Operate a straight truck or tractor-trailer with a Gross Vehicle Weight (GVW) of up to 45,000 kg (100,000 lb.).
- Transport freight contained within a cargo van-style trailer.
- Handle general freight, Less-than-Truckload (LTL) or loose freight, tailgate deliveries, intercity pickup and delivery, inner-city travel, and potentially heated (but non-refrigerated) loads.
- Operate on urban, regional, and national roads.
- Operate in good to moderate weather conditions.

The content of this standard was developed by industry experts with input from employers, insurance representatives, and industry stakeholders.

What’s in this NOS?

This standard consists of three general competency elements, including:

- 1 Supportive Competencies: Interpersonal, workplace, and other non-driving competencies that are often described as “soft skills.”



- 2 Functional Competencies: Non-driving job functions and equipment operations.
- 3 Driving Competencies: The driving-specific competencies which apply to a straight trucks, tractor-trailers, or both.

The three competency elements include 29 individual competency blocks, which are further divided into required knowledge and/or task competencies. Knowledge competencies are described in ways that can be measured through a written test. Task competencies are described in ways that can be observed and evaluated.

NOTE: Content has been numbered for reference purposes only. The order and length of any content does not imply significance. In select cases, however, the numbers are used to highlight the sequence of related steps.

How can this NOS be used?

This NOS can be useful to a host of audiences — HR professionals, employers, curriculum developers, training providers and governments — interested in developing training programs, skills evaluations, knowledge tests, and more.

THRC uses the NOS as a base for creating practical downloadable resources to support employers and others involved in the development and or delivery of entry level or occupational level training. These resources showcase how the NOS can be used to help the industry ensure operators have the competencies they need to be successful in the profession.

There are over a dozen resources available, including guides for setting up or evaluating occupational level training, guides for supporting driver training, and a suite of tools to support the selection and development of driver instructors.

To access these resources, visit truckinghr.com.

Acquiring the competencies of this NOS

Operators acquire the NOS competencies in two major stages:

During **Stage 1**, commercial transport truck operators work to obtain all the competencies outlined in the NOS. During this stage, they acquire these competencies in two phases:

- **Entry-Level Training (MELT/ ELT) Phase:** In this phase a person begins acquiring enough of the NOS competencies to obtain a commercial driver licence (CDL) and to begin working as a truck driver.
- **Occupational Level Training (OLT) Phase:** In this phase, a truck driver applies NOS competencies in real-life situations while working as a truck driver to fully acquire those competencies. This phase of competency development is often referred to as “finishing” and takes place after the ELT phase.

These two phases are generally detached from one another, but in some jurisdictions the training is combined and administered through a single program. Where the phases are separate, traditional truck driving schools almost exclusively deliver the first phase while workplaces offer the second.



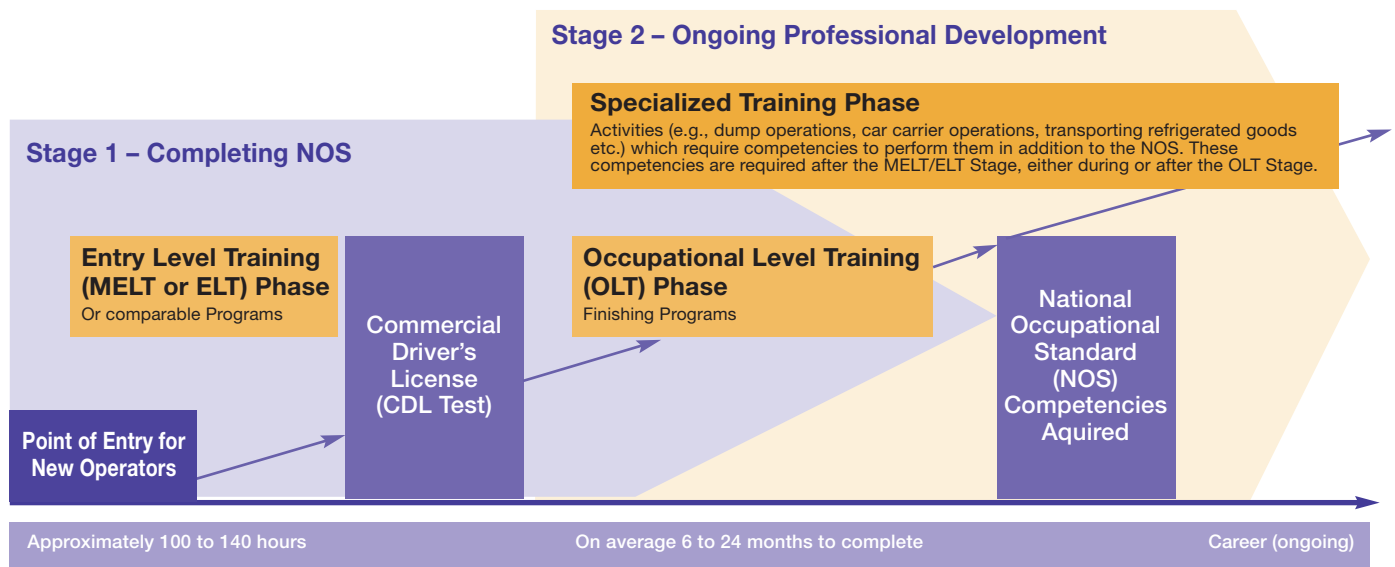
Stage 2, extends through the entire length of a truck driver’s career, after they acquire a CDL. During this stage, operators develop professionally above and beyond the competencies outlined in the NOS and often acquire supplementary knowledge relating to various commodities, operation settings, routes, etc. including the examples listed alphabetically below:

- Aggregate or dump operation.
- Bin, lugger, or roll-on/roll-off operation.
- Car carrier operation.
- Cargo or dry bulk tank operation.
- Crane or auxiliary vehicle (e.g., moffet, hitchhiker) operation.
- Crossing an international border.
- Ferry crossing.
- Flatbed operation.
- On/off road operation (e.g., logging, petroleum).
- Operating a long combination vehicle.
- Operating double trailers.
- Operating in extreme weather.
- Operating in mountainous terrain.
- Owner-operator or leased-operator engagement.
- Transporting dangerous goods (as defined by the need for a TDG certificate)
- Transporting intermodal containers
- Transporting livestock.
- Transporting overweight or over dimensional loads.
- Transporting refrigerated good

See Graph #1 – Commercial Transport Truck Operator – Training Stages.



GRAPH #1 - Commercial Transport Truck Operator – Training Stages



NOTE: “Workers” in this document refers to Commercial Transport Truck Operators in a workplace setting.

NOTE: “Highway” in this document refers to all highways, roads and streets.

ELEMENT 1 SUPPORTIVE COMPETENCIES

Supportive competencies include interpersonal, workplace and other non-driving occupational requirements that are often described as “soft skills.”

ELEMENT 1 includes:

BLOCK 1 Understand the Workplace

BLOCK 2 Relate and Interact in the Workplace

BLOCK 3 Maintain Health, Wellness and Relationships

BLOCK 4 Understand Basic Regulatory Requirements

BLOCK 5 Communicate in the Workplace

BLOCK 6 Use Workplace Documents

BLOCK 7 Complete Numeracy Tasks

BLOCK 8 Operate Computer and Electronic Devices



ELEMENT 1: Supportive Competencies

BLOCK 1: UNDERSTAND THE WORKPLACE

KNOWLEDGE: Know that employers and workers must comply with government regulations and standards, and that employers can establish additional workplace-specific practices, procedures, and policies to support business objectives.

This means the commercial transport truck operator knows:

- 1** Employers must comply with government regulations and standards that apply to occupational health and safety, employment, transportation, and business operations. Examples of these regulations include: the Canada Labour Code, National Safety Code, Transportation of Dangerous Goods Act, provincial Occupational Health and Safety acts, etc.
- 2** Workers must comply with government regulations and standards that apply to worker obligations, rights, and responsibilities; employment; health and safety; labour agreements; etc.
- 3** Gaining and sustaining employment may require, security screening and background checks; regular appraisals and performance reviews; pre-employment, periodic, or post-incident drug and alcohol testing; etc. Workers may also need to acknowledge that they understand and accept workplace standards and policies.
- 4** Gaining and sustaining employment will generally require medical clearance based on a specific type of driver's licence and may also involve a physical assessment or fitness screening.
- 5** Some medical conditions – such as heart conditions, epilepsy, some types of diabetes, etc. -- may prohibit a driver from holding specific types of commercial driver's licences.
- 6** Expectations of worker performance are usually defined through workplace practices, procedures and policies that may include, corrective action processes, consequences for failing to adhere to requirements, and steps that can lead to dismissal.
- 7** Specific workplace practices, procedures and policies vary in scope and application, and may be written or unwritten.
- 8** Workers are sometimes expected to rely heavily on their personal knowledge of regulatory or compliance requirements.
- 9** Workers must identify workplace hazards according to workplace practices, procedures and policies and hazards which are communicated through methods such as Workplace Hazardous Materials Information System (WHMIS), and labels and Safety Data Sheets (SDS), used in the system known as the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) for Workplace Chemicals.
- 10** Some cargo is defined through regulations as “dangerous goods”. This cargo can only be handled and transported by workers who have been specifically trained and certified. All workers must recognize the symbols and methods used to identify “dangerous goods”.
- 11** Workers must develop a clear understanding of workplace practices, procedures, and policies -- and take steps to recognize and resolve situations in which their understanding is unclear.

ELEMENT 1: Supportive Competencies

BLOCK 2: RELATE AND INTERACT IN THE WORKPLACE

KNOWLEDGE: Knowledge: Effectively interact and speak with coworkers, supervisors, customers, suppliers, enforcement officials, and the public.

This means the commercial transport truck operator will:

- 1** Practice techniques for social, verbal, and electronic interactions that positively impact the worker's success.
- 2** Practice techniques including, honesty, respect, and integrity in workplace interactions with coworkers, supervisors, customers, suppliers, other motorists, regulatory officials, and the public.
- 3** Demonstrate awareness that interactions involving spoken words include specific words as well as the accompanying tone of voice, context, gestures, and body language.
- 4** Know that interactions can consist entirely of gestures and body language, without exchanging spoken words.
- 5** Know that actions and statements can be misinterpreted and even considered offensive by individuals who have different cultural experiences, beliefs, or backgrounds.
- 6** Know the types of avoidable actions, behaviours or attitudes that can cause workplace conflict including, disrespect, disagreement, discrimination, harassment, racism, intolerance, being judgmental, being violent, being outspoken, being overbearing, showing favoritism, making ignorant statements, etc.
- 7** Know that there is value in greeting a person or group before interacting on any issue.
- 8** Know that teamwork in the workplace supports the success of the employer and workers.
- 9** Use techniques for effectively approaching supervisors to help resolve workplace difficulties, and follow a process if the difficulties are not resolved.
- 10** Know that regulations require employers and workers to provide a workplace in which everyone feels secure and free of unnecessary conflict.
- 11** Know that deliberate will and action in every interaction are needed to avoid conflict.
- 12** Comply with workplace practices, procedures, and policies that workers must follow when dealing with internal contacts such as coworkers, supervisors, customers and suppliers, and external contacts such as other motorists, officials, media, and the public.
- 13** Know that employers and workers must be sensitive to cultural diversity and realize that cultural differences require a gentle and careful reaction when encountering any misunderstanding.
- 14** Know that personal appearance and behavior can affect an employer's corporate image.
- 15** Act professionally during commercial vehicle inspections and cooperate and follow instructions when interacting with enforcement officials.

ELEMENT 1: Supportive Competencies

BLOCK 3: MAINTAIN HEALTH, WELLNESS AND RELATIONSHIPS

KNOWLEDGE AND TASKS: Know the importance of being “fit for work” – and generally maintains a healthy lifestyle, and balances personal and work life, to contribute to overall occupational success.

This means the commercial transport truck operator will:

- 1** Know that some types of driving require significant amounts of time away from home. This schedule can cause work-related and personal stress and can affect family relationships.
- 2** Know that lifestyle and dietary factors can influence fatigue, performance, physical fitness, and agility.
- 3** Know that each worker’s emotional state will affect their tolerance for dealing with stress, the decisions they make, and their ability to properly do a job. Workers should assess their emotional state before deciding if they are ready to drive.
- 4** Know that the effects of alcohol, over-the-counter drugs, prescription drugs, legal and/or illegal drugs can continue before, during and after work, and that there can also be consequences for using these substances.
- 5** Know that operators may be required to enter a drug and alcohol testing program.
- 6** Use personal strategies to recognize and alleviate the causes and symptoms of stress that may affect performance at work.
- 7** Use personal strategies to recognize and combat fatigue.
- 8** Carefully plan work and know when and where breaks can be taken.
- 9** Use procedures and proactive techniques such as stretching and proper lifting methods that can prevent workplace injuries.
- 10** Plan suitable sleep and other breaks to avoid fatigue while completing driving responsibilities.
- 11** Address occupational factors which contribute to health-related challenges such as obstructive sleep apnea, back strain, injuries caused by slips, trips, and falls, etc.
- 12** Practice techniques for remaining physically, mentally, and emotionally “fit for work”.
- 13** Utilize personal hygiene habits that positively affect workplace relationships.
- 14** Know that mental health is an issue that can affect a person's readiness and ability to drive safely, and to seek help if needed.
- 15** Identify signs of poor mental health.
- 16** Identify ways to access mental health resources in the workplace and/or through public services.

ELEMENT 1: Supportive Competencies

BLOCK 4: UNDERSTAND BASIC REGULATORY REQUIREMENTS

KNOWLEDGE: Know the purpose, fundamental structure, and basic content of regulations that apply to commercial vehicle operations.

This means the commercial transport truck operator knows:

- 1** The National Safety Code is a model for Canadian jurisdictions to regulate the safe operation of commercial vehicles.
- 2** Legislation and regulations may affect operations within each jurisdiction. The applicable rules can vary, even during the same workday, depending on where a driver is working.
- 3** Commercial vehicles are generally defined by weight. Individual Canadian jurisdictions can set unique weight thresholds.
- 4** Different classes of driver's licences apply to different types of vehicles. Required licence classes vary between Canadian jurisdictions.
- 5** A driver's licence may require specific endorsements for certain types of commercial vehicles and operations.
- 6** Personal driving history can affect the status of a worker's commercial licence and ability to drive commercial vehicles.
- 7** Government agencies develop and retain records of driver incidents and infractions.
- 8** Government agencies develop and retain records of commercial motor carrier incidents and infractions.
- 9** Medical condition and history affect the type of licence a driver can hold.
- 10** Regulations apply to the movement of vehicles on all public roads and highways.
- 11** Regulations apply to the mechanical condition of commercial vehicles.
- 12** Regulations apply to the allowable weights and dimensions of commercial vehicles.
- 13** Regulations apply to the securing of cargo transported by commercial vehicles.
- 14** Regulations apply to the air brake systems used on commercial vehicles.
- 15** Regulations apply to the daily inspection of commercial vehicles.
- 16** Regulations apply to the transport of materials and products that are defined as "dangerous goods".
- 17** Regulations apply to the hours a person is permitted to drive a commercial vehicle, be on duty, and be off duty.
- 18** Electronic devices are mandatory for monitoring, recording, and reporting the work activities of commercial transport truck operators.
- 19** Commercial vehicles may be restricted from operating on certain routes, or at certain times, due to their weight, licence, size, or commodity being transported.

ELEMENT 1: Supportive Competencies

BLOCK 5: COMMUNICATE IN THE WORKPLACE

KNOWLEDGE AND TASKS: communicate effectively with internal and external contacts in the workplace.

This means the commercial transport truck operator will:

- | | |
|-----------|--|
| 1 | Receive, understand, and follow written and verbal instructions from supervisors, dispatchers, and other workplace staff. |
| 2 | Comply with workplace practices, procedures and policies that may include methods that workers must adopt for effectively and professionally interacting with people including police, enforcement personnel, the media, public, other motorists, etc. |
| 3 | Seek clarification whenever they are uncertain about instructions, expectations, procedures, or policies. Adopt and consistently follow standard workplace protocols when using written or digital communication and recording systems, devices, and documents, as well as other new technology. |
| 4 | Adopt and consistently follow standard workplace protocols when using written or digital communication and recording systems, devices, and documents, as well as other new technology. |
| 5 | Speak clearly and professionally to fellow workers, supervisors, dispatchers, and workplace operation staff. |
| 6 | Speak clearly and professionally to staff at shipper and customer locations. |
| 7 | Listen to and convey messages from shippers and customers. |
| 8 | Receive and convey negative messages and/or complaints in a polite and professional manner and use methods to de-escalate difficult or hostile situations. |
| 9 | Avoid revealing any sensitive information about their operation, vehicle, trips, routes, or cargo. |
| 10 | Follow regulations when communicating with police, enforcement officers, and emergency responders. |



ELEMENT 1: Supportive Competencies

BLOCK 6: USE WORKPLACE DOCUMENTS

KNOWLEDGE AND TASKS: Know the importance and meaning of written workplace documents and communicates effectively through written means.

This means the commercial transport truck operator will:

- | | |
|-----------|---|
| 1 | Know the importance and meaning of written company practices, procedures, policies, messages, bulletins, and other workplace communications, and understand how to comply with the content. |
| 2 | Legibly complete all workplace forms needed to establish and sustain employment. |
| 3 | Know the importance and meaning of job task analyses and workplace hazard assessments. |
| 4 | Seek clarification and assistance when they do not fully understand any written workplace documents. |
| 5 | Know the meaning of messages and symbols on cargo packaging and cargo documents such as waybills, packing lists, delivery documents, instructions, workplace hazard information, etc. |
| 6 | Identify the purpose, importance, and proper condition of vehicle related documents such as vehicle registration, insurance, program registry, fuel tax reporting, permits, etc. |
| 7 | Compose and deliver written information and messages relating to workplace activities. |
| 8 | Access information and reference tables such as those related to vehicle weights and dimensions. |
| 9 | Legibly complete work activity reports, daily logs, records of duty status and/or cycle tracking records for Hours-of-Service regulations compliance. (See Block 13) |
| 10 | Legibly record information onto, track and manage cargo related documents such as waybills. |
| 11 | Access written workplace information such as practice, procedure and policy documents related to cargo securement, job task analysis, hazard assessment, etc. |



ELEMENT 1: Supportive Competencies

BLOCK 7: COMPLETE NUMERACY TASKS

KNOWLEDGE AND TASKS: Complete basic mathematical calculations required for commercial vehicle operation.

This means the commercial transport truck operator will:

- 1 Calculate route and trip distances.
- 2 Estimate fuel consumption rates and estimate how far a vehicle can travel on a particular quantity of fuel.
- 3 Calculate actual and allowable axle weights.
- 4 Know vehicle dimension and axle spacing requirements, and complete necessary calculations to confirm compliance with vehicle requirements such as “bridge formulas”, etc.
- 5 Calculate trip durations to determine arrival times and plan departure times.
- 6 Calculate and record information needed for fuel tax reports.
- 7 Calculate and record cargo weight when necessary.
- 8 Complete all calculations to determine current compliance with **Hours of Service** regulations and determine the remaining hours that are available to work. (See *Block 13*)
- 9 Convert imperial and metric measurements using tables, mathematical formulas, or conversion programs.

ELEMENT 1: Supportive Competencies

BLOCK 8: OPERATE COMPUTERS AND ELECTRONIC DEVICES

KNOWLEDGE AND TASKS: Proficiently use computers, electronic and communication devices common in commercial vehicle operations.

This means the commercial transport truck operator will:

- 1 Proficiently use a calculator or computer when necessary.
- 2 Use a hand-held electronic or communication device only when and where permitted.
- 3 Proficiently operate a mobile (cellular) telephone.
- 4 Proficiently use workplace-specific electronic tools such as communication, tracking and video event recording devices, customer-specific data-entry devices, etc.
- 5 Complete basic data-entry, form-filling, and online search tasks.
- 6 Record work activities using an electronic logging device according to workplace and manufacturer procedures.

ELEMENT 2 FUNCTIONAL COMPETENCIES

Functional Competencies include Non-Driving Tasks and Compliance Requirements

ELEMENT 2 includes:

BLOCK 9 Plan Work, Plan Trips, and Solve Problems

BLOCK 10 Prevent Loss and Maintain Secure Facilities

BLOCK 11 Support Inspection and Maintenance Program

BLOCK 12 Conduct Daily Vehicle Inspections

BLOCK 13 Comply with Hours of Service Regulations

BLOCK 14 Operate Vehicle Air Brake Systems

BLOCK 15 Secure Cargo for Transport

BLOCK 16 Operate Computer and Electronic Devices Operate Commercial Features

BLOCK 17 Maintain Situational Awareness



ELEMENT 2: Functional Competencies

BLOCK 9: PLAN WORK, PLAN TRIPS, AND SOLVE PROBLEMS

KNOWLEDGE AND TASKS: Plan ahead, anticipate problems, and professionally and efficiently deal with any emergency situation.

This means the commercial transport truck operator knows:

- 1** Avoid traveling to an unfamiliar location without first confirming facilities and preferred routes.
- 2** Use digital maps and route information resources according to workplace requirements.
- 3** Access reliable information and utilize technology and apps (*like 511*) about commercial vehicle routes, road construction, road closures, height clearances, weight restrictions, permit requirements, etc.
- 4** Prepare a route plan, or identify and accept a predetermined route plan, that correctly considers vehicle size and weight.
- 5** Identify special requirements relating to the vehicle, load, routing, or commodity.
- 6** Access reliable information about weather and road conditions, before and during a trip.
- 7** Adjust trip plans or work plans when encountering unanticipated changes.
- 8** Plan each trip to ensure compliance with Hours-of-Service regulations. (*See Block 13*)
- 9** Identify, locate, and access service facilities, rest areas, and emergency refuge locations as necessary.
- 10** Proficiently use some basic hand tools.
- 11** Identify and locate suitable fuel sources, and purchase fuel according to workplace practice, procedures, and policies.
- 12** Carry required emergency equipment on or inside the vehicle and understand how and when to use the equipment.
- 13** Know workplace risks and hazards, and properly wear or otherwise use appropriate Personal Protective Equipment.
- 14** Operate basic emergency equipment such as a fire extinguisher, safety warnings (triangles, flares), spill kits, etc.
- 15** Readily locate emergency contact information.
- 16** Adjust the vehicle's fifth wheel setting, axle position, or suspension system as necessary and according to workplace direction.
- 17** Carry necessary first aid supplies and understand personal limitations in administering first aid.
- 18** Regularly check cargo securement to confirm compliance. Adjust the vehicle, cargo or securement devices as required, before and during a trip. (*See Block 15*)
- 19** Operate cargo access doors in a safe manner and protect against potential falling cargo when opening doors.
- 20** Regularly check vehicle(s) as required by regulations and according to workplace practices, procedures, and policies. (*See Blocks 11 and 12*)

| | |
|-----------|---|
| 21 | Proceed proficiently through construction zones and detours. |
| 22 | Identify and prepare for common problems and challenges, such as packing cold weather attire and equipment when necessary. |
| 23 | Follow workplace requirements for cargo-handling and use of specialized equipment needed for the cargo being transported. |
| 24 | Confirm that cargo matches related documents – and identify any areas requiring clarification, changes, adjustment, or planning. |
| 25 | Carefully track cargo and related documents during each trip, identifying discrepancies between cargo documents and the cargo being transported. |
| 26 | Calculate changing cargo weight when needed, verify compliance with vehicle weight regulations, and identify how changing weight can change vehicle handling. |
| 27 | Within personal capabilities – and according to workplace practices, procedures, and policies – assist another driver, motorist, or member of the public during an emergency or whenever there is an obvious urgent need for such assistance. |
| 28 | Work carefully – within personal limitations, and according to workplace practices, procedures, and policies – when dealing with any emergency, breakdown, or immobilizing situation. |
| 29 | When a vehicle is disabled or immobilized, use towing, recovery, police, and emergency services according to workplace practices, procedures, and policies. |
| 30 | Contact emergency service as soon as it appears necessary for himself or herself, a fellow worker, motorist, or any member of the public. |
| 31 | Understand their obligations in regulation and/or company practices, procedures, and policies with respect to dealing with a build-up of snow or ice on their vehicle(s) and the need to take appropriate corrective action. |



ELEMENT 2: Functional Competencies

BLOCK 10: PREVENT LOSS AND MAINTAIN SECURE FACILITIES

KNOWLEDGE AND TASKS: Know how to prevent cargo loss claims, and follow required procedures to maintain secure facilities, prevent cargo loss and avoid damage.

This means the commercial transport truck operator will:

- 1** Follow required practices, procedures and policies when accessing workplace, shipper and customer facilities, and restricted areas.
- 2** Seek appropriate help when accessing an unfamiliar location or facility.
- 3** Handle and load cargo carefully, and confirm that all cargo is properly packaged, unitized, arranged, and secured inside facilities and vehicles.
- 4** Follow workplace practices, procedures and policies when releasing sensitive information about an operation, vehicle, trips, routes, or cargo.
- 5** Use appropriate Personal Protective Equipment properly and as required, inside or outside of every workplace, shipper facility and customer facility.
- 6** Use cargo seals, pin locks and similar vehicle security devices according to company practices, procedures, and policies.
- 7** Operate cargo handling equipment in the proper manner, and only when fully trained and authorized.
- 8** Follow all workplace, shipper and receiver practices, procedures and policies that involve issues such as parking locations and methods, facility security, securing and accessing vehicles and securing valuables including cash etc.



ELEMENT 2: Functional Competencies

BLOCK 11: SUPPORT INSPECTION AND MAINTENANCE PROGRAM

KNOWLEDGE AND TASKS: Know the importance of proper vehicle maintenance and follow all workplace practices, procedures, and policies to ensure vehicle maintenance and inspection are properly completed.

This means the commercial transport truck operator will:

| | |
|-----------|---|
| 1 | Know that every workplace must establish a system, and keep a written record, for periodically inspecting and maintaining vehicles. |
| 2 | Know that every commercial vehicle must meet prescribed performance standards while operating on a highway. |
| 3 | Know the importance of enforcement and audit programs to ensure that inspection and maintenance is adequate. |
| 4 | Conduct required daily (trip) inspections using supplied forms and schedules. (See Block 12) |
| 5 | Inspect the condition of vehicles and operating components according to workplace practice, procedures, and policies. |
| 6 | Use appropriate Personal Protective Equipment during maintenance and inspection activities according to workplace practice, procedures, and policies. |
| 7 | Confirm that every commercial vehicle being operated displays valid evidence that regulatory periodic inspections and workplace-specific inspections have been conducted. |
| 8 | Check level of operating fluids including fuel, engine oil, engine coolant, power steering oil, windshield washer, diesel exhaust fluid (DEF), etc. – and top up when necessary. |
| 9 | Regularly check basic vehicle components, such as drive belts, hoses, tires, etc. |
| 10 | Complete minor vehicle repairs such as minor electrical connection problem; replace lamp, gladhand seal or wiper blade; reset circuit breaker, etc., according to workplace requirements. |
| 11 | Coordinate vehicle repairs that take place away from company facilities, complete required reports, and follow related procedures according to workplace practice, procedures, and policies. |
| 12 | Practice engine warm-up and cool-down procedures that are appropriate for conditions, following manufacturer recommendations and in accordance with workplace practice, procedures, and policies. |
| 13 | Know the sounds and other signs that a vehicle is operating in an abnormal manner. |
| 14 | Identify defective conditions and damage on most vehicle components and systems, according to company practices, procedures, and policies. |
| 15 | Report vehicle damage, defects, completed repairs, and any other condition that may require maintenance, correction, or review. |
| 16 | Adhere to workplace practices, procedures, and policies about vehicle condition, cleanliness, and corporate image. |

ELEMENT 2: Functional Competencies

BLOCK 12: CONDUCT DAILY VEHICLE INSPECTIONS

KNOWLEDGE AND TASKS: Effectively conduct prescribed daily inspections and monitor the vehicle's safe condition.

This means the commercial transport truck operator will:

- 1** Know they are responsible for the safe condition of each commercial vehicle they operate.
- 2** Know that Schedule 1 of National Safety Code Standard 13 (NSC 13) lists all minor and major defects that the driver is expected to identify.
- 3** Know that NSC 13 Schedule 1 includes the most common defects that a driver may encounter.
- 4** Conduct daily inspections and identify each of the minor and major defects listed in NSC 13 Schedule 1.
- 5** Identify when a minor or major defect listed in NSC 13 Schedule 1 is present on their vehicle.
- 6** Properly complete and sign written or electronic daily inspection reports that declare the vehicle's condition.
- 7** Continuously monitor vehicle condition according to NSC 13 Schedule 1 while driving or otherwise being responsible for the vehicle and update the inspection report as required.
- 8** Record every minor defect found during an inspection or while operating a vehicle on an inspection report, and report the minor defect according to workplace practices, procedures, and policies.
- 9** Know there are legal requirements and obligations, and severe consequences for operating a vehicle with an out-of-service (OOS) defect.
- 10** Know there are legal requirements and obligations, and immediately record on an inspection document and report every major defect found during an inspection, or while operating a vehicle, and immediately stop operating the vehicle.
- 11** Maintain a vehicle's OOS status whenever a major defect is identified, until the condition is corrected.
- 12** Conduct regular en-route and post-trip vehicle inspections according to workplace practice, procedures, and policies.
- 13** Adhere to the regulations and company practices, procedures and policies whenever accepting an inspection report from another worker.
- 14** Carry a valid inspection report for each vehicle currently being operated and a copy of NSC 13 Schedule 1 and produce these items when required by an enforcement officer.

