TENtec OMC Glossary ver.2.1

Data Collection Studies Version

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1. Railways

| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|------------------------------------|---|-------------|-----------|
| 1 | Туре | Conventional / High speed In case of mixed types, e.g. a high speed is operated next to a conventional line, please use the type being most relevant to long distance travel (minimum 200km). The possibility of creating parallel sections in a transport mode is being developped. | enumeration | Lot 1 / I |
| 2 | Activity | Freight / Passenger / Passenger and Freight | enumeration | Lot 1 / I |
| 3 | Number of tracks | Total (most relevant figures, e.g. if a single track railway of 10km has 2km stretch of two tracks, the relevant total is one track) A high speed line running in parallel with a conventional line, should be in principle be defined as a separate line. | integer | Lot 1 / I |
| 4 | Traction | Electrified / non-electrified | enumeration | Lot 1 / I |
| 5 | Track gauge (mm) | 1000 / 1435 / 1520 / 1524 / 1600 / 1668 Note: the following systems are TSI compliant: 1435 mm, 1520 mm, 1524 mm, 1600 mm and 1668 mm system. In case of dual gauge, a broader gauge to be indicated under this parameter | enumeration | Lot 1 / I |
| 6 | Dual gauge | None - interlaced - parallel | enumeration | Lot 1/I |
| 7 | Structure gauge (EN 15273) | 3 international gauges defined in EN 15273, UK gauges W9 and above defined in Railway Group Standard GE/RT8073: - GA GAUGE: Total height 3.85 m above the rail and 1.28 m on either side of the track axis - GB GAUGE: Total height 4.08 m above the rail and 1.28 m on either side of the track axis - GC GAUGE: Total height 4.65 m above the rail and 1.45 m on either side of the track axis. - W GAUGES (for UK only) to indicate W9 and above (see reference Railway Group Standard GE/RT8073) - Other (to be noted according to the Standard EN15273 Annex C and D) | enumeration | Lot 1/I |





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|-----|--|--|-------------|-----------|--|--|
| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise | | |
| 8 | Combined transport profile for swap bodies | Coding for combined transport with swap bodies as defined in UIC Code 596-6. The technical number is made up of the wagon compatibility code (1 letter) and the standard combined transport profile number (2 digits when width ≤ 2500 mm or 3 digits when, 2500 < width ≤ 2600 mm). - C 22 - C 32 - C 38 - C 45 - C 50 - C 55 - C 60 - C 65 - C 70 - C 80 - C 90 - C 341 - C 3349 - C 351 - C 357 - C 364 - C 388 - C 385 - C 390 - C 395 - C 400 - C 405 - C 400 - C 405 - C 410 - C 420 - Other | enumeration | Lot 1 / I | | |





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|-----|--|---|------------------|-----------|
| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
| 9 | Combined transport profile for semi-trailers | Coding for combined transport for semi-trailