

**SQAS 2022 Rail**

**Questionnaire & Guidelines**

**Revised**



Version 28-04-23

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| **SQAS Rail Questionnaire & Guidelines - English version – 2022**  **New revised text is in green** | | | | **Compulsory Comment** |
| **Item N°** | **Question** |  | **Guideline** |  |
| **6.** | **Subcontracting of Transport** |  | **Subcontracting of Transport** |  |
| 6.1. | Subcontracting policy |  | Subcontracting policy |  |
|  |  |  | It is of critical importance that any Rail Undertaking (RU) which is subcontracted by another RU/Rail Company is operated to an equivalent safety, environment, health, security, corporate social responsibility and quality standard~~s~~ as that of the main contractor. Note: Rail Companies include also Rail Freight Forwarders. The RU that is subcontracted by another RU can operate under its own license or under the license of the main RU. Companies that supply only staff, such as locomotive drivers, shunting drivers and/or ground-staff are also considered subcontractors.  Staff hired from agencies shall be considered as own staff as they operate under the license of the main carrier. |  |
| 6.1.1. | Are the requirements and restrictions of the customer companies reflected in the subcontracting policy? |  | Verify that any specific customer requirements from the chemical companies are specified on top of the general requirements. |  |
| 6.1.2. | Does the Rail Undertaking (RU)/Rail Company that is the main contractor maintain an up-to-date list of fully approved subcontractors that act as carriers? |  | Verify, by random sampling of current transport orders, that all currently used carriers are listed and approved as subcontractors. The list has to identify which subcontractors work under the license of the main RU and which ones work under their own license. | X |
| 6.1.3. | Does the RU/Rail Company have a database of all relevant subcontracted safety functions (train driver/shunter/wagon checker/maintenance people)? |  | The database shall include the names of the subcontracted companies and personnel involved. | X |
| 6.1.4. | Is there a procedure to manage the last mile services (if applicable)? |  | Last mile refers to the subcontracted service between the last RU station and the loading/unloading site. |  |
| 6.2. | Subcontractors: Performance criteria and monitoring |  | Subcontractors: Performance criteria and monitoring |  |
| 6.2.1. | Performance criteria of subcontractors |  | Performance criteria of subcontractors |  |
| 6.2.1.1. | Is there a written agreement with every RU subcontractor that contains the following requirements? |  | Review a sample of subcontractor files, and check-off the performance criteria that are reflected in the formal agreements with RU subcontractors. |  |
| 6.2.1.1.a. | compliance with all relevant national and international regulations and laws? |  |  |  |
| 6.2.1.1.b. | railway operating licenses and safety certificates of subcontracted RUs consistent with the activities and operations? |  | Railway companies need to be checked on the type of railway safety certificate they operate under (only type B is valid for a specific infrastructure). | X |
| 6.2.1.1.c. | adequate selection and training of drivers and shunting staff who are subcontracted? |  | The selection and training of train drivers is subject to a specific regulation (ED 2007/59). Every train driver needs to have a train driver license, in addition they need to have a secondary document which states the infrastructure line they are authorized to operate on, with which type of locomotive and also mentions their language knowledge. Drivers working for RUs that are working under the license of the main RU shall be included in the training of the main RU. | X |
| 6.2.1.1.d. | use of emergency number/emergency response capabilities (own or those of the main RU)? |  |  |  |
| 6.2.1.1.e. | appointment and fulfilment of the duties of the Dangerous Goods Safety Adviser (DGSA) of the subcontracted RU? |  | In the case of subcontracted traction, the DGSA must hold a valid RID module. |  |
| 6.2.1.1.f. | secondary subcontracting of transport? |  | Most of the RUs have no European coverage, so they normally have to outsource part of the transport contract. A contract holder can have 2 to 3 RUs which deliver traction in part of the region where the main contractor does not hold a safety license. | X |
| 6.2.1.1.g. | insurance that covers legal and customer requirements, as a minimum? |  |  | X |
| 6.2.1.1.h. | accident/incident reporting to NSAs (National Safety Authorities), IMs (Infrastructure Managers) and the main RU? |  | The compulsory reporting to the NSA should be included in the agreement. All rail accidents which are part of the CSI (common safety indicators) such as derailments, collisions, SPAD's, broken axles, etc., need to be reported to the NSA within a defined time frame required by law. See section 8.3. | X |
| 6.2.1.1.i. | near-miss reporting to NSAs, IMs and main RU/Rail Company? |  | A near miss is an unplanned event that did not result in injury, illness, or damage – but had the potential to do so*.* Examples can be a person nearly hit by a train or an unattended train out of control in a marshalling yard that does not hit another train. | X |
| 6.2.1.1.j. | implementation of Behavior Based Safety (BBS) for driving based on the Cefic BBS Guidelines for safe driving? |  | The RU should develop its own BBS programme based on the principles of equivalent programmes in the road transport sector. See "Cefic/ECTA Behavior based safety guidelines for training of drivers and safe driving of road freight vehicles ".  <https://cefic.org/library-item/behaviour-based-safety-guidelines-training-drivers-safe-driving-road-freight-vehicles> | X |
| 6.2.1.1.k. | prohibition of drugs and alcohol? |  | Any use of alcohol and (non-medically prescribed) drugs shall be prohibited. | X |
| 6.2.1.1.l. | availability of PPE/ emergency equipment |  | For transport of dangerous goods the requirements are defined in RID 5.4.3 and applicable national legislation. Other requirements depend on products (SDS) and customer requirements. | X |
| 6.2.1.1.m. | confidentiality of operational and commercial data? |  |  |  |
| 6.2.1.1.n. | security provisions as required by applicable legislation (1.10 RID)? |  |  |  |
| 6.2.1.1.o. | handover responsibility of controls covered by RID? |  |  |  |
| 6.2.1.1.p. | handover responsibility of technical surveillance of wagons? |  |  |  |
| 6.2.1.1.q. | equipment maintenance, inspection and testing? |  |  |  |
| 6.2.2. | Performance monitoring process of subcontractors |  | Performance monitoring process of subcontractors |  |
| 6.2.2.1. | Is the subcontracted company assessed by SQAS? |  | Look for evidence that the company has analysed its subcontractors' reports from the SQAS databases or alternatively has obtained extracted reports directly from the assessed companies. The analysis has to contain a conclusion and, if applicable, an action plan based on the report. | X |
| 6.2.2.2. | When SQAS is not used, is the main RU/Rail Company using equivalent assessments to evaluate its subcontractors? |  | Look for evidence that the company has evaluated its partners through equivalent assessment protocols. Equivalent means that it is an assessment carried out *in situ* covering the same areas that SQAS covers. The sub-subcontractors should be included in this verification. This can be accomplished by using SQAS questionnaires or by an equivalent system of evaluation carried out on the first level of subcontractors. | X |
| 6.2.2.3. | When SQAS packages are not used, are the following criteria taken into account to evaluate the subcontractors?: |  | The assessor will take a sample of the subcontractors files used by the main RU. The assessment reports must have a reference to the aspects referred to below. |  |
| 6.2.2.3.a. | compliance with all relevant national and international regulations and laws? |  |  |  |
| 6.2.2.3.b. | railway operating licenses and safety certificates of subcontracted RUs consistent with the activities and operations? |  | The assessor shall check the railway safety certificate part B of the subcontracted RUs. This is a European document issued by National Safety Authorities (NSAs) that can be used to impose restrictions on the company. The restrictions can be on the type of rolling stock or on groups of dangerous goods or even limits on UN number, etc. The assessor will check if the licenses are still valid, the normal validity is 5 years. Every RU must have this, they cannot obtain a railway safety certificate if the railway license is not present. |  |
| 6.2.2.3.c. | adequate selection and training of drivers and shunting staff who are subcontracted? |  |  |  |
| 6.2.2.3.d. | use of emergency number/emergency response capabilities? |  | The assessor will check that the emergency procedure of the subcontractor includes a reference to an emergency number. This number may also be found in transport documents or transport orders. |  |
| 6.2.2.3.e. | appointment and fulfilment of the duties of the Dangerous Goods Safety Adviser (DGSA) of the subcontracted RU? |  | In the case of subcontracted traction, the DGSA must have the RID module. The assessed company must have copies of the DGSA certificates of subcontracted RUs and the assessor has to verify them. |  |
| 6.2.2.3.f. | secondary subcontracting of transport? |  | The assessor should check that the level of secondary subcontracting is agreed with the customer. |  |
| 6.2.2.3.g. | insurance that covers legal and customer requirements, as a minimum? |  |  |  |
| 6.2.2.3.h. | accident/incident reporting to NSAs (National Safety Authorities), IMs (Infrastructure Managers) and RU/Rail Company? |  |  |  |
| 6.2.2.3.i. | near-miss reporting to NSAs, IMs and RU/Rail Company? |  |  |  |
| 6.2.2.3.j. | implementation of Behaviour Based Safety (BBS) for driving based on the Cefic BBS Guidelines for safe driving? |  |  |  |
| 6.2.2.3.k. | prohibition of drugs and alcohol? |  |  |  |
| 6.2.2.3.l. | availability of PPE/ emergency equipment? |  |  |  |
| 6.2.2.3.m. | confidentiality of operational and commercial data? |  |  |  |
| 6.2.2.3.n. | security provisions as required by applicable legislation (1.10 RID)? |  |  |  |
| 6.2.2.3.o. | handover responsibility of controls covered by RID? |  |  |  |
| 6.2.2.3.p. | handover responsibility of technical surveillance of wagons? |  |  |  |
| 6.2.2.3.q. | equipment maintenance, inspection and testing? |  |  |  |
| 6.2.2.4. | Do you retain documented evidence that compliance with the performance criteria was verified before the agreement, was signed with each subcontractor, and repeated regularly? |  | Compliance should be checked before the agreement was signed and be monitored at least on an annual basis. Check for documented evidence that performance monitoring has taken place through reviewing the SQAS assessments of these RUs or by direct auditing. |  |
| **7.** | **Equipment** |  | **Equipment** |  |
| 7.1. | Equipment Specification |  | Equipment Specification |  |
| 7.1.1. | Does the purchasing procedure include: |  | Check for the existence of a procedure and responsibilities for purchasing, leasing or renting. |  |
| 7.1.1.a. | - customer demands? |  |  |  |
| 7.1.1.b. | - QSSHE requirements? |  |  |  |
| 7.1.2. | Are there written specifications for the purchase or lease of locomotives and wagons? |  | Check the specification for a recently purchased or leased equipment. |  |
| 7.1.3. | Are new delivered locomotives and wagons (purchased or leased) checked on conformity with the agreed specifications before first use? |  | Ask how this is done (checklist used?) and by whom. Verify from documentation that a check was carried out accordingly on a recently purchased or leased locomotive and wagon. |  |