ELEMENT 2: Functional Competencies

BLOCK 13: COMPLY WITH HOURS OF SERVICE REGULATIONS

KNOWLEDGE AND TASKS: Know and follow the Hours of Service (HOS) regulations.

This means the commercial transport truck operator will:

Application and Duty Status

- 1** Know that the Hours-of-Service regulations apply to operating any commercial vehicle.
- 2** Know that they are on duty when driving, in care and control of a vehicle, and performing other types of work.
- 3** Calculate when they can begin to drive, and how many hours are available for driving.
- 4** Know that in normal conditions they must take 10 hours off duty each day and have one 24-hour period off duty within the previous 14 days.
- 5** Know they cannot drive any further when any one of the on-duty limits is reached.
- 6** Know that a commercial vehicle may be operated for personal use, and for up to 75 km in a day when the vehicle is empty, and no trailer is being towed; no work of any sort is being done for a motor carrier; and the starting and ending odometer readings are recorded in the driver's daily log.

Driving Limitations and Duty Cycles in Normal Conditions

- 7** Know that they must not drive a commercial vehicle after being on duty for 14 hours in a day.
- 8** Know that they must not drive a commercial vehicle after accumulating 13 hours of driving in a day.
- 9** Know that a work shift begins when they return to on duty, after being off duty for at least 8 consecutive hours.
- 10** Know they are still considered to be on the previous work shift when returning to on duty after less than 8 hours off duty, and they may be prohibited from driving.
- 11** Know that they must not drive a commercial vehicle any longer when 16 hours have elapsed since their work shift began.
- 12** Know that a 7-day cycle is called "Cycle 1" and allows a driver to be on duty for 70 hours in a 7-day period.
- 13** Know that a 14-day cycle is called "Cycle 2" and allows a driver to be on duty for 120 hours in a 14-day period.
- 14** Know that a new cycle can start only after taking the required minimum number of hours off duty, and this period is called a "reset."
- 15** Know that resetting Cycle 1 requires at least 36 hours off duty.
- 16** Know that resetting Cycle 2 requires at least 72 hours off duty.
- 17** Know that up to 2 hours of the required minimum daily off-duty time can be deferred from one day to the next if the deferred time is properly added to the correct portion of off-duty time in the following day.

| Driving Limitations in Adverse Conditions | |
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| 18 | Know that when encountering specifically defined adverse driving conditions, driving up to 2 hours beyond the daily limit is permitted, when remaining within the 16-hour work shift rule. |
| 19 | Know that, when adverse conditions cause a driver to be on duty longer than is normally permitted, the off duty period on the following day must be increased by a similar amount. |
| Completing a Driver's Daily Log | |
| 20 | Know that they must maintain and carry a daily log whenever they operate beyond 160 km of their home terminal; return to a location other than their home terminal at the end of the day; or work for an employer who does not maintain a record of the driver's duty status. |
| 21 | Know that they must track their status within each day as defined on the daily log, and track the duty status within their work shift, which can start at any time of day. |
| 22 | Know that the "day" shown on a daily log is a 24-hour period which generally begins at midnight but can start at any time set by an employer. |
| 23 | Know that the "home terminal" is determined by the employer and is normally associated with the location where a worker begins to drive a commercial vehicle. |
| 24 | Know that when operating a commercial vehicle for which a daily log must be carried, a driver must carry logs which show the previous 14 days of duty status. |
| 25 | Know that driver's daily logs may also need to be retained for tax purposes such as meal deductions, etc. |
| 26 | Maintain a complete, legible, and accurate driver's daily log (in a written or electronic format) that fully complies with the regulations. |
| 27 | Carry daily logs that apply to the preceding 14 days, whenever operating a commercial vehicle requiring the driver to carry a log. |
| 28 | Retain and submit daily logs as required by the regulations and according to workplace practices, procedures, and policies. |
| For certain operators, HOS knowledge may also include the following items: | |
| Completing a Duty Status Record | |
| 29 | A driver may be exempt from the requirements to complete and carry a daily log when they drive within a radius of 160 km from their home terminal; return to their home terminal at the end of the day; and work for an employer who maintains a record of their duty status. |
| 30 | A record of each driver's duty status must track the driver's activities within each day, within the work shift, and within a duty cycle. |
| 31 | A driver using a record of duty status instead of a daily log must still comply with all driving restrictions. |
| Sleeper Berth Provisions | |
| 32 | Proper use of the sleeper berth allows the off-duty period to be split. |
| 33 | Off-duty periods can be split into shorter periods in certain conditions. |



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| | U.S. HOS Requirements |
| 34 | Canadian HOS requirements differ from those in the U.S. |
| 35 | Adhere to differing requirements when crossing an international border. |

ELEMENT 2: Functional Competencies

BLOCK 14: OPERATE VEHICLE AIR BRAKE SYSTEMS

KNOWLEDGE AND TASKS: Know how air brake systems operate, and routinely inspect and test system safety features.

This means the commercial transport truck operator will:

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| 1 | Know the basic operating principles of air brakes. |
| 2 | Know the general function of supply, service, parking/emergency, and trailer sub-systems and related components.* |
| 3 | Know the visual characteristics, external components, and basic function of common types of foundation brakes. |
| 4 | Know how speed, weight, vehicle specifications, and downhill grades affect vehicle braking. |
| 5 | Understand conditions such as brake fade, and brake lag. |
| 6 | Identify common brake types and recognize many of the components. |
| 7 | Identify damaged, missing, or malfunctioning foundation brake components. |
| 8 | Identify cracked, loose, missing, or contaminated brake lining, improper drum contact, or lining that is less than the required thickness. |
| 9 | Identify audible air leaks and visible evidence of cracks and non-manufactured holes in brake chambers. |
| 10 | Identify mismatched brake chamber size and/or slack adjuster length on axles. |
| 11 | Identify cracked and/or broken brake drums or rotors. |
| 12 | Identify leaks, damage, deterioration, and improper fittings on readily visible brake hoses and air lines. |
| 13 | Identify a loose, cut, or frayed compressor drive belt. |
| 14 | Identify insecure air compressor mounts, brackets, or fasteners. |
| 15 | Check the air brake system for audible air leaks. |
| 16 | Test the low air pressure warning device. |
| 17 | Measure air pressure build-up time. |

**Note: The specific requirements may vary in some jurisdictions. Operators of straight vehicles may not be required to know about trailer-related systems.*

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| 18 | Identify air compressor governor cut-out and cut-in pressure settings. |
| 19 | Test the air loss rate of an air brake system. |
| 20 | Test the tractor (towing vehicle) protection valve. |
| 21 | Test automatic application of the trailer spring (parking/emergency) brakes. |
| 22 | Test spring (parking/emergency) brakes. |
| 23 | Test the function and condition of air tank drain valves. |
| 24 | Identify insecurely mounted air tanks. |
| 25 | Test spring brake operation. |
| 26 | Know the importance of proper brake pushrod stroke. |
| 27 | Know how to measure brake pushrod stroke. |
| 28 | Know that only qualified individuals may repair brakes. |

ELEMENT 2: Functional Competencies

BLOCK 15: SECURE CARGO FOR TRANSPORT

KNOWLEDGE AND TASKS: Know the regulatory requirements for securing cargo and take the steps necessary to secure cargo on their vehicle, before and during transport.

This means the commercial transport truck operator will:

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| 1 | Know that every commercial vehicle transporting cargo must have the cargo secured according to the regulations (National Safety Code Standard 10). |
| 2 | Know that the requirement to secure cargo includes any material, equipment, or other loose article carried on the vehicle, including dunnage, blocking, tarps, tools, equipment, spare materials, etc. |
| 3 | Know all cargo must be secured so that it cannot fall off the vehicle, or in any way be lost. |
| 4 | Know that articles of cargo must be secured to prevent forward, rearward, and sideways movement, and in some cases must also be secured to prevent upward movement. |
| 5 | Know that all cargo must be secured so that it cannot shift in a way that can affect a vehicle's stability or maneuverability in a negative way. |
| 6 | Know that cargo must be loaded in such a way that it does not interfere with the driver's ability to drive the vehicle safely and does not block vehicle entry or exit. |
| 7 | Know how to properly inspect the security of the cargo. |
| 8 | Know that articles of cargo are generally secured against the vehicle's structure and by using devices such as tiedowns, blocking, and bracing. |