| 7.2. | Equipment Inspection and Maintenance of all rolling stock |  | Equipment Inspection and Maintenance of all rolling stock |  |
|  |  |  | A quality RU should only use reliable equipment. This section seeks to ensure that effective routine inspection and maintenance systems are in place which require that equipment (owned, leased or subcontracted) is adequately serviced, lubricated and adjusted and otherwise maintained to prevent abnormal wear and tear, and to detect defects before they cause accidents or breakdowns. |  |
|  |  |  | In quality RU companies abnormal wear, accidental damage and abuse detected through preventive maintenance inspections will be investigated. Repair and replacement costs, associated with this, will be recorded and analysed as loss data and will require similar remedial and follow up actions as for other accidental losses. |  |
|  |  |  | “Inspection” refers to statutory inspection of equipment. |  |
|  |  |  | “Maintenance” is meant in this context to be “preventive maintenance”, i.e. a planned overhaul and repair of current defects which ensures that the equipment remains safe throughout its current life. |  |
|  |  |  | Rolling stock under control are locomotives and wagons which are owned by the company or leased on a long term basis, if the company does the maintenance in this case. An important aspect to note is that the responsibilities involving the maintenance of wagons are complex. An RU can either deliver traction to its own wagons, to leased wagons, customer wagons or to wagons from other RU's. A wagon must always have a keeper (the company who places the VKM -vehicle keeper marker- on the wagon, not necessarily a RU) and ECM (entity in charge of maintenance, also not necessarily a RU).  The RU can be either a keeper, ECM or both, but it can also be neither of them. In this case the RU is just delivering traction and is not responsible for the maintenance. When the RU is ECM for a wagon, their maintenance management system must be CERTIFIED. The certification can be done by a notified body or by NSAs, depending on the country. |  |
| 7.2.1. | Is there a written policy to ensure the continued safe operation of all rolling stock? |  | Check for the existence of a written policy statement which must be clear and unambiguous. Look for a document which clearly defines responsibilities, required inspection steps, response to identified defects, maintenance programme(s), definition of exception rules, etc. |  |
| 7.2.2. | Does this policy require a maintenance (management) system and plan covering the international and local requirements? |  | Check for evidence and test scope of checklist. |  |
| 7.2.3. | Where the RU is ECM for all of the wagons: Is there a valid certificate available? |  | Verify for which function the certificate is issued: Regulation (EU) 2018/763 of 9 April 2018.  The assessor will check in the following ERA website the scope and validity of the certificate: <https://eradis.era.europa.eu/safety_docs/ecm/certificates/default.aspx?DocType=1>.  The assessor will select some wagons during the site inspection and check the maintenance status against the information provided by the RU. | X |
| 7.2.4. | Where the RU is not ECM for all of the wagons: how does the RU assure the maintenance? |  | A contract between the RU/Keeper and the ECM will be available and the conditions of the contract shall be respected by both the RU/Keeper and the ECM (Regulation (EU) 2018/763 of 9 April 2018). The RU must assure that the wagons have identified ECMs and the use of the wagons correspond to the scope of the certificate. The assessor must verify this by the sampling of wagons during the site inspection. | X |
| 7.2.5. | Is the maintenance of locomotives verified by the RU? |  | The assessor shall verify that the company has a system to control the quality and execution of the maintenance of the locomotives. | X |
| 7.2.6. | If the RU carries out repairs, is it ensured that the company is certified and equipped to do so? |  | This section is intended for the small repair and maintenance of wagons conducted on the site operated by the RU. Examples are: changing of brake blocks, greasing of the buffers, etc. For maintenance above this limit the wagon keeper has to be informed.  Check that personnel involved are trained and or licensed to perform these activities. Check that only allowed repairs are carried out (no quick fix). | X |
| 7.2.7. | Identification and Calibration of Measuring equipment |  | Identification and Calibration of Measuring equipment |  |
| 7.2.7.1. | Are calibration procedures in place? |  | Calibration, if performed in-house, should be undertaken by qualified personnel (properly trained and authorized to perform the activity) who are working according to verified procedures. Alternatively, calibration may be undertaken by a qualified contractor certified to national standards. In this case, a formal agreement specifying the requirement for, and the frequency of calibration should exist between the owner and the contractor. |  |
| 7.2.7.2. | Is measuring equipment clearly identified and calibrated? |  | Check calibration procedure, programme and inventory of the measuring equipment, if applicable. Examples of equipment to be calibrated are: measurement tools for axle length between wheels, measurement tools for wheel flange/surface, torque wrenches, manometers, etc. |  |
| 7.2.7.3. | Are calibration records maintained? |  | Verify that the calibration records are consistent with the measuring equipment present on site and the calibration programme. |  |
| **8.** | **Behaviour Based Safety (BBS or equivalent programme) and Training** |  | **Behaviour Based Safety (BBS or equivalent programme) and Training** |  |
|  |  |  | The Cefic/ECTA Guidelines on BBS for truck drivers can be used as reference document and "inspiration source" to design and implement a company programme. <https://cefic.org/library-item/behaviour-based-safety-guidelines-training-drivers-safe-driving-road-freight-vehicles> |  |
| 8.1. | Awareness of all service partners |  | Awareness of all service partners |  |
| 8.1.1. | Does the company promote the implementation of the principles of Behaviour Based Safety (BBS) for driving, shunting, repair, and small maintenance activities with its service partners? |  | Check policies, contracts, service level agreements and verify that the principles of BBS are reflected. The following activities should be covered: driving/shunting/repair/small maintenance activities. |  |
| 8.2. | BBS for Safe Operations |  | BBS for Safe Operations |  |
| 8.2.1. | BBS Training for Safe Operations |  | BBS Training for Safe Operations |  |
| 8.2.1.1. | Is BBS taken into account when reviewing the training requirements of managers and operational staff? |  | BBS must be fully integrated in the carrier’s organization and become an integral part of the company’s culture. Not only train drivers but also ground operators/operational staff and administrative staff should be trained and understand the principles of BBS. Look for training records and awareness. Drivers of subcontracted RUs that are working under the main RU's license and staff provided by subcontracted agencies must be included in the BBS plan. | X |
| 8.2.1.2. | Have internal or external persons been formally selected and designated as qualified BBS trainers? |  | Trainers can be recruited internally or externally.  In case of internal trainers, it is advisable that these have an independent position and relationship with the drivers. Ask for trainer history and previous and current position.  Besides being an experienced and respected driver, the trainer must be a good teacher, objective, motivated and able to convey the message in a positive way. Try to have a talk with the BSS trainer in order to evaluate his BBS knowledge and interpersonal skills. Smaller companies will be more likely to seek a trainer from a training institute. Try to find out if the institute's programme is in line with the BBS guidelines. |  |
| 8.2.1.3. | Do own train drivers have a valid driving license? |  | The selection and training of train drivers is subject to a specific regulation (ED 2007/59). Every train driver needs to have a train driver licence, in addition they need to have a secondary document which states the infrastructure line they are authorized to operate on, with which type of locomotive and also mentions their language knowledge. | X |
| 8.2.1.4. | Has the BBS driver training content and format (based on observation, coaching and interactive communication) been developed? |  | Check if the training content and format are reflecting the spirit of the BBS guidelines i.e. on a one-to-one basis between trainer and driver observing and coaching whilst driving and addressing the behavioral driving skills. |  |
| 8.2.1.5. | Has the BBS training content and format for technical staff doing the technical checks, been developed (based on observation, coaching and interactive communication)? |  | Check if the training content and format are reflecting the spirit of the BBS guidelines i.e. on a one-to-one basis between trainer and operator, based on observing and coaching whilst performing the technical checks. |  |
| 8.2.1.6. | Has the BBS training frequency been defined and is it implemented? |  | Check training plan. The frequency may vary between once every 1 to 3 years depending on the annual performance review of each individual driver. |  |
| 8.2.1.7. | Are all operational staff covered by a BBS training plan (register with individual names and dates)? |  | Check the training records. |  |
| 8.2.1.8. | Is a personal record kept on each person with the observations on the behavioral skills? |  | Check the training records. |  |
| 8.2.2. | BBS Results, Analysis and Monitoring |  | BBS Results, Analysis and Monitoring |  |
| 8.2.2.1. | Are individual results from the BBS training communicated to the staff, preventive actions agreed, recorded and followed-up? |  | Check the training and individual records of operational staff. |  |
| 8.2.2.2. | Are key performance indicators identified and measured to determine the effectiveness of the BBS programme? |  | Look for documented evidence. |  |
| 8.2.2.2.a. | - fuel/energy consumption per tonne per km? |  | The question is addressed to the locomotive’s consumption of fuel/energy. |  |
| 8.2.2.2.b. | - damages? |  |  |  |
| 8.2.2.3. | Are the overall results of KPIs analysed and are root causes identified? |  | Look for analyses of the recorded observations. |  |
| 8.2.2.4. | Are these results, the structural trends and issues reported to the staff at regular intervals? |  | Look for documented evidence. |  |
| 8.2.2.5. | Are the results and learning from BBS reflected in the refresher programmes? |  | Check that the overall results and trends as identified in 8.2.2.4. are documented as learning experience and included in the refresher training. |  |
| 8.3. | Common Safety Indicators (CSIs) |  |  |  |
| 8.3.1. | Does the company analyse the following CSIs and take corrective actions, if needed? |  | CSIs are reported to National Safety Authorities. The indicators must be related to the number of incidents during cargo transportation per million kilometres. For definition of CSIs refer to Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety.  The assessed company must analyse trends and implement corrective actions if there are deviations from the expected outcome and/or from the national average results. |  |
| 8.3.1.1. | Collisions of trains, (set of) wagons |  |  | X |
| 8.3.1.2. | Derailments of trains |  |  | X |
| 8.3.1.3. | Derailments during shunting |  |  | X |
| 8.3.1.4. | Level-crossing accidents (excluding suicides) |  |  | X |
| 8.3.1.5. | Signal Passed at Danger (SPAD) |  |  | X |
| 8.3.1.6. | Loss of containment - Dangerous Goods involved. |  |  | X |
| 8.4. | Training |  | Training |  |
| 8.4.1. | Are the following subjects covered in the training programme for operational personnel (drivers, shunters, inspectors, maintenance staff and traffic controllers)? |  | Drivers of subcontracted RUs that are working under the main RU's license and staff provided by subcontracted agencies must be included in the training Check a random sample of training records.  These are additional questions to SQAS Core section 3.2. | X |
| 8.4.1.a. | RTC (Rail Tank Car) construction (critical points to recognize defects)? |  | The training programme must cover critical elements of RTC construction to help the staff recognize defects. |  |
| 8.4.1.b. | locomotive preparation/daily checklist? |  | The training programme must cover critical elements of the locomotive construction to help the staff recognize defects and elements that should be checked before starting a journey. |  |
| 8.4.1.c. | driving style for energy saving? |  | Award a positive score if there is evidence of an on-going commitment to provide training on driving style for energy saving to all drivers. | X |
| 8.4.2. | Have all staff been trained in the content of the driver manuals? |  | Check training records and interview train drivers, shunting drivers, and ground staff. Check frequency of retraining. |  |
| **9.** | **Security in Transport** |  | **Security in Transport** |  |
| 9.1. | Security Plan |  | Security Plan |  |
| 9.1.1. | Has the company developed security provisions regarding its distribution of transport information? |  | Logistics information must be protected and secured within the IT systems. Check that IT systems are secured appropriately. An additional option is to include a Secrecy Clause in the employment contract which is filed in the Human Resource Department. |  |
| 9.1.2. | Is the handover/transfer of security with the associated responsibilities signed and documented? |  | Check for documented evidence. This has to cover own staff, subcontractors and other service partners. |  |
| 9.2. | Security during transport |  | Security during transport |  |
|  | *Legal requirements for High Consequence Dangerous Goods (HCDG):* |  | *Legal requirements for High Consequence Dangerous Goods (HCDG):* |  |
| 9.2.1. | Has a security plan been developed and implemented for High Consequence Dangerous Goods (HCDG) in accordance with section 1.10.3 of RID? |  | Check from recent transactions, whether High Consequence Dangerous Goods (as defined in RID) are being transported. For High Consequence Dangerous Goods (HCDG), the RU must develop and implement a security plan. |  |
|  |  |  | Check the main content of RID section 1.10 and check if the index page of the security plan contains all necessary chapters. |  |
| 9.2.2. | Are arrangements to prevent the manipulation or abuse or unauthorized use of HCDG applied and are measures taken to ensure that these are operational and effective at all times? |  | These arrangements will be based on the security plan developed according to section 1.10.3 of RID. Check the type of arrangements and the effectiveness in practice. (Check during inspection). | X |
| 9.2.3. | Has the IT department developed measures to protect the transfer/storage of sensitive transport information related to HCDG? |  | Look for a written procedure to protect the information. |  |
|  | *Best practices for transport security of HCDG:* |  | *Best practices for transport security of HCDG:* |  |
| 9.2.4. | Does the company have measures to monitor the movement of HCDG whilst in transit? |  | The assessor shall check the tools used to monitor the position of the train and make a traceability test (the verification shall include the composition of the train on arrival and the position of the HCDG in the train). | X |
| 9.2.5. | Where seals/load security devices are used, are seal discrepancies for HCDG investigated thoroughly, the shipment rejected if necessary, security personnel notified and extreme care taken if there is evidence of seal tampering? |  | Reporting system for seal discrepancies must be in place, including investigation and follow-up. |  |
| **10.** | **Operating Procedures and Interfaces** |  | **Operating Procedures and Interfaces** |  |
| 10.1. | Site Operating Procedures |  | Site Operating Procedures |  |
|  |  |  | The assessor shall select operating procedures at random and check whether appropriate emphasis is placed on the need to observe correct safety requirements and attitudes. In order to clarify the terminology used, the following explanations are provided:  **Shunting:** is the process of sorting items of rolling stock into complete trains, or the reverse. It refers also to transfer from one location to another on a marshalling yard. **Marshalling yard**: a place or depot where railway wagons are shunted and made up into trains and where engines, carriages, etc., are kept when not in use. |  |
| 10.1.1. | Is there a clear definition of responsibilities between the RU and the site owner about operation and maintenance of offices, buildings, grounds, workshops and the site in general? |  | The assessor shall ask for documentary evidence that defines responsibilities. These can also be required by local regulations. | X |
| 10.1.2. | Are there comprehensive procedures/instructions at the facility for following activities or the use of following equipment? |  | Procedures and instructions should be written in detail and describe who has particular responsibilities and the standard of performance expected. During the site inspection it should be checked if the responsible personnel understand all the requirements of the procedures and if they are fully implemented. |  |
| 10.1.2.a. | clean up and disposal of chemical spillages? |  | The assessor shall look for operating procedures that cover clean-up and disposal of spillages. This information might be derived from the Safety Data Sheet or from information provided by the manufacturers. For some particularly hazardous substances, specialized equipment, for example suitable respiratory protective devices, antidotes or decontaminants are required. Check whether an analysis has been made on the products the company are handling and the need for specialized equipment has been determined. Check details of the waste disposal arrangements which are in place and if these are in compliance with the relevant regulations applicable for the country of operation. Examples of waste may be waste oil, paper, scrap metal, chemicals, lamps, aerosols, contaminated clothing, used PPE's, etc. |  |
| 10.1.2.b. | spill control plan in place? |  | Look for evidence of a pro-active programme to minimize spills and their consequences. |  |
| 10.1.2.c. | vehicle/equipment defect reporting? |  |  |  |
| 10.1.2.d. | vehicle/equipment defect rectification? |  |  |  |
| 10.1.2.e. | handling of lifting equipment, cranes and hydraulic systems? |  |  |  |
| 10.1.2.f. | handling of explosion proof equipment? |  |  |  |
| 10.1.2.g. | handing over of vehicle/equipment to a Terminal? |  |  |  |
| 10.1.2.h. | reporting and handling of damages/ defects of rail infrastructure? |  |  |  |
| 10.1.2.i. | Shunting? |  |  |  |
| 10.1.3. | Management of change: Have the significant changes been assessed by an Assessment Body according to Com Reg 402/2013. (Art 4 to 6)? |  | The assessor will investigate if significant changes have happened in the operations of the RU according to the criteria defined in Com Reg 402/2013, Annex I, and will ask for the safety assessment reports required by the referred regulation. This question is additional to SQAS Core question 2.1. | X |
| 10.1.4. | Does the company have a system to encourage near-miss reporting? |  | Look for near-miss reports. This question is additional to SQAS Core 5.1 |  |
| 10.2. | Operating activities on public railroads |  | Operating activities on public railroads |  |
| 10.2.1. | Operating procedures |  | Operating procedures |  |
| 10.2.1.1. | Are there comprehensive procedures/instructions for the following activities or the use of following equipment: |  | Procedures and instructions shall be written in detail and describe who has particular responsibilities and the standard of performance expected. |  |
| 10.2.1.1.a. | clean up and disposal of chemical spillages? |  | The assessor shall look for operating procedures that cover clean-up and disposal of spillages. This information might be derived from the Safety Data Sheet or from information provided by the manufacturers. For some particularly hazardous substances, specialized equipment, for example suitable respiratory protective devices, antidotes or decontaminants are required. Check whether an analysis has been made on the products the company are handling and the need for specialized equipment has been determined. Check details of the waste disposal arrangements which are in place and if these are in compliance with the relevant regulations applicable for the country of operation. Examples of waste may be waste oil, paper, scrap metal, chemicals, lamps, aerosols, contaminated clothing, used PPE's, etc. |  |
| 10.2.1.1.b. | spill control plan in place? |  | Look for evidence of a pro-active programme to minimize spills and their consequences. |  |
| 10.2.1.1.c. | vehicle/equipment defect reporting? |  |  |  |
| 10.2.1.1.d. | vehicle/equipment defect rectification? |  |  |  |
| 10.2.1.1.e. | handling of lifting equipment, cranes and hydraulic systems? |  |  |  |
| 10.2.1.1.f. | handling of explosion proof equipment? |  |  |  |
| 10.2.1.1.g. | handing over of vehicle/equipment to a Terminal? |  |  | X |
| 10.2.1.1.h. | reporting and handling of damages/ defects of rail infrastructure? |  |  |  |
| 10.2.2. | Emergency Response on public railroads |  | Emergency Response on public railroads |  |
|  |  |  | These questions are additional to the questions of section SQAS Core 4. |  |
| 10.2.2.1. | Does the RU include the Emergency Response Number of the producer/consigner/product owner on the Transport Document? |  | This is applicable when the RU is involved in making up the Transport Document. |  |
| 10.2.2.2. | Are joint emergency drills for railway incidents held with customers? |  | It is essential to test emergency procedures and emergency response plans from time to time. It is good practice to get all relevant parties involved in an exercise, to identify shortcomings and to agree improvement steps. Check for evidence that such drills are carried out, results are analysed and documented, improvement steps agreed and followed-up. | X |
| 10.2.2.3. | Are there projects to further improve the communication with customers and emergency centers? |  | Check for planned projects on modernization and speed of communication to meet the requirements of the authorities, the customer and the public. |  |
| 10.3. | Customer Interface |  | Customer Interface |  |
| 10.3.1. | Are formal operational agreements made and transferred into operational procedures? |  | Look for evidence of formal agreements (e.g. contracts) and scheduled meetings at which these agreements are reviewed. The assessor shall check that operational procedures related to these agreements are in place. |  |
| 10.3.2. | Are there formal written agreements between the customer and the RU/Rail Company concerning the responsibility (ownership, maintenance, use) for the railway track which is used for collecting and distributing? |  | Many incidents happen because of lack of or unclear responsibility roles and consequently disconnects. Check for evidence of written agreements. |  |
| 10.3.3. | Are safety rules and standards known to the RU crews when entering the private premises? |  | It is clear that a formal relationship exists only between the RU and the chemical company by which it has been contracted. Other parties than the customer may own loading and/or discharge sites. The RU therefore cannot enter directly into a written agreement with these parties. The assessor shall look for evidence that the driver's manual includes a reference to these items and that the RU is aware of specific site instructions communicated to him by his customer. If these are available, the assessor must find proof that these have been communicated to the driver(s) concerned. |  |