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| 9 | Know that any cargo securing method or device must be the proper type, and must be properly used, strong enough, and in good condition. |
| 10 | Know that devices used to secure cargo are generally rated for their strength and that most cargo requires a minimum number of tiedowns with working load limit ratings. |
| 11 | Know that cargo tiedowns are specifically designed and rated for such use, must have a means to be tightened, and must be used according to the manufacturer instructions. |
| 12 | Know that tiedown ratings are determined by manufacturers, are expressed as a “working load limit” (WLL) and marked on the tiedowns. |
| 13 | Know that the combined strength of individual tiedowns used together to restrain cargo is called the “aggregate working load limit.” |
| 14 | Know that friction between cargo and vehicle surfaces, and friction between different articles of cargo that are in contact, helps to keep some types of cargo secure. |
| 15 | Know that the size, shape, and weight of cargo generally dictates the required number, strength, and placement of tiedowns. |
| 16 | Know that the aggregate working load limit of tiedowns used to secure cargo must equal at least 50% of the cargo weight. |
| 17 | Know that cargo fully enclosed within a vehicle structure will not generally require tiedowns, but may require blocking, bracing, or devices to increase friction between the vehicle and cargo. |
| 18 | Know that individual pieces of cargo will, in some cases, need to be “unitized” into larger units of cargo. |
| 19 | Know they are not required to inspect cargo if a vehicle has been sealed to prevent access and they have been instructed by their employer not to remove the seal. |
| 20 | Know that certain commodities require specific securing methods, devices, and equipment to comply with specific regulatory requirements. |
| 21 | Identify cargo that can be secured according to general regulatory requirements, and identify that specific securement methods are required for certain cargo including logs, dressed lumber and similar building materials, metal coils, paper rolls, concrete pipe, inter-modal containers, automobiles, light trucks and vans, heavy vehicle equipment and machinery, flattened or crushed cars, roll-on/roll-off and hook-lift containers, boulders, etc. |
| 22 | Inspect cargo and methods used to secure the cargo before driving, to confirm everything is properly secured to comply with the regulations, and according to workplace practices, procedures, and policies. |
| 23 | Inspect cargo and related articles at specific intervals during the trip to ensure everything remains properly secured to comply with the regulations, and according to workplace practices, procedures, and policies. |
| 24 | Confirm proper methods and devices have been used to secure cargo, are in good condition, and are in the proper locations. |
| 25 | Inspect the condition and integrity of tiedown devices and adjust tiedowns as necessary to keep cargo secure during transport. |
| 26 | Ensure that, in cases where cargo needs to be unitized, individual articles of cargo remain adequately secured into larger articles of cargo. |
| 27 | Ensure that cargo secured to the vehicle structure is properly distributed and arranged, and that any required blocking, bracing, or friction mat is adequate, properly positioned, and securely in place. |
| 28 | Follow the specific cargo securing practices, procedures, and policies of the workplace, shipper and/or receivers. |



ELEMENT 2: Functional Competencies

BLOCK 16: OPERATE COMMERCIAL VEHICLE SYSTEMS AND FEATURES

KNOWLEDGE AND TASKS: Understand and properly operate typical commercial vehicle systems and features.

This means the commercial transport truck operator will:

- 1** Know the general layout of a typical commercial vehicle engine compartment, identify important service items, and locate operating fluid check points.
- 2** Know the general layout and function of major body, frame, and external vehicle components and systems.
- 3** Locate fuel tanks and filler caps, and practice proper fueling methods.
- 4** Know the correct operating fluids required for a vehicle, and how to properly re-fill and maintain fluid levels.
- 5** Know the differences between single, tandem, tridem, and other multi-axle configurations.
- 6** Understand the operation of typical manual, automated, and automatic commercial vehicle transmissions, controls, shift patterns, and clutches.
- 7** Identify the basic types, features, and function of tires and wheels.
- 8** Identify the physical features and operation of common types of suspension systems.
- 9** Locate and operate all typical primary and secondary controls, gauges, and instruments.
- 10** Identify and read the instrument panel indicators displaying important vehicle operating information, warnings, and safety system status.
- 11** Understand the basic operation of a differential and inter-axle differential used in tandem drive axles.
- 12** Operate a differential lock or inter-axle differential lock.
- 13** Operate engine brake or retarders and understand how and when to appropriately use these systems to control vehicle speed.
- 14** Identify the physical features, indicators, warnings, and the basic operation of hydraulic brake systems.
- 15** Identify the physical features and basic operation of drum and disc brake systems.
- 16** Know how steering control is lost when tires skid during heavy brake use or when braking with poor traction.
- 17** Know that Anti-lock Brake Systems (ABS) keep wheels from locking but may not shorten vehicle stopping distance.
- 18** Know how stability control systems operate and affect vehicle operation.
- 19** Operate vehicle heating, defrosting, and air-conditioning systems.
- 20** Operate vehicle lamps and accessories.
- 21** Operate windshield wiper and washer systems.

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| 22 | Carry, secure, store, and use, or operate required emergency equipment. |
| 23 | Know the basic operation of portable or on-board cargo heating equipment. |
| 24 | Identify and operate different types of trailer coupling devices. |
| 25 | When involved in tractor-trailer operation, proficiently alter the position of a fifth wheel to alter vehicle dimensions or distribute vehicle and/or cargo weight according to workplace requirements. |
| 26 | When involved in tractor-trailer operation, proficiently reposition trailer axles to alter vehicle dimensions, or to distribute vehicle and/or cargo weight. |
| 27 | Adjust rear-view mirrors to maximize the view and effectively remove or minimize a vehicle's blind spots. |
| 28 | Know the basic operation of collision avoidance systems. |
| 29 | Know the maintenance and inspection requirements relating to commercial vehicle system and features. (See Block 11 & 12) |
| 30 | Be generally familiar with vehicle owner and operator manuals, understand the nature of the content, and locate the manuals as needed. |
| 31 | Have a basic understanding of common emission controlling devices including malfunction indicators, Diesel Particulate Filter (DPF) and their regeneration procedures, Diesel Exhaust Fluid (DEF), etc. |
| 32 | Have a basic awareness of the use of hybrid drive systems, battery electric systems, and alternate fuels such as liquefied petroleum gas (LPG), compressed natural gas (CNG), liquefied natural gas (LNG), biodiesel, etc. |



ELEMENT 2: Functional Competencies

BLOCK 17: MAINTAIN SITUATIONAL AWARENESS

KNOWLEDGE AND TASKS: Understand workplace hazards, and routinely assess and adapt to changing conditions.

This means the commercial transport truck operator will:

- 1** Know workplace hazards and risks and recognize that such hazards and risks can change.
- 2** Know the role and importance of workplace practices, procedures, and policies which are used to manage hazards and risks.
- 3** Locate and understand workplace practices, procedures, and policies which are used to manage hazards and risks.
- 4** Review and understand documented job task analyses and hazard assessments.
- 5** Be aware of the presence of other motorists, pedestrians, cyclists, and slow-moving vehicles which share the road with commercial vehicles.
- 6** Watch for wildlife or livestock which can enter the space around a vehicle, particularly on routes known for collisions involving animals.
- 7** Set up mirrors to minimize a vehicle's blind spots.
- 8** Complete a hazard assessment whenever entering an unplanned, unfamiliar, or altered workplace.
- 9** Monitor and adhere to highway speed advisories.
- 10** Monitor anticipated weather and road conditions before and during each trip.
- 11** Remain highly alert while driving.
- 12** Regularly and systematically scan exterior conditions by looking ahead and using mirrors.
- 13** Regularly and systematically scan vehicle conditions by monitoring instruments and gauges.
- 14** Monitor the movement and actions of other motorists while passing or being passed.
- 15** Know the visual cues and other signs of potentially hazardous traffic situations.
- 16** Practice methods to de-escalate any situation that could cause anger, hostility, or danger.
- 17** Exit the vehicle whenever necessary to inspect clearances and identify potential obstructions.
- 18** Secure a vehicle properly before exiting.

ELEMENT 3 DRIVING COMPETENCIES

Driving Competencies Include Tasks Where Commercial Transport Truck Operators Spend Most of Their Time

ELEMENT 3 includes:

BLOCK 18 Prepare and Start to Drive

BLOCK 19 Control Vehicle Motion and Speed

BLOCK 20 Control Vehicle Direction and Position

BLOCK 21 Maximize Fuel Efficiency

BLOCK 22 Practice Defensive Driving Techniques

BLOCK 23 Adhere to Requirements that are Specific to Commercial Vehicles

BLOCK 24 Back, Dock, and Park Vehicles

BLOCK 25 Handle Emergency Incidents

BLOCK 26 Couple Trailers

BLOCK 27 Uncouple Trailers

BLOCK 28 Turn Tractor-Trailers

BLOCK 29 Back, Dock, and Park Tractor-Trailers

Note: Blocks 28 and 29 apply only to tractor-trailers



ELEMENT 3: Driving Competencies

BLOCK 18: PREPARE AND START TO DRIVE

KNOWLEDGE AND TASKS: Know the importance of preparation and complete all necessary tasks prior to departure.

This means the commercial transport truck operator will:

- 1** Plan for each trip, addressing issues such as Hours of Service regulations, rest stops, fuel stops, hazard awareness, shipper and customer facilities, primary and alternate routes, weather and road conditions, service facilities, departure and arrival times, etc. (See Block 9)
- 2** Drive only when fully alert and when judgment is not impaired in any way.
- 3** Calculate when driving can begin, and determine the number of hours available to drive, to comply with Hours-of-Service regulations. (See Block 13)
- 4** Determine before leaving the driver's seat that the vehicle is secured by the vehicle's parking brake, wheel chocks, or suitable blocks.
- 5** Always properly enter and exit the cab or vehicle cargo area, maintaining 3-point contact, and avoid the risks of improperly climbing onto or jumping from equipment.
- 6** Inspect each vehicle to confirm it complies with safety regulations before a trip begins. (See Block 12)
- 7** Confirm the vehicle and cargo are properly inspected. (See Blocks 11, 12 and 15)
- 8** Confirm all required vehicle and cargo documents are valid and correct, including permit books, vehicle registration, insurance, bills of lading, etc.
- 9** When in a loading dock, confirm that all cargo handling equipment and devices have been returned to their proper place.
- 10** Check or remove vehicle restraints and other loading dock devices.
- 11** Confirm that cargo and all vehicle-related equipment are properly distributed, secured, and covered if necessary. (See Block 15)
- 12** When a tractor-trailer is involved, check and/or adjust air suspension settings and controls, axle spacing, and fifth wheel position.
- 13** Check the condition, attachment, and operation of coupling devices and any other connections between the towing vehicle and trailer. (See Block 26)
- 14** Adjust the driver's seat to the correct position.
- 15** Inspect, wear, and properly adjust seatbelts.
- 16** Locate and identify all vehicle controls and instruments. (See Block 16)
- 17** Confirm mirrors are properly adjusted. (See Block 17)
- 18** Know the importance of proper start-up and/or warm-up procedures.
- 19** Set up and operate onboard communication systems and electronic logging devices. (See Block 5 and 8)

20 Scan all controls and instruments before driving.

21 Start the engine while monitoring the instrument panel and indicator lamps, listen for normal vehicle sounds, and avoid unnecessary idling.