| 10.3.4. | Is a quality performance measurement system in place? |  | Performance refers to punctuality of the service and the good care of the customer’s goods, for example avoiding damage. Check from records like punctuality compliance or damaged equipment rate that the performance analysis on the rendered services is followed-up. |  |
| 10.3.5. | Are the requirements specified by the customers satisfactorily met? |  | Check in these records whether specific customer requirements are taken into consideration. |  |
| 10.3.6. | Are the performance results communicated to the customers? |  | Check that the results of the service performance measurement are communicated to the customers. |  |
| 10.4. | Interface with the Infrastructure Manager (IM) |  | Interface with the Infrastructure Manager (IM) |  |
|  |  |  | This section is intended to deal with Infrastructure Equipment, such as tracks, switches, signals, crossings, which are normally neither owned nor operated by the RU. However, it is important for the RU to have a good understanding of the management systems in place with regard to the specification, maintenance and inspection of infrastructure equipment. The safety and quality of the transport operation depends to a large extent on the reliability of the infrastructure equipment. This section applies especially to freight lines and marshalling yards, because normally for main-lines, these requirements are ensured through the controls over passenger traffic. |  |
| 10.4.1. | Communications between RU and Infrastructure Manager |  | Communications between RU and Infrastructure Manager |  |
| 10.4.1.1. | Are unsafe situations reported to the infrastructure manager? |  | Check for communication between RU and Infrastructure Manager, and follow-up on problem issues. Look for evidence of reports/communications. |  |
| 10.4.1.2. | Is the information from the IM about incidents in the infrastructure handled in an effective way by the RU? |  | These include messages such as derailments, interruptions on the track, etc. Check that locomotive drivers are informed about these incidents. |  |
| 10.4.1.3. | Are the accidents/incidents investigated jointly with the IM using a root cause analysis approach? |  | To avoid recurrence of equipment failures, root causes for accidents/incidents must be investigated and results openly shared with parties involved. For that purpose, the "Guidelines for investigation of logistics accidents and identifying root cause" have to be used.  Look for relevant evidence. | X |
| 10.4.1.4. | Are there regular meetings with the IMs? |  | Look for agendas, minutes, attendance lists and frequency of such meetings. The infrastructure availability that could affect punctuality of deliveries has to be discussed. |  |
| 10.4.1.5. | Is an action plan drawn up with the IM after an incident? |  | Investigations lead to actions. Check whether action plans have been requested by the RU to the IM. |  |
| 10.4.2. | RU and Infrastructure Manager Joint Emergency Plans |  | RU and Infrastructure Manager Joint Emergency Plans |  |
| 10.4.2.1. | Are joint emergency drills for railway incidents held? |  | Check for evidence on joint drills. | X |
| 10.4.2.2. | Does the infrastructure manager and the RU have joint bad weather emergency plans? |  | Check Emergency procedure and Plans. Different weather conditions are to be included. | X |
| **11.** | **Order Process and Operations** |  | **Order Process and Operations** |  |
| 11.1. | Planning and Communication |  | Planning and Communication |  |
| 11.1.1. | Order Planning and Processing |  | Order Planning and Processing |  |
| 11.1.1.1. | Is there a written procedure for transport order processing that takes into account risk assessment of the routing? |  | The assessor should review the documented procedures and give a positive score when the key elements are covered, e.g. transport solutions (path, locomotive, driver) which make it possible to meet the transport order considering safety aspects. |  |
| 11.1.1.2. | Is there a business contingency plan to maintain the planning capability in the event of sickness, holidays, unforeseen events, strikes, bad weather, etc.? |  | Check if arrangements are in place to ensure a continuous correct execution of orders in all circumstances. |  |
| 11.1.1.3. | Does the planning section communicate all relevant information and instructions to the relevant staff (train drivers, shunting operators, subcontractors, etc.) including but not limited to: |  | To score a "Yes" the checklist needs only to include details specific to the particular delivery, not covered by other general instructions. |  |
| 11.1.1.3.a. | hazardous nature of the material? |  |  |  |
| 11.1.1.3.b. | national transport regulations in all involved countries (for international transport)? |  |  |  |
| 11.1.1.3.c. | consignor/consignee details? |  |  |  |
| 11.1.1.3.d. | handling of emergencies? |  |  |  |
| 11.1.1.4. | Are there procedures in place to ensure that: |  |  |  |
| 11.1.1.4.a. | the maximum allowable weight in the various countries is not exceeded? |  | Check if a procedure is in place to ensure that, during the journey, the maximum allowable weights in the various countries are not exceeded. The procedure should take into account a calculation based on the track categories (A/B/C/D/E), the tare weight of the load unit, the payload of the wagon and the filling degree (if applicable), container, box, trailer. The procedure shall include verification of the train inspectors before departure (GCU, Appendix 9, Annex 1, item 7.1.2.). The assessor shall verify these records. Look for a document with maximum allowable weights in the various countries, taking also exceptions for the intermodal legs into consideration. |  |
| 11.1.1.4.b. | the different loading gauges are taken into account? |  | A loading gauge defines the maximum height and width for railway vehicles and their loads to ensure safe passage through bridges, tunnels and other structures. This is especially relevant in case of intermodal transport: swap bodies, trailers and high cube containers. Not all infrastructures offer the same loading gauge and especially for intermodal transports this can pose a very high risk (e.g. trailers not fitting into tunnels etc.). |  |
| 11.1.2. | Traffic Control |  | Traffic Control |  |
| 11.1.2.1. | Are procedures or systems (telematics, RFID, etc.) in place to monitor the current wagon location while in transit in order to signal unusual delay? |  | Examine, whether there is a system in place to keep the customer at all times informed about the current location of the wagon carrying his goods and about any (major) envisaged delays. |  |
| 11.1.2.2. | Are speed limits communicated and adhered to: |  | Check for existence of records, including records of speed controls (like black boxes). |  |
| 11.1.2.2.a. | - on the main lines? |  |  |  |
| 11.1.2.2.b. | - in shunting yards? |  |  |  |
| 11.1.2.3. | Are the communication systems connected with the systems used by the involved RU? |  | Communication systems of different railway carriers should be compatible to allow quick and efficient exchange of information and data. Check records for evidence of successful communications between different railway companies for a positive score. |  |
| 11.1.2.4. | With regard to line categories (EN 15528)? |  | It is important to realize that railway lines are classified in a certain category, defined by a given axle load and tonne/meter weight. The assessor shall verify that up-to-date records of the track categories exist and that a mechanism is in place which ensures that railway carriers are informed about changes. |  |
| 11.1.2.4.a. | are applicable line categories (in accordance with EN 15528, e.g. C/D-tariff) communicated to customers? |  | This information can be found in the agreement between the RU and the customers, RU web pages, routing specifications or transport documents. The loader needs this information to determine the maximum load in the RTC. |  |
| 11.1.2.4.b. | is there a formal procedure in place to inform RUs/customers about changes in track categories? |  |  |  |
| 11.2. | Operations |  | Operations |  |
| 11.2.1. | Instructions to RU staff (train drivers, shunting operators and wagon inspectors) |  | Instructions to RU staff (train drivers, shunting operators and wagon inspectors) |  |
| 11.2.1.1. | Have train drivers received a manual in a language they can understand? |  | Check if drivers’ manuals are available and are distributed in a language they can understand. Refer to TSI (Technical Specification for Interoperability) Operation and Traffic 2012/757. Art 4.2.1.2. documentation for drivers. Take a random check by asking 2 or more train drivers if the manuals are present in the drivers’ cabin. Check for evidence that document control procedures have been followed. Examine selected instructions to check that details are up-to-date. The score is zero if significant details are out of date. |  |
| 11.2.1.2. | Are the manuals updated regularly? |  | Check that the manuals are up-to-date by checking references to updates in RID and/or other applicable legislation and developments. Examine selected instructions to check that they have been reviewed and revised, if needed. Do not score positively if they are out of date. |  |
| 11.2.1.3. | Does the driver manuals contain detailed instructions regarding: |  | Scores a "Yes" for each listed item for which an instruction exists that covers critical SHEQ&Sec aspects. |  |
| 11.2.1.3.a. | - requirements included in TSI? |  | Drivers' rule book, description of the lines and the relevant line-side equipment associated with the lines worked over, information from Rail Infrastructure managers in real time, timetables (Refer to TSI Operation and Traffic 2012/757. Art 4.2.1.2. documentation for drivers). |  |
| 11.2.1.3.b. | - use of mobile phone? |  | Mobile phones shall not be used for "private use” and communications will be held as short as possible and allowed during shunting and approach into (un)loading sites. |  |
| 11.2.1.3.c. | - prohibition of use of drugs and alcohol? |  | Can also be needed when the RTC is handed over to another RU. |  |
| 11.2.1.3.d. | - actions to be taken in an emergency? |  |  | X |
| 11.2.1.3.e. | - security? |  |  |  |
| 11.2.1.3.f. | - verification that all prescribed documentation is on board the train? |  |  |  |
| 11.2.1.3.g. | - reporting of defects and/or unusual circumstances ? |  |  |  |
| 11.2.1.3.h. | - operating/driving restrictions during bad weather conditions ? |  |  |  |
| 11.2.1.3.i. | - actions to be taken if, during the journey, an infringement which could jeopardize the safety of the transport, is observed (RID goods)? |  |  |  |
| 11.2.1.3.j. | - use of wheel blocks (to avoid uncontrolled vehicle movement)? |  |  |  |
| 11.2.1.3.k. | - shunting restrictions (fragile goods, forbidden hump, etc.)? |  |  |  |
| 11.2.1.4. | Do the wagon inspectors check the following items: |  |  |  |
| 11.2.1.4.a. | - verification that the vehicles have no visible defects, leakages, cracks and missing equipment? |  |  | X |
| 11.2.1.4.b. | - verification through documents that the vehicles are not overloaded? |  |  | X |
| 11.2.1.4.c. | - verification that danger labels and markings (orange plates) prescribed for the vehicles have been affixed (RID goods)? |  |  |  |
| 11.2.1.4.d. | - segregation of rail vehicles? |  |  |  |
| 11.2.1.5. | When shunting operations are carried out by the RU, are there procedures to: |  | Shunting is one of the most dangerous activities in railway operations. Check whether written procedures are existing for the listed items. |  |