ELEMENT 3: Driving Competencies

BLOCK 19: CONTROL VEHICLE MOTION AND SPEED

KNOWLEDGE AND TASKS: Effectively and proficiently control vehicle motion, speed, and space around the vehicle.

This means the commercial transport truck operator will:

- 1** Know the requirements and restrictions relating to types of transmissions a driver licence may allow or restrict.
- 2** Proficiently operate one of the following common types of transmission:
 - a. Manual transmission and clutch according to the manufacturer-recommended procedures, including:
 - i. Efficiently operate the engine, clutch, and transmission to avoid unnecessary clutch wear and damage to any drivetrain components.
 - ii. Select the correct gear for starting, smoothly start a vehicle into motion, and apply starting techniques that may be necessary to accommodate vehicle weight.
 - iii. Appropriately select and smoothly change gears while accelerating and decelerating.
 - iv. Shift progressively while accelerating.
 - v. Skip gears appropriately during acceleration and deceleration.
 - b. Automated manual transmission according to the manufacturer-recommended procedures.
 - c. Automatic transmission according to the manufacturer-recommended procedures.
- 3** Keep a vehicle from rolling backward when starting to drive uphill.
- 4** Know the relationship between engine rpm and torque output, and routinely operate the engine in its optimal range.
- 5** Look ahead, maintain adequate space around the vehicle, and adjust space management techniques when traffic is congested, etc.
- 6** Anticipate the need to brake or stop, modulate brake pressure to make smooth and gradual stops, and use all service brakes.
- 7** Anticipate the need to down-shift when approaching grades and rolling terrain, and select the appropriate gear, engine rpm and vehicle speed for these conditions.
- 8** Adjust speed as appropriate in response to speed advisories, traffic, and road conditions.
- 9** Adjust vehicle speed before entering a curve or turn and avoid using brakes during a curve or turn.
- 10** Effectively use a compression-style engine brake or driveline retarder, as and when applicable, to hold back or slow a vehicle, and avoid using these devices in slippery conditions.

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| 11 | Understand the time needed to clear intersections and anticipate the typical patterns of traffic control signals. |
| 12 | Understand the increased risk of collisions within traffic intersections. |
| 13 | Operate at speed that is at or below posted speed advisory and is appropriate for vehicle weight, center of gravity, and type of cargo. |
| 14 | Properly use highway acceleration and deceleration lanes to smoothly integrate with traffic. |
| 15 | Select the appropriate gear, engine rpm, and vehicle speed for travelling up and down grades. |
| 16 | Properly use a cruise-control system. Avoid cruise-control use on slippery roads, steep grades, sharp curves, in heavy traffic, during limited visibility, or on city streets. |
| 17 | Apply an effective method to get a vehicle moving on a slippery surface, using the power divider “differential lock” as needed. |
| 18 | Monitor an overtaking or merging vehicle and provide additional space when necessary. |
| 19 | Anticipate conditions that make it harder to control vehicle speed due to reduced traction, and effectively adjust driving techniques whenever a vehicle is likely to react differently. |
| 20 | Increase following distance, reduce speed, and be more attentive in difficult and adverse conditions such as darkness, poor visibility, high wind, slippery surfaces, etc. |
| 21 | Modify braking techniques in difficult conditions such as slippery surfaces, congested traffic, low visibility, high wind, etc. |
| 22 | Operate only when road conditions are safe and avoid putting any vehicle or person into an unnecessarily hazardous situation. |



ELEMENT 3: Driving Competencies

BLOCK 20: CONTROL VEHICLE DIRECTION AND POSITION

KNOWLEDGE AND TASKS: Effectively and proficiently control vehicle direction, turns, and position.

This means the commercial transport truck operator will:

- 1** Maintain a secure grip on the steering wheel, using two properly positioned hands, as much as possible.
- 2** Select appropriate lanes on multi-lane highways and on highways having both express and collector lanes.
- 3** Maintain a consistent vehicle position, generally in the right-most driving lane, normally near the centre or slightly right of centre in the lane.
- 4** Steer smoothly and avoid jerky and unnecessary steering correction.
- 5** Confirm and maintain mirror adjustments to minimize blind spots.
- 6** Drive inside marked lanes, and change lanes only where permitted.
- 7** Watch traffic flow continuously and identify the need to change lanes or merge with adequate time to do so.
- 8** Check carefully before beginning a lane change or merge, signal every lane change in advance, then smoothly and deliberately change lanes only after confirming the space is clear.
- 9** Ensure a suitable amount of space is available whenever making a lane change or merge, leaving neither too much space, or intruding on other vehicles, and adjusting space as necessary to deal with traffic congestion.
- 10** Change one lane at a time and cancel the turn signal immediately after completing a lane change.
- 11** Select the correct lane for beginning and completing each turn.
- 12** Proficiently complete wide and tight turns in right-hand and left-hand directions. Select the proper lanes for each turn, maintain appropriate speed, and keep wheels clear of curbs and obstructions.
- 13** Monitor traffic, pedestrians, cyclists, and slow-moving vehicles on all sides, before and during each turn.
- 14** Respect the value of de-escalating any situation that might intimidate another driver or cause another driver to take evasive action.
- 15** Successfully negotiate traffic circles or roundabouts.
- 16** Anticipate conditions that make it harder to control vehicle direction due to reduced lateral stability, and effectively adjust driving techniques whenever a vehicle is likely to react differently.
- 17** Reduce speed as needed before entering curves, ramps, and turns, accounting for surface conditions, vehicle weight, centre of gravity, and cargo.
- 18** Account for vehicle overhang, off-tracking, and lane encroachment during turns.

ELEMENT 3: Driving Competencies

BLOCK 21: MAXIMIZE FUEL EFFICIENCY

KNOWLEDGE AND TASKS: Maximize fuel efficiency.

This means the commercial transport truck operator will:

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| 1 | Accelerate at a smooth and gradual rate. |
| 2 | Anticipate necessary changes in speed, gear selection, and surrounding space. |
| 3 | Operate the engine and transmission in the most fuel-efficient rpm range whenever possible. |
| 4 | When driving a vehicle with manual transmission, or an automated manual transmission in "manual" mode, shift progressively and select the engine rpm and gear that are most suitable for the vehicle speed and load. |
| 5 | When driving a vehicle with an automated manual transmission, control shift points by adjusting the throttle. |
| 6 | Look ahead, anticipate the need to change speed, and gradually change speed. |
| 7 | Use cruise control whenever possible and appropriate for driving conditions. |
| 8 | Use auxiliary power units and "shore power" according to workplace practice, procedures, and policies. |
| 9 | Idle the engine as little as possible, and only when and where permitted. |
| 10 | Set up and operate vehicle to minimize fuel consumption. Minimize the gap between tractor and trailer where possible and allowed. |
| 11 | Use fuel types, vehicle technology, fuel additives, etc., according to workplace practices, procedures, and policies. Purchase fuel based on workplace practices, procedures, and policies that reflect price, etc. |

ELEMENT 3: Driving Competencies

BLOCK 22: PRACTICE DEFENSIVE DRIVING TECHNIQUES

KNOWLEDGE AND TASKS: Drive defensively.

This means the commercial transport truck operator will:

- 1** Observe and critique personal driving techniques to identify ways to improve.
- 2** Constantly monitor the actions of other drivers, changing weather, and changing road surfaces.
- 3** Adjust driving techniques to match the vehicle configuration, cargo height, weight, centre of gravity, and their driving experience.
- 4** Recognize and take steps to avoid situations that cause anger, hostility, or danger.
- 5** Be courteous and be prepared and willing to yield to other motorists, cyclists, pedestrians, and slow-moving vehicles.
- 6** Regularly and systematically scan mirrors, instruments, and gauges.
- 7** Watch for the visual cues and other signs of potentially hazardous traffic situations.
- 8** Maintain an appropriate following distance in all conditions.
- 9** Recognize and avoid sources of distraction.
- 10** Maintain the appropriate speed for road and traffic conditions, while adhering to safety regulations and workplace practice, procedures, and policies.
- 11** Know they have a duty to proactively protect other road users from harm.
- 12** Recognize their responsibilities around sharing a workplace with the public, and how the additional size and weight of their vehicle may be perceived by other road users.



ELEMENT 3: Driving Competencies

BLOCK 23: ADHERE TO REQUIREMENTS THAT ARE SPECIFIC TO COMMERCIAL VEHICLES

KNOWLEDGE AND TASKS: Recognize and respond to requirements that apply to commercial vehicles.

This means the commercial transport truck operator will:

- 1** Read all signs with messages that apply to commercial vehicles.
- 2** Know the height of their vehicle.
- 3** Know the empty and loaded weight of their vehicle.
- 4** Know standard highway height and weight restrictions.
- 5** Know the routes that prohibit commercial vehicles.
- 6** Take extra care when crossing railway tracks and, before crossing, determine the space available for vehicles. Whenever possible, shift gears only before or after crossing the railway tracks.
- 7** Safely enter vehicle inspection facilities, or pull off the roadway, when instructed by an officer or highway sign.
- 8** Watch for potential hazards of unmarked overhead obstructions such as canopies, roof overhangs and other building protrusions, signs, utility lines, tree limbs, doorway entries, etc.
- 9** Watch for snow build-up, debris, or road construction that can change vehicle height, weight, or clearances.
- 10** Read signs indicating the weight capacity of roadways or bridges – including seasonal weight restrictions.
- 11** Comply with specific requirements for using toll routes and bridges.
- 12** Know the location and proper use of truck emergency runaway lanes.
- 13** Know the times, days, and/or weeks when commercial vehicle operations are restricted in certain urban areas.
- 14** Carry and know how to use the emergency equipment required for certain commercial vehicle operations.
- 15** Know how and when to properly set up emergency warning devices such as triangle reflectors.
- 16** Immediately recognize and respond to an unexpected situation in which their vehicle weight or height is greater than what is permitted to operate on a road or highway.
- 17** Respect local bylaws restricting vehicle loading and unloading activities, parking, and idling.