| 11.2.1.5.a. | - prevent excessive impact on wagons, especially 'bumping'? |  | This is especially important for cargo of dangerous goods classes 1, 2 and 3. 'Bumping' means the process of pushing uncoupled wagons away from the locomotive, after which the wagons will move on their own until they 'collide' with others or otherwise come to a halt. |  |
| 11.2.1.5.b. | - prohibit climbing on/off moving wagons? |  |  |  |
| 11.2.1.5.c. | - ensure the correct use of handbrakes? |  |  |  |
| 11.2.1.5.d. | - prohibit access to the top of wagons? |  |  |  |
| 11.2.1.5.e. | - prohibit access underneath or between wagons when they are not arrested? |  | For coupling and uncoupling, shunting operators should not be allowed to enter the 'Berner Raum' (space between the buffers) until the two RTCs touch each other and have come to a standstill. |  |
| 11.2.1.5.f. | - make sure that there is a permanent contact between the driver and the shunting operator? |  | Communication is essential because few people are involved and the observation (overview) of each other is limited. Clear communication procedures will minimize personal injury and equipment damage. Communication between driver and other operating personnel might be by electronic means, but also by manual signaling; check for clear and unambiguous protocols. |  |
| 11.2.1.5.g. | - monitor the current wagon location in the yard? |  |  |  |
| 11.2.1.6. | Is there an operational procedure in place concerning the use of private rail track connections? |  | Check that a procedure is in place and verify how the applicable information is forwarded to the consignee. |  |
| 11.2.1.7. | Does this procedure cover the following subjects: |  | Check the procedure for each of the elements a-g. |  |
| 11.2.1.7.a. | - handling of transport documents ? |  | Check whether the procedure describes how related transport documents are handled. |  |
| 11.2.1.7.b. | - required customs procedure (if applicable)? |  | Check whether the procedure describes how related customs documents are handled and which actions, where and by whom, are to be performed. |  |
| 11.2.1.7.c. | - knowledge about transported products, especially in case of hazardous cargo? |  | Check that the procedure indicates if there are specific product procedures in place and how this knowledge is forwarded to the involved staff members. |  |
| 11.2.1.7.d. | - transfer of the transport documents to the receiver? |  | Check whether the procedure includes how to handle the related transport documents. |  |
| 11.2.1.7.e. | - information interface between RU and receiver concerning the delivery of rail wagons? |  | Check how the information is forwarded to the receiver. |  |
| 11.2.1.7.f. | - technical information on the private rail track connections? |  | The assessor should check if the technical aspects of the private rail track connections (track length, switches, level crossing, etc.) are included. Instructions on how to operate the private rail track connections shall be included. The assessor shall verify if train drivers and shunters are trained in these aspects. |  |
| 11.2.1.7.g. | - safety precautions to be taken at the private rail track connections by train drivers, shunters and wagon inspectors? |  | E.g. use of PPEs, restriction on the use of mobile phones, etc. The assessor shall verify if the train drivers and shunters are trained in these aspects. |  |
| 11.2.1.8. | Are shunting activities in accordance with environmental permits? |  | The assessor will check the environmental permit and will ask the RU how it is assured that the limitations about parking, noise, etc. are fulfilled. |  |
| 11.2.2. | Records |  | Records |  |
| 11.2.2.1. | Are records of all transport orders (receipts and deliveries) kept, including: |  | Pick several deliveries documents at random from operational activities. |  |
| 11.2.2.1.a. | - order identification? |  |  |  |
| 11.2.2.1.b. | - vehicle/tank/container identification? |  |  |  |
| 11.2.2.1.c. | - actual expedition date, time and site? |  |  |  |
| 11.2.2.1.d. | - quantity received and delivered? |  |  |  |
| 11.2.2.1.e. | - actual delivery date, delivery time and delivery address? |  |  |  |
| 11.2.2.1.f. | - marshalling operations, shunting operations, operations of ground staff, etc.? |  |  |  |
| 11.2.2.1.g. | - communication with traffic control center? |  |  |  |
| 11.2.2.1.h. | - verification of the operation of the hump braking system, if applicable? |  |  |  |
| 11.2.3. | Pre-Start Checks and Handover |  | Pre-Start Checks and Handover |  |
| 11.2.3.1. | Pre-start checks**:** After the wagons have been combined into a train, are there procedures to: |  |  |  |
| 11.2.3.1.a. | - carry out the technical check of trains according to General Contract of Use for Wagons (GCU)? |  | Refer to [GCU – Bureau (gcubureau.org)](https://gcubureau.org/) | X |
| 11.2.3.1.b. | - ensure that the RID transport of dangerous goods requirements for the RU are fulfilled (if applicable)? |  | See UIC leaflet 471/3 O, section 5: "Inspections of Dangerous Goods consignments". Refer to RID section 1.4.2.2.: responsibilities of a Carrier. |  |
| 11.2.3.1.c. | - ensure that all required transport documents are present? |  | The assessor shall randomly select some transportation orders. He will check the presence of the CIM freight letter (The RID check box must be checked), the wagon list ( with a list of all wagons and loads, including the full RID declaration of the goods), the brake document (indicating the br~~e~~aking percentage), the waste declaration if applicable (this document must be present for the cross border transport of waste). The assessor will also check these documents during the site inspection (presence and compliance). |  |
| 11.2.3.1.d. | - ensure that a correct brake test has been performed? |  | Full brake test: The assessor will check if the wagon inspector together with the train driver have performed a full brake test (checking the brakes of every single wagon on both sides of the train).  Partial/small brake test: Functional test of the first wagon behind the locomotive.  If the train has been immobilized for a longer time frame a new brake test has to be performed (this can be a FULL brake test, but also only a continuation test or a brake test on the first wagon).  The general rule is: if a train is stopped for more than 24h, a FULL brake test is required before the train continues. The assessor will verify that there is a procedure to handle this situation. |  |
| 11.2.3.1.e. | - ensure that the train driver has performed a complete check of the locomotive? |  | The assessor will look for evidence that the locomotive has been checked prior to departure (oil level, fuel level -if diesel locomotive-, sand level, check of safety system, etc.). | X |
| 11.2.3.2. | **Handover of a train** |  | The handover of the train is a risky task, many things can go wrong and sometimes they can happen up to one day after the train is handed over. The train can be handed over to another RU, or just to a different train driver. The handover location can either be at the last or first border station, but can also be when the train composition changes or just because the train driver has reached the maximum amount of driving hours. |  |
| 11.2.3.2.a. | Is there a procedure to handover the train to another RU (at the border or somewhere else)? |  | The assessor much first check if there is a MLA (Multi-lateral agreement) present between the RUs. This contract must be in accordance with the GCU appendix 9. The assessor must check if the procedure is based on the conditions of appendix 9 regarding the technical transfer of wagons (sampling of some items).  If no MLA is present the RU to whom the train is handed over must perform a complete departure check. | X |
| 11.2.3.2.b. | Is there a procedure to handover the train to another train driver that ensures: |  |  |  |
| 11.2.3.2.b.1. | - that the train driver has received training and has the knowledge for the foreseen train path? |  | The assessor shall check if there is a procedure in place to check the driver's knowledge on infrastructure language requirements, line knowledge, locomotive knowledge, etc. |  |
| 11.2.3.2.b.2. | That the documents are handed over between consecutive drivers? |  | The assessor shall check if there is a procedure in place for the communication between both train drivers. How the train documents are transmitted, how the technical details are communicated, how the train is immobilized, etc. |  |
| 11.3. | Administration |  | Administration |  |
| 11.3.1. | Controls over RU staff (train drivers and shunting operators) |  | Controls over RU staff (train drivers and shunting operators) |  |
| 11.3.1.1. | Is there a system to check the maximum allowable number of working and driving hours/week? |  | There shall be a system in place, which checks that the regulations regarding maximum allowable man hours/driver/week have been followed. The system shall be capable of identifying and recording any non-conformances and reporting these to senior management for attention and corrective action as necessary. Check for the existence of such a system.  There is a difference between national requirements and the European cross border regulations. The reference is not only the number of working hours but the number of driving hours (the time spent going from and to the terminal is not counted). There is also a difference between night and daytime. Rest breaks are also important (30' or 45'), the number of free weekends and the total number of driving hours in 2 weeks. The assessor shall check with the operational department and confirm by records that the system is implemented. |  |
| 11.3.1.2. | Is there a policy and/or procedure to avoid fatigue and tiredness that could affect the safety of the operations on top of legal requirements? |  | The assessor will check that external factors do not affect the drivers' vigilance. For example: no other jobs, living/travelling before or after locomotive driving, delay due to interruptions that lead to additional measures, etc. The assessor will check that the drivers can decide to stop driving if they do not feel fit for driving due to tiredness or fatigue. | X |
| 11.3.1.3. | Is there a driving vigilance control system? |  | The assessor will award a positive score if there is evidence of an on-going commitment to provide driving vigilance for all drivers. A means of on-board monitoring of driver vigilance is necessary. This shall intervene to bring the train to a stop if the driver does not react within a certain time; the time range is specified in the rolling stock TSIs.  Refer to Regulation (EU) 2019/773 of 16 May 2019 driving vigilance (dead man's control). |  |
| **12.** | **Specific types of services and activities** |  | **Specific types of services and activities** |  |
| 12.1. | Is there a procedure to handle derailed, overloaded or leaking (drop leakage) wagons? |  | This question is intended to cover special situations that could be critical and not under the scope of an emergency (for example: one wagon or one boogie off track, transfer of loads in situ, etc.). |  |
| 12.2. | Is there a procedure to allow safe access for inspection on top of the wagon? |  | The risks of electrocution, exposure to vapours, falling from height, etc., must be taken into account. |  |
| 12.3. | Is there a procedure to inform, immediately, the wagon keeper each time that a wagon has been taken out of the train? |  | Reasons for this could be: repairs needed to be done, exceeding inspection validity date, etc. |  |
| 12.4. | Is there a procedure to transport damaged wagons safely to a maintenance workshop? |  | The assessor shall look for special transport requirements for red labelled wagons such as reduced speed, reduced brake power or exceptional transport requirement from the infrastructure manager. |  |
| **13.** | **Site Inspection** |  | **Site Inspection** |  |
|  |  |  | **The questions in this section must be evaluated by the assessor during an inspection round, out on the premises of the company, and can be verified through visual inspections and interviews with drivers/operators.** |  |
|  |  |  | An effective system of management will be reflected in the site, i.e. its content, layout, condition and modus operandi. |  |
|  |  |  | Although the SQAS is strongly geared to examine management systems and is not a check on hardware per se, this chapter looks at certain hardware elements in order to get an impression about the status of fixed facilities (buildings, grounds and fixed equipment) and the safety/health/environmental/quality aspects of their operations. |  |
|  |  |  | In view of the diversity of railway companies, different types of sites may be found. The main two are Headquarters and Marshalling yards: |  |
|  |  |  | Headquarters, typically independent from a rail site, where scheduling and commercial activities can take place; |  |
|  |  |  | Marshalling Yards, typically with local offices/buildings, signaling houses (these depend on the Infrastructure Manager), grounds and fixed equipment, including maintenance facilities, where operations are performed. |  |
|  |  |  | For buildings, fire prevention and protection are the most important issues as well as people safety. |  |
|  |  |  | For grounds, the RU should have a good environment protection and firefighting equipment. Depending on the location, security aspects have to be closely considered. |  |
| 13.1. | Office, buildings, grounds, workshops and site in general |  | Office, buildings, grounds, workshops and site in general |  |
|  |  |  | In this section, all commercial and operational office buildings and the associated grounds are covered. |  |
| 13.1.1. | Is there a sufficient site lighting? |  | The site lighting system should be such that all movements and operations can be controlled without restrictions and safety hazards. Check against local regulations, if applicable. Check records of lighting measurements. |  |
| 13.1.2. | Is housekeeping at a good standard (e.g. clean, tidy, paintwork, no tripping conditions, no slippery surfaces, etc.)? |  | Housekeeping is a good indication for the organizational efficiency of the site operation. Good housekeeping will help to prevent accidents. The assessor will add a comment when the question is scored zero. |  |
| 13.1.3. | Is unauthorized access avoided? |  | The site boundary should be clearly defined and marked. The assessor must verify fences and restricted access to keys. Public warning/information signs should be in place to prevent unauthorized or accidental access. |  |
| 13.1.4. | Are caution signs installed (no smoking, eye protection, helmet, etc.)? |  | Caution signs serve to remind people of good practices. Pictograms are more useful than long text. |  |
| 13.1.5. | Are emergency exits marked on buildings and unblocked? |  | The assessor will check that people can evacuate buildings in a safe way in case of emergency. |  |
| 13.1.6. | In case of emergency, is there an assured method for safe evacuation of all personnel and is this visibly placarded? |  | Emergency exits should be marked at the site perimeter. There should be an off-site assembly point, head counting and reconciliation system. |  |
| 13.1.7. | Are emergency exit routes clear of obstacles and in a safe, well maintained condition? |  | Check that the emergency exits are unobstructed. |  |
| 13.1.8. | Is the emergency assembly point clearly identified? |  | Look for placards showing the assembly point and the way to reach it. |  |
| 13.1.9. | Is a fire-fighting system installed that complies with local regulations, as a minimum? |  | The equipment (necessity and type) must be based on risk assessment and local regulations. Automatic fire protection is requested if sensitive information, necessary for the operations, is kept in the building, whether in computer or in paper files. |  |
| 13.1.10. | Is the accessibility of the site, the buildings and the RTCs adequate for fire control? |  | How well can a fire be controlled to minimize damage? Is the access for the fire brigade (with equipment) clear and easy? |  |
| 13.1.11. | Does the fire water pump have emergency power? |  | Is a second electrical tie-in requested or do electrical pumps have back-up by diesel-pumps ? Can the reliability of the system be shown ? |  |
| 13.1.12. | Is the lay-out and the partitioning of the building adequate for fire loss control? |  | Buildings should be separated to provide a fire break and to avoid total loss. |  |
| 13.1.13. | Is the location, accessibility and number of fire-fighting equipment (hoses with nozzles, fire extinguishers) adequate and properly marked? |  | The assessor will check at random against the fire plan. Give only a positive score if all criteria (location, indication, condition of equipment, etc.) are met. |  |
| 13.1.14. | Are the first-aid posts clearly indicated, easily accessible and appropriately stocked to ensure prompt treatment? |  | The assessor should check compliance with local legislation. The assessor should also spot check if the contents of the first-aid kit are within expiry date. |  |
| 13.1.15. | Is the condition of walk- and roadways and parking area of an acceptable and safe standard? |  | The condition of the fences, gates, roadways, parking areas and buildings gives an indication on how seriously the site management is interested in quality and safe operation, and not only in commercial affairs. This is also important for the image of the company. Look for example if there are potholes or pools of water on the parking areas. |  |
| 13.1.16. | Is a site emergency communication system/evacuation alarm installed? |  | Site communication is important to warn all the employees in case of emergencies. Instructions and evacuation might be vital for the headquarters safety. |  |
| 13.1.17. | Are eye wash bottles and safety shower systems available in pre-determined areas within the work area? |  | Safety and eye-wash showers should always be installed in the immediate vicinity of working areas where there is potential for product contact and spill. Injured people would not be able to find a remote installation. Check that showers are operational. |  |
| 13.1.18. | Is frost protection in place for utility systems (e.g. emergency showers, sprinklers)? |  | Are all relevant utility systems protected from freezing to ensure safe operation without interruption? This is also applicable for fixed safety shower/eye wash systems on site. |  |
| 13.1.19. | Workshops |  | Workshops |  |
| 13.1.19.1. | Is the tank entry procedure in place at the workshop? |  | Entry into confined spaces refers to entry into spaces where there is a risk of suffocation or poisoning by lack of ventilation (e.g. entry into tanks). This activity requires a Permit to Work system. Such a system includes clear defined authorities, the identification of risks and measures taken (e.g. measurement of tank atmosphere, conditions under which tank entry must be done, PPE’s, 2nd man in attendance, etc.). The assessor should check the file of work permits of the last 12 months by checking in detail a few recent work permits (are all the signatures and dates in place, are necessary PPE listed, etc.) and also check if the requirements of the work permit procedures are understood by involved personnel including the prime/back-up approval authority. | X |
| 13.1.19.2. | Does the maintenance shop area have emergency doors and are these freely accessible? |  | People should be able to escape from the maintenance workshop via defined emergency doors without being trapped in case of emergency. Open one exit to check if it is equipped with an alarm and not locked. |  |
| 13.1.19.3. | Is there a separate and appropriate storage area for flammable products (e.g. cleaning solvents in workshops)? |  |  |  |
| 13.2. | Shunting yards |  | Shunting yards |  |
| 13.2.1. | Train inspection |  | At some stage during the assessment, the assessor should select at random two trains and check them against the items listed. If possible these should be trains which have just returned after completing an order or leaving the shunting yard , so that the assessor can interview the driver as well as inspect the train. At the start of the assessment, the assessor will ask to be immediately notified when an incoming train arrives at the shunting yard so that at that stage the assessor can immediately direct his attention to interviewing the driver and inspecting the train before returning then to the remainder of the questionnaire. Under comments the assessor will indicate the number of trains and wagons that were inspected during the assessment. |  |
| 13.2.1.a. | Are the keepers mark (VKM) recorded on the wagons? |  | Check that every wagon has a VKM marked on the wagon and this is known by the RU. | X |
| 13.2.1.b. | Do the wagons inspected have identified ECMs and the use of the wagons correspond to the scope of the certificate? |  | The assessor will select some wagons during the site inspection and check the maintenance status against the information provided by the RU. |  |
| 13.2.1.c. | Are the requirements for inspection, testing, and marking of tank wagons fulfilled? |  | Refer to chapters 1.4 and 6.8 of RID. |  |
| 13.2.1.d. | Are the end signals in place? |  | Two should be on the back of the train. They could be red lights or plates. |  |
| 1132.1.e. | Are the brakes not working properly isolated? |  | Brakes not working properly should be recorded and checked against the brake document. |  |
| 13.2.1.f. | Is the composition of the train correct? |  | The assessor will sample wagons and check against the wagon list (position of wagons). |  |
| 13.2.1.g. | Are the maintenance dates documented and painted on the wagons? |  | The LAST maintenance date has to be marked on the chassis. For the tank, the NEXT date has to be marked on. A 3 months extension for the tank test is only allowed for RTCs marked with "L" and for the intermediate inspection, not for the hydraulic test. | X |
| 13.2.1.h. | Are there any visible defects as described in the booklet "Cargo Guidelines of visible defects in RTCs"? |  | The assessor will refer to the document: "Cargo Guidelines of visible defects in RTCs" issued by DB Cargo and VNCI. | X |
| 13.2.1.i. | Is documentation required by RID on the locomotive? |  | The assessor should verify the presence of the transport document, instructions in writing and container vehicle packing certificates. This should be checked before departure of the train. |  |
| 13.2.1.j. | Is equipment for personal protection available? |  | This is required by Chapter 5.4 of RID and national legislation. Warning clothing is a legal requirement (only the color can be different from country to country). Look for instructions and practice when to use it. |  |
| 13.2.1.k. | Do drivers (own and subcontracted) have valid driving licenses and secondary documents? |  | The selection and training of train drivers is subject to a specific regulation (ED 2007/59). Every train driver needs to have a train driver license, in addition they need to have a secondary document which states the infrastructure line they are authorized to operate on, with which type of locomotive and also mentions their language knowledge. |  |
| 13.2.1.l. | Have the train drivers performed a complete check of the locomotive? |  | The assessor will look for evidence that the locomotive has been checked prior to departure (oil level, fuel level -if diesel locomotive-, sand level, check of safety system, etc.). |  |
| 13.2.2. | Are there walkways along the tracks level and are these unobstructed ? |  | The condition of walkways along tracks in marshalling yards is critical to safety. Check whether they are safe, i.e. even, clear of obstacles, well lit and in good overall maintenance condition. |  |