ELEMENT 3: Driving Competencies

BLOCK 24: BACK, DOCK, AND PARK VEHICLES

KNOWLEDGE AND TASKS: Safely and proficiently back, dock, and park a single commercial vehicle in any typical setting.

This means the commercial transport truck operator will:

- 1** Minimize backing activity by driving forward, driving around the block, or finding a different approach whenever possible.
- 2** Plan to ensure backing is always done in the safest manner, and with the greatest visibility. For example, perform blindside backing only when there is no alternative, or choose to back into a space where it is possible to drive out in a forward direction rather than backing onto a road.
- 3** Check mirror set up before backing. Adjust mirrors if necessary.
- 4** Exit the vehicle and check the intended path for clearances, obstructions, and hazards as often as necessary, before and during backing. Recheck the path whenever delays could allow conditions to change.
- 5** Open windows, silence entertainment and communication systems, use warning flashers to improve vehicle visibility, and briefly sound the horn to warn nearby people whenever backing.
- 6** Engage competent signallers and confirm signals will be understood. When using a signaller, confirm situational needs and risks are assessed. Stop the vehicle when the signaller can no longer be seen or heard.
- 7** Know that even when using a signaller, the driver remains responsible for backing safely and without incident.
- 8** Observe signals and other warning devices used around loading docks.
- 9** Proficiently back into and properly align with loading docks.
- 10** Proficiently back 30 metres in a straight line in a path that provides 15 cm clearance on either side at the vehicle's widest point, door, or mirror.
- 11** Proficiently complete offset backing to the left.
- 12** Understand the difficulty of offset backing to the right.
- 13** Proficiently back into a space that provides only enough room to complete an "alley dock backing" maneuver from the left.
- 14** Understand the difficulty of backing into a space that provides only enough room to complete an "alley dock backing" maneuver from the right.
- 15** Proficiently back into a parallel parking space from the left.
- 16** Understand the difficulty of parallel parking from the right.
- 17** Proficiently back through a slalom course following a predetermined layout, maintaining necessary clearances.

ELEMENT 3: Driving Competencies

BLOCK 25: HANDLE EMERGENCY INCIDENTS

KNOWLEDGE AND TASKS: Handle emergency incidents in a professional manner, adhering to workplace practices, procedures, and policies.

This means the commercial transport truck operator will:

- | | |
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| 1 | Know the types of incidents that must be reported to employers, police, and other reporting agencies. |
| 2 | Know workplace practices, procedures, and policies relating to obligations and limitations in administering first aid. |
| 3 | Conduct themselves according to workplace practices, procedures, and policies regarding collisions, close calls, injuries, or other similar incidents in any emergency situation, and when speaking to police, media, other motorists, and the public. |
| 4 | Follow workplace practices, procedures, and policies when engaging emergency support such as towing and recovery service, vehicle repair, breakdown, tire repair, etc. |
| 5 | Comply with regulations and workplace practices, procedures, and policies when using warning devices and other emergency equipment. |
| 6 | Identify the importance of helping victims of human trafficking. |
| 7 | Identify the indicators that human trafficking may be occurring. |
| 8 | Identify calling a human trafficking hotline as the best way to report human trafficking. |
| 9 | Identify the hand signal used by a person communicating their need for help. |
| 10 | Identify calling 911 as the way to report a crime in progress. |
| 11 | Identify a person displaying any of the following signs or behaviours as a possible victim of human trafficking: <ul style="list-style-type: none">- a lack of knowledge of their whereabouts- no control of their ID/passport restricted or controlled communication (not permitted to speak for themselves)- inability to come and go unrestricted- descriptions of having a quota or having a pimp/daddy- signs of branding or tattooing of a trafficker's name- experience being dropped off and picked up approximately 15-20 minutes later using a van, RV, or vehicle with multiple persons and in an area mostly frequented by men- signs of physical bruising or other visible trauma |

ELEMENT 3: Driving Competencies

BLOCK 26: COUPLE TRAILERS

KNOWLEDGE AND TASKS: Safely and proficiently couple trailers to towing vehicles.

This means the commercial transport truck operator will:

- 1** Inspect trailer couplers and connectors before coupling. Check for damage, cracks or other defects, and condition of lubricant where applicable.
- 2** Follow a systematic routine for the coupling process, adhering to workplace practices, procedures, and policies.
- 3** Overcome challenges involving ground surface conditions, traction, clearances, obstructions, and access.
- 4** Confirm the suitable and safe condition of the lower and upper fifth wheel couplers, air connections, and electrical connections.
- 5** Align the tractor and trailer with the king pin near the centre line of the lower fifth wheel coupler.
- 6**
 - a. Couple a trailer to a towing vehicle with a fifth wheel as follows:
 - i. Adjust coupling height if necessary, using the trailer landing gear so that the trailer upper coupler contacts the fifth wheel lower coupler behind the pivot.
 - ii. Reverse the tractor, gently but firmly engaging the fifth wheel, while monitoring the trailer's position.
 - b. Additional steps for coupling a trailer to a fifth wheel using a tractor with air suspension with an air bag dump feature:
 - i. Back up close to the trailer, check vehicle heights, and dump the tractor air suspension.
 - ii. Reverse the tractor until the fifth wheel lower coupler is fully under the front of the trailer, but still ahead of the king pin.
 - iii. Return the tractor air suspension to its normal height while monitoring the trailer's position.
 - iv. Reverse the tractor to engage the fifth wheel coupling.
- 7** Confirm proper fifth wheel coupling by attempting to move the tractor forward ("tug test"). Then secure the tractor.
- 8** Visually confirm the lower fifth wheel coupler is fully locked by the position of the release handle and the jaws. Then connect air and electrical lines.
- 9** Raise the trailer landing gear and stow its handle.
- 10** Charge the trailer's air brake system and confirm air pressure gauges show normal pressure levels and operation. (See *Block 13*)
- 11** Adjust trailer air suspension as needed.

| Couple a trailer to a towing vehicle using a different type of coupling device as follows: | |
|--|--|
| 12 | Inspect trailer couplers and connectors before coupling. Check for damage, cracks or other defects, and condition of lubricant where applicable. |
| 13 | Follow a systematic routine for the coupling process, adhering to workplace practices, procedures, and policies. |
| 14 | Overcome challenges involving ground surface conditions, traction, clearances, obstructions, and access. |
| 15 | Establish the correct height for coupling. |
| 16 | Engage the coupler and close the coupler latch and any secondary latch. |
| 17 | Connect electrical systems and any other required connections. |
| 18 | Connect safety chains or cables. |



ELEMENT 3: Driving Competencies

BLOCK 27: UNCOUPLE TRAILERS

KNOWLEDGE AND TASKS: Safely and proficiently uncouple trailers from towing vehicles.

This means the commercial transport truck operator will:

- 1** Confirm the suitable and safe location for uncoupling.
- 2** Park and secure the towing vehicle and trailer.
- 3** Place any required wheel chocks and blocks or engage locks.
- 4** Place suitable support material under the trailer landing gear if required.
- 5** Disconnect and stow the trailer system connectors.
- 6** Uncouple the trailer from the towing vehicle following process a,b or c based on the coupler type.
 - a. Uncouple a trailer from a fifth wheel, using a tractor with fixed suspension:
 - i. Release the fifth wheel coupler lock.
 - ii. Adjust trailer air suspension systems as required.
 - iii. Lower the trailer landing gear until it just touches the ground but does not raise the trailer from the fifth wheel.
 - iv. Slowly drive the tractor forward, until the fifth wheel lower coupler is fully out from under the trailer, but the trailer is still above the tractor's frame.
 - v. Confirm that the trailer is stable and slowly drive forward until the tractor is clear of the trailer.
 - b. Uncouple a trailer from a fifth wheel, using a tractor with air suspension and an air bag dump feature:
 - i. Release the fifth wheel coupler lock.
 - ii. Adjust trailer air suspension systems as required.
 - iii. Lower the trailer landing gear until it just touches the ground but does not raise the trailer from the fifth wheel.
 - iv. Drive slowly forward a short distance to unlatch the fifth wheel coupler.
 - v. Drop the tractor's air suspension.
 - vi. Confirm that the trailer is stable and slowly drive forward until the tractor is clear of the trailer.
 - vii. Restore air suspension to its normal setting.
 - c. Uncoupling a trailer from another type of coupler:
 - i. Disconnect electrical systems and remove other connectors.
 - ii. Detach safety chains or cables.
 - iii. Engage trailer support gear until it contacts the ground.
 - iv. Open the primary and secondary latch.
 - v. Raise the trailer to separate the coupler.
 - vi. Slowly drive forward, confirm that the trailer is stable.
- 7** Secure the trailer according to company practices, procedures, and policies before driving away

ELEMENT 3: Driving Competencies

BLOCK 28: TURN TRACTOR-TRAILERS

KNOWLEDGE AND TASKS: Safely and proficiently complete right-hand, left-hand, and U-turns with a tractor-trailer.