| 13.2.3. | Is the vegetation (e.g. plant and weed growth) in the stations controlled? |  | Verify that vegetation is cleared from the tracks in the marshalling yards. |  |
| 13.2.4. | For environment protection, is the site designed to prevent potential leaks reaching the ground-water? |  | The scope of the question are workshops, loading/unloading stations. For places for refueling locomotives see section 13.3. |  |
| 13.2.5. | Are there wind direction indicators to help evacuation? |  |  |  |
| 13.2.6. | Is there sufficient fire-fighting capability if flammable dangerous goods are stored or temporarily parked on site? |  | If flammable chemicals are stored/parked on the site, foam may be needed for fire-fighting. This requires a stock of foam producing chemical and foam generating equipment. Check against the requirements laid out by the fire brigade (fire risk assessment). |  |
| 13.3. | Bulk Storage Tanks (Fuel, Fuelling area and Waste Storage) |  | Bulk Storage Tanks (Fuel, Fueling area and Waste Storage) |  |
| 13.3.1. | Are the tanks approved for the goods stored and identified/labelled accordingly? |  | Storage of goods in non-adequate tanks can lead to serious accidents. Look for certificates showing the approval of the tanks used. Check labels on tanks and tubes. |  |
| 13.3.2. | Are pipelines and valves labelled or color coded and contents identified? |  | Marking of pipelines and valves is essential to avoid mistakes. |  |
| 13.3.3. | Are tank valves closed if not in use? |  | Valves might leak and therefore it is good practice to close valves in series. By doing so, tank contents will not be lost at once if one valve should fail. |  |
| 13.3.4. | Are permanent hose connections, flexible joints, sight glasses avoided as much as possible? |  | To minimize possibilities for leaks and spills, it is important to eliminate weak points such as hoses, flex-joints, sight glasses, ... etc. |  |
| 13.3.5. | For above ground tanks, is the spill containment (e.g. bunding) in good condition and based on 110% of maximum storage tank volume? |  | Spill containment should be designed to hold 100% of the largest tank plus 10% for foam or fire water - check the volumes. |  |
| 13.3.6. | Are high level alarms installed on storage tanks? |  | Spillage may cause a major contamination. This can be prevented by an overfill protection device and regular checks. |  |
| 13.3.7. | Is explosion-proof equipment installed if handling flammables? |  | The necessity for the installation of ex-proof equipment is mentioned within the permission and/or the ATEX assessment report and site plan. |  |
| 13.3.8. | Is there no visible evidence of leaks/ spills (fittings, pumps, tanks, valves etc.)? |  | Visible leaks and spills are indicative of bad operation and maintenance and therefore also of poor site management. They create long-term environmental problems, which are costly to clean up afterwards. Check places not meant to be entered. Ask for an action plan in the case of detected leaks. |  |
| 13.3.9. | Is spill containment in place for all tanks? |  | If a filling-station is on the site, the area should have containment to prevent soil and ground water contamination. |  |
| **14.** | **Measurement and Management of transport greenhouse gas (GHG) emissions**  **This section follows a hierarchy of questions, every question requires a more detailed calculation than the precedent one.**  **This section is applicable to Rail Undertakings and Rail Freight Forwarders** |  | **Measurement and Management of transport greenhouse gas (GHG) emissions**  The European Commission is establishing a European framework for the harmonized measurement of transport and logistics greenhouse gas emissions, based on global standards, which could then be used to provide businesses and end-users with an estimate of the carbon footprint of their choices, and increase the demand from end-users and consumers for opting for more sustainable transport and mobility solutions.  In the Sustainable and Smart Mobility Strategy published by the European Commission in Dec 2020 the following objective was defined:  90% reduction in greenhouse gas emissions **in transport** by 2050, compared to 1990. |  |
| **14.1.** | **Scope 1:** Emission measurement of locomotives that are owned or controlled by the company. |  | **Scope 1** emissions includes the direct emissions from assets that are owned or controlled by the assessed company using fuels that are paid by the company. This includes the combustion of fuels purchased to produce energy, heat or steam for use in stationary or mobile equipment (e.g. locomotives , vehicles, generators).  **Fuel or gas used for heating of offices of the company shall not be included**, nevertheless, the company is encouraged to measure and reduce this consumption of energy. If the company decides to include this calculation, the assessor will not take it into account for the scoring of the question |  |
| 14.1.1. | Does the assessed company have a system to collect data enabling energy (fuel)-based calculation of its transport GHG emissions for all locomotives whose fuel is paid for by the company? |  | The system should cover all types of fuels used by the company.. If the assessed company does not operate its own locomotives, this section is not applicable. If the assessed company is a headquarter, data collected should be available at country level. If it is a subsidiary or a standalone assessment, data should be available at regional level  It should be assured that there is no double account between HQ and subsidiaries  The assessed company needs to have a system to record the following data:  - Consumed fuel for each fuel type (e.g. via the fuel purchase invoices)  The company could consume different fuels, for example: - diesel  - diesel/biodiesel blend - biodiesel - CNG/LNG - hydrogen - etc.  - total mileage driven  - transported tonnage (e.g. via transport orders). See guideline of question 14.5.1 for the definition of tonnage transported |  |
| 14.1.2 | Does the assessed company have a system to annually calculate transport GHG emission intensity (expressed as kg CO2 equivalent per tkm) using the data collected in question 14.1.1.? |  | **kg CO2e** means **kg CO2 equivalent**: it is a unit that describes the impact of different greenhouse gases as a single measure related to the global warming potential of carbon dioxide. The assessor will accept the calculation made by the company provided that the formula used in the numerator is the addition of the emissions from the fuel(s) annually consumed and the denominator is calculated by the formula mentioned in 14.5.2.  For the way to calculate tonnes see question and guideline 14.5.1 |  |
| 14.1.3. | Does the company know the fuel consumed by **transport category** on an annual basis? |  | Examples of train categories are the following:   * **Container train** (intermodal) * **Conventional Blocktrain (RTC)**: train in which all cars (wagons) carry the same product and are shipped from the same origin to the same destination, without being split up or stored en route * **Single Wagon (RTC)**: The wagonload transport starts with feeding single wagons or wagon groups from their origin to the first collecting spot. In a next step, the wagons are assembled to a full train for the respective line haul. After the transport, wagons or wagon groups are distributed to their final destination   To score the question positively the company should measure the fuel consumed for every transport category and every type of fuel consumed. In case the exact amount is not known a reasonable estimate will be accepted.  For additional explanation of transport categories see the **GLEC framework guideline: "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting". Last version. Module 5** <https://www.smartfreightcentre.org/en/downloads/>, section 3.3 |  |
| 14.1.4. | Did the company calculate the emissions **TTW** from the fuel consumed during the last year using the formula: kg CO2e = Σ (fuel (litres) × TTW fuel emission factor (kg CO2e/ litres fuel))? |  | The company will use fuel emission factors from the **GLEC framework guideline: "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting" last version**. The document can be downloaded from this link:<https://www.smartfreightcentre.org/en/downloads/>  For every type of fuel three factors can be used: **WTT, TTW and WTW.**  - **Well-to-Tank** **(WTT):** WTT emissions consist of all processes between the source of the energy (the well) through the energy extraction, processing, storage and delivery phases up until the point of use (the tank) - **Tank-to-Wheel (TTW): t**hese are the emissions from fuels combusted to power activities (the wheel).  - **Well-to-Wheel (WTW):** these are emissions from the full fuel life cycle and should be equivalent to the sum of WTT and TTW emissions.  **For this question TTW should be used.** |  |
| 14.2. | **Scope** 2: Emissions from electricity |  | **Scope 2 emissions** are indirect emissions from the production and distribution of electricity, heat and steam purchased by the assessed company for use in  its own logistics sites, electric vehicles or other owned asset requiring electricity.  If electricity is not used, section 14.2 is not applicable |  |
| 14.2.1. | Did the company measure the electricity purchased for use in its electric locomotives, logistics sites, electric vehicles or other owned assets requiring electricity? |  | Electricity bills provide the most accurate information on electricity used.  Typical energy consumptions come from locomotives running with electricity taken from the catenary and/or with batteries, and electricity used for heating/refrigeration and lighting.  Electricity used for heating or cooling of offices of the company shall not be included. Nevertheless, the company is encouraged to measure and reduce this consumption of energy, although this will not be taken into account for the scoring of the question.  In case solar panels or any other electricity source (e.g. wind power generators) are connected to the electric grid, the electricity bill or electricity measurement equipment can also be used to determine the electricity used.  It is recommended to record the amount of electricity generated by these devices |  |
| 14.2.2. | Did the company calculate the **Scope 2 emissions:** |  |  |  |
| 14.2.2.a | **from the purchased electricity WTT** mentioned in 14.2.1. during the last year with the formula: kg CO2e = Σ (electricity (kWh)× electricity emission factor (kg CO2e/ kWh electricity))? |  | TTW is considered to be zero for electricity, all emissions are in the WTT stages at the point of use.  **The emission factors to be used depend on the electricity origin**. Companies must gather electricity emission factors from the countries or regions where the logistics sites are located.  Electricity factors by country can also be obtained from the International Energy Agency (IEA): <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2020#emissions-factors> (fee to be paid)  In absence of other data, an EU average electricity factor of 420 g CO2e/kWh can be assumed (source: GLEC framework guideline). Use of individual country mixes may give significantly different values, especially in countries with a highly decarbonized electricity supply. |  |