This means the commercial transport truck operator will:

- 1** Know when trailer axles, and possibly fifth wheels, can and should be repositioned to complete turns.
- 2** Proficiently adjust overall vehicle length, fifth wheel position, and axle positions as required, accounting for the vehicle's overhang, trailer swing, and the rules governing vehicle weights and dimensions. (See *Block 16.25 and 16.26*)
- 3** Plan how to approach a turn and take a different route whenever a safe turn may not be possible.
- 4** Know the swept path of a tractor-trailer during a turn.
- 5** Begin a turn only when space, traffic, and traffic control signals allow the turn to be completed safely.
- 6** Proceed slowly through each left-hand and right-hand turn, while tracking the rear of the trailer.
- 7** Drive over lane markings -- or swing to the right or left of a marked lane -- only after assessing all hazards, only when the actions are needed to complete a turn, utilizing appropriate signals for visibility to all potential hazards.
- 8** Avoid contacting any obstacle during turns, and avoid contacting any curb, shoulder, or similar obstacle when adequate turning room is available.
- 9** Steer beyond the intended lane during any turn that requires additional clearance for the trailer.
- 10** Be considerate and patient during a turn, and carefully monitor pedestrians, cyclists, and other nearby vehicles.
- 11** Proficiency complete a U-turn only where legally permitted, when necessary and after assessing all hazards, and comply with company practices, procedures, and policies where more strict rules prohibit U-turns.
- 12** Proficiently turn tractor-trailers from a laneway onto a two-lane street.
- 13** Proficiently steer a tractor-trailer through a predetermined slalom course, maintaining the necessary clearance from course markers.

ELEMENT 3: Driving Competencies

BLOCK 29: BACK, DOCK, AND PARK TRACTOR-TRAILERS

KNOWLEDGE AND TASKS: Safely and proficiently back up, dock, or park a tractor-trailer.

This means the commercial transport truck operator will:

- 1** Minimize backing activity by driving forward, driving around the block, or finding a different approach whenever possible.
- 2** Plan ahead to ensure backing is always done in the safest manner, and with the greatest visibility. For example, perform blindside backing only when there is no alternative, or choose to back into a space where it is possible to drive out in a forward direction rather than backing onto a road.
- 3** Check mirror set up before backing. Adjust mirrors if necessary.
- 4** Exit the vehicle and check the intended path for clearances, obstructions, and hazards as often as necessary, before and during backing. Recheck the path whenever delays could allow conditions to change.
- 5** Open windows, silence entertainment and communication systems, use warning flashers to improve vehicle visibility, and briefly sound the horn to warn nearby people whenever backing.
- 6** Engage competent signallers and confirm signals will be understood. When using a signaller, confirm situational needs and risks are assessed. Stop the vehicle when the signaller can no longer be seen or heard.
- 7** Know that, even when using a signaller, the driver remains responsible for backing safely and without incident.
- 8** Observe signals and other warning devices used around loading docks.
- 9** Proficiently back into and properly align with loading docks.
- 10** Know the room required to safely back into a loading dock or parking space.
- 11** Know the most effective way to approach a space to begin backing.
- 12** Know the individual steering points needed to align the trailer during backing.
- 13** Anticipate and effectively counter “trailer drift” during backing.
- 14** Know that a backing tractor-trailer typically needs to travel 3 to 4 metres before the trailer begins to change direction in response to the steering wheel.
- 15** Know that shorter trailers respond more quickly to steering changes than longer trailers.
- 16** Know that the number of trailer axles and axle position affect trailer reaction during turns.
- 17** Know that straight backing maneuvers are the simplest backing maneuvers and are the preferred option whenever available.
- 18** Approach each backing maneuver in the safest and most efficient manner.
- 19** Open cargo doors when needed before backing.

| | |
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| 20 | Proficiently back a trailer into a space offering room to complete a “straight back” maneuver. |
| 21 | Proficiently complete offset backing to the left. |
| 22 | Understand the difficulty of offset backing to the right. |
| 23 | Proficiently back a trailer into a space that provides enough room to complete a “straight dock backing” maneuver, approaching a space on the left side. |
| 24 | Understand the difficulty of backing a trailer into a space that provides enough room to complete a “straight dock backing” maneuver, approaching a space on the right side. |
| 25 | Proficiently back a trailer into a space that provides only enough room to complete an “alley dock backing” maneuver from the left. |
| 26 | Understand the difficulty of backing a trailer into a space that provides only enough room to complete an “alley dock backing” maneuver from the right. |
| 27 | Proficiently back a trailer into a space that provides only enough room to complete a “angled dock backing” maneuver from the left. |
| 28 | Understand the difficulty of backing a trailer into a space that provides only enough room to complete a “angled dock backing” maneuver from the right. |
| 29 | Proficiently back a trailer into a parallel parking space from the left. |
| 30 | Understand the difficulty of parallel parking from the right. |
| 31 | Proficiently back a tractor-trailer through a predetermined slalom course, maintaining the necessary clearance from course markers. |



APPENDIX A GLOSSARY

This appendix explains the meaning of terms used in this document.

Bridge formula

A mathematical formula which calculates allowable weights based on the number of vehicle axles and the distance between the axles.

Canada Labour Code

A federal act that consolidates labour-focused statutes which govern such things as occupational health and safety, employment standards, etc.

Cargo handling equipment

Tools such as forklifts and pallet jacks which are used to move cargo on and on a commercial vehicle.

Cargo seals

Mechanical devices which seal trailer and container doors, offering added security and evidence of any tampering after the cargo has been loaded.

Combination vehicle

Two or more vehicles that have been joined together at an articulated point. A common example includes a powered tractor and unpowered semitrailer.

Curtain-sided trailer

A trailer with “walls” consisting of a frame and moveable tarp.

Dangerous goods

Cargo such as explosive, hazardous, or otherwise dangerous goods which must be transported by commercial transport truck operators who have been trained in requirements specific to these goods. Vehicles carrying this cargo must also be labelled with warning placards.

Day cab

A truck without a sleeper.

Differential lock

A device that improves traction by disabling a vehicle’s differential.

Dry van

An enclosed trailer which is used to transport non-refrigerated cargo.

Electronic On-Board Recorder (EOBR)

A device which records operational data such as a driver’s duty status, truck location, and speed.

Fifth wheel

A pivoting plate which supports the front of a trailer and creates an articulation point by locking around a king pin.



Fit for work

A physical, mental, and emotional state which reflects someone who is prepared to perform tasks or subtasks.

Flatbed

A trailer without sides.

Gladhands

The connectors at the end of hoses which supply compressed air between tractors and trailers.

Gross Vehicle Weight (GVW)

The combined weight of the vehicle and cargo.

Hazard assessment

A process used to identify workplace hazards so they can be eliminated or controlled.

Heated loads

Cargo which is heated during transport, typically to prevent freezing.

Hours of Service (HOS) regulations

Rules which govern the maximum number of hours in which a driver can perform different types of work, as well as minimum periods of rest.

Intermodal container

A non-wheeled cargo-carrying container that is moved using multiple modes of transportation.

King pin

A trailer's vertical pivot that is coupled within the jaws of a tractor's fifth wheel.

Landing gear

Retractable legs which support the front of a semitrailer that is not connected to a tractor.

Less-than-Truckload (LTL)

A shipment which includes several types of cargo -- each weighing less than 4,500 kg and destined for different locations.

Logbook

A record of the duties a driver performs, and the time at which they were performed. The document is used to confirm compliance with Hours of Service (HOS) regulations.

Long Combination Vehicle (LCV)

A vehicle combining two 53-foot trailers and typically restricted to specific routes.

National Safety Code (NSC)

A set of national standards, adopted through provincial regulations, which establish the minimum safety standards for commercial vehicles and drivers.

These govern:

- NSC 1 – Single driver licence concept
- NSC 2 – Knowledge and performance tests (drivers)



- NSC 3 – Driver examiner training program
 - NSC 4 – Classified driver licensing system
 - NSC 5 – Self-certification standards and procedures
 - NSC 6 – Medical standards for drivers
 - NSC 7 – Carrier and driver profiles
 - NSC 8 – Short-term suspension
 - NSC 9 – Hours of Service
 - NSC 10 – Cargo securement
 - NSC 11 – Commercial vehicle maintenance and inspection (PMVI)
 - NSC 12 – Commercial Vehicle Safety Alliance on-road inspections
 - NSC 13 – Trip inspections
 - NSC 14 – Safety ratings
 - NSC 15 – Facility audits
 - NSC 16 – First aid training
-

Operating fluids

Fluids including the fuel, engine oil, engine coolant, power steering oil, windshield washer, and diesel exhaust fluid needed to operate a commercial vehicle.

Overweight and over-dimensional vehicles

Vehicles which can only be moved with a special permit because they exceed sizes as defined under regulated weights and dimensions.

Personal Protective Equipment (PPE)

Protective clothing and equipment which helps to shield the user from workplace hazards.

Safety Data Sheets

Documents which explain hazards of workplace chemicals, with content defined by the Globally Harmonized System of Classification and Labelling of Chemicals for Workplace Chemicals.

Semitrailer

A trailer which places a substantial amount of its weight on a truck tractor, another trailer, or converter dolly.

Shipper

The party responsible for initiating a shipment.

Shore power

A source of electrical power, typically available at a truck stop, which can be connected to a parked truck. It is used to power vehicle amenities without requiring an idling engine.

Situational awareness

A general awareness of hazards and potential hazards in and around a vehicle.

Sleeper

The area inside a tractor which includes a bed for sleeping.

Soft skills

Interpersonal skills and general knowledge applied in the workplace.

Straight truck

A single vehicle with all the axles attached to a single frame.



Tailgate deliveries

Deliveries which require a driver to move cargo to the back or “tail” of a vehicle, where the goods can be transferred using cargo-handling equipment.

Tandem

A pair of closely spaced axles sharing a load.

TDG Act

The Transportation of Dangerous Goods Act, governing dangerous commodities which can only be moved by specially certified drivers.

Tractor

A motor vehicle equipped with the lower half of a fifth-wheel coupler.

Trailer drift

The actual path followed by the rear of a trailer. This differs from the vehicle’s apparent line of travel because a trailer pivots around the king pin and its axles.

Video event recording device

A truck-mounted video camera and recorder, typically activated by factors such as sudden changes in vehicle speed.

Weights and dimensions regulations

Regional regulations that govern the height, length, and weight of vehicles.

Working Load Limit (WLL)

The defined maximum working load of a cargo securement device such as a strap or chain.





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