| 14.3. | **Scope 3** |  | **Scope 3 emissions** are indirect emissions from the assessed company’s supply chain.  This includes emissions from transport subcontracted and subcontracted services.  The company can use “activity based” estimation methodology for the calculation (e.g. Ecotransit World Methodology or other) For the definition of “activity based” see question 14.3.1.1.  Scope 3 also covers the production and distribution of fuels burned in Scope 1 (WTT), transport emissions embedded within purchased goods and services, product use and end-of-life.  In case of multisite assessments, the Headquarter could consider its subsidiaries as Scope 3, 2 or 1, it is up to the company to decide. Whatever the approach is, the following principles will be met:   * GHG emissions at subsidiary level should be available * It should be assured that there is no double counting between emissions from HQ and subsidiaries * In the management review of the HQ (SQAS 2022 Rev, section 5.4.), the GHG emission measuring and reduction programme of the subsidiaries will be analysed and decisions to reduce emissions will be taken. |  |
| 14.3.1. | Subcontractors |  | If the assessed company does not operate with subcontractors, this section is not applicable.  Rail operators can subcontract locomotives for international rail or for transportation at national level |  |
| 14.3.1.1. | Does the assessed company have a system to collect data enabling activity-based calculation of the transport WTW GHG emissions from their Subcontractors? |  | There are two approaches to calculate GHG emissions from transport activities: “activity based” and “energy based”.  In the “activity based” calculation, the GHG emissions are obtained by multiplying the tonne-kilometres by an emission factor.  In the “energy based” calculation, the GHG emissions are obtained by multiplying the actual fuel consumed by a standard emission conversion factor. This method is more precise than the “activity based” approach.  In case the main rail company outsources transports to subcontractors, the assessed company must know the quantity of these outsourced tonnes and kilometres. |  |
| 14.3.1.2. | Does the company calculate the WTW emissions from their transport subcontractors? |  | For the calculation of the GHG transport emissions the company should use the GLEC framework guideline: "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting" scope 3, latest de version. The document can be downloaded from this link: <https://www.flexmail.eu/f-844a1f54174eb51e> |  |
| 14.3.2. | Intermodal/ Multimodal  **This subsection follows a hierarchy of questions, every question requires a more detailed calculation than the precedent one** |  | This section is only applicable when the transport company **includes intermodal/multimodal transport in its services.** **Intermodal** is a transportation of goods, in one and the same intermodal transport unit, by successive modes of transport without handling of the goods themselves when changing modes. This term is usually used when road and rail are involved. The intermodal transport unit can be a container, swap body or a road or rail vehicle or a vessel. **Multimodal**: Transport of goods by at least two different modes of transport. Intermodal transport is a particular type of multimodal transport, often based on a contract regulating the full multimodal transport. Usually **rail or waterborne services (inland waterways and short sea)** are used with road feeder movements at one or both ends.  The tonnes and Kilometers should also include any **sub**-**subcontracted** transport company that is transporting the load requested by the rail operator. |  |
| 14.3.2.1. | Does the assessed company have a system to calculate activity based WTW GHG emissions of the intermodal transportation? |  | The calculation of the emissions can be made by using **composite factors** or **by the addition of the emissions of the different legs of every shipment**.  A **leg** refers to the starting point and ending point of a shipment that uses the same transportation mode.  For the calculation method see the **GLEC framework guideline: "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting". Last version. Module 5.**<https://www.smartfreightcentre.org/en/downloads/> |  |
| 14.3.2.2. | Does the assessed company have a system to collect data enabling calculation of the transport GHG emissions of the road, rail and waterborne services legs in case that the company is using these services? |  | The company will have to able to collect data of the emissions, tonnes and kms of every leg of every shipment transported. |  |
| 14.3.2.3. | Does the assessed company calculate the GHG emissions of all legs involved? |  | If the rail leg of the shipment is made by own locomotives the emission calculation of this leg will be included in section 14.1. (Scope 1) or 14.2. (Scope 2). If it is subcontracted will be included in 14.3.1. (Scope 3).  For the calculation of the rail and waterborne legs the company will use **GLEC framework guideline: "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting". Last version. Module 5:** <https://www.smartfreightcentre.org/en/downloads/>    In case the number of shipments does not justify manual calculations, the company can use IT providers. As examples, see <https://www.smartfreightcentre.org/en/working-with-sfc-accredited-partners-1/>  **The WTW factors will be used.** |  |
| 14.3.5. | Production and Distribution of fuels burned in Scope 1 |  |  |  |
| 14.3.5.1. | Did the company calculate the absolute emissions **WTT** from the fuel consumed during the last year using the formula: kg CO2e = Σ (fuel (litters) × WTT fuel emission factor (kg CO2e/ litters fuel))? |  | The factor should be obtained from the "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting" latest version. Module 1. |  |
| 14.3.6. | Calculation of Scope 3 emissions |  |  |  |
| 14.3.6.1. | Did the company calculate Emissions of **Scope 3** with the following formula?  **kg CO2e= Addition of questions of subsection 14.3** |  | The following questions should be added: 14.3.1.2. + (14.3.2.1. or 14.3.2.3.)+ 14.3.5.1. |  |
| 14.4. | **Calculation of Total emissions (Scope 1, 2 and 3)** |  | Measurement of total emissions is necessary because it has a direct impact on global warming. |  |
| 14.4.1. | Did the company calculate the **Total emissions** during last year **by addition of Scope 1, 2 and 3 emissions?** |  | The following questions should be added: 14.1.4. + 14.2.2 + 14.3.6.1. |  |
| 14.5. | **Calculation of Tonnes-km** |  |  |  |
| 14.5.1. | Does the company know the tonnes of product transported and Kilometers driven (both laden and empty) **associated with each category** specified in 14.1.3.? |  | In case of bulk, the product transported will be the **net weight of the product without taking into account the weight of the tank** (e.g., in an ISO Container, it will be the weight of the product transported without adding neither the weight of the tank container nor the container frame).  If the net weight of the transported product is not known, an average weight indicated in the section “2.4 Payloads” of the GLEC framework guideline “Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting”, Module 5, can be used. The weight of the wagon and locomotive **shall not be included in the calculation**. In case of packed goods, the weight should include **the product and the packaging provided for transport by the shipper**; additional packaging or handling equipment used by the LSP **should not be included in the calculation.**  For additional explanation see the GLEC framework guideline: “Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting”. Last version. Module 5. <https://www.smartfreightcentre.org/en/downloads/> |  |
| 14.5.2. | Did the company calculate the tonnes-Kilometers (tkm) during the last year **by transport order and by category** with the formula:  Σ tkm by **transport category** = (ton shipment 1 x km shipment 1) + (ton shipment 2 x km shipment 2) +…. + (ton shipment n x km shipment n)? |  | The assessor will take a sample of transport orders and will ask the company how the tons and km transported were calculated. |  |
| 14.6. | **Calculation of emission intensity** |  | **Emission intensity** is a key measurement in a transport company and the objective is to decrease it. If a company, for example, changes the fuel consumed from diesel to alternative fuels or to transport modes of lower emissions (e.g. road to rail), the emission intensity will decrease.  The emission intensity is affected by **empty running** (distance travelled without a load) and the **load factor** (percentage of the available capacity utilised on a loaded trip). Higher empty running and partial loaded trips will increase the emission intensity.  Nevertheless, the **density of the load** also affects the emission intensity: products with low density increase the emission intensity, but this increase does not necessarily mean a decrease in the transport performance of the transport company.  Of the several ways available to measure the emission intensity **SQAS adopted the emission by tonne-km.**  The assessor will not include information about emission intensity, absolute emissions or tonnes-km in the comments of the questions as objective evidence. |  |
| 14.6.1. | Did the company calculate the **emission intensity by transport category** during the last year using the formula  Emission intensity factor by transport category (kg CO2e/tkm) = **Total emissions** obtained from 14.4.1. / **tkm by category** calculated in 14.5.2.? |  | For an explanation on how to calculate emissions by transport categories see the **GLEC framework guideline: "Global Logistics Emissions Council Framework for Logistics Emissions Accounting and Reporting". Last version. Module 5.** <https://www.smartfreightcentre.org/en/downloads/> |  |
| **14.7.** | **Consolidating and reporting emissions** |  |  |  |
| 14.7.1. | Does the company consolidate in a report the total annual emissions in the following form?  - Scope 1 (question 14.1.4.)  - Scope 2 (question 14.2.2.)  - Scope 3 (question 14.3.6.1.)  - Total emissions (question 14.4.1.)  - Emission intensity by transport category (question 14.6.1.) |  | For calculation examples see the GLEC declaration, page 50ff of the GLEC framework guideline, last version**.**  The report shall be internal, unless is required by legislation |  |
| **14.8.** | **Training** |  | The assessor will look for evidence of a suitable training programme and its delivery into individual personnel files. |  |
| 14.8.1. | Are transport planners trained in payload optimization and empty mileage reduction? |  | The assessor will look for evidence of training/induction training plan records or previous experience records. |  |
| **14.9.** | **Reducing emissions** |  |  |  |
| 14.9.1. | Defining strategy, objectives and programme  **The first three questions of this section follow a hierarchy: every question has a level of requirement higher than the precedent one** |  |  |  |
| 14.9.1.1. | Has the company defined a **strategy** to reduce its transport GHG emissions, based on the measurements made in 14.7.1.? |  | Km driven can be laden or empty. One of the potential ways to reduce the emission intensity is by reducing the empty km driven or to increase the payload per trip. Eco driving is another alternative.  Shunting is an operation where emissions can be reduced.  Technologic measures like changing to sustainable fuels are also alternatives |  |
| 14.9.1.2. | Has the company defined the **objectives** to reduce its **emission intensity**, based on the measurements made in 14.6.1. in a multiannual programme? |  | The assessor will check if the reduction is in line with the objective indicated in guideline of question 14, Sustainable and Smart Mobility Strategy. |  |
| 14.9.1.3. | Does the assessed company have a multiannual **programme** to reach the objectives mentioned in 14.9.1.2? |  | The programme could be in partnership with other subcontractors or with customers.  To score one, the assessor will check that there is a detailed programme with responsible people and due dates. The programme will include intermediate steps and following up at least on a yearly basis. |  |
| 14.9.1.4. | Does the company offer intermodal solutions to its customer to reduce GHG emissions? |  | For example, by shifting transportation from road to rail |  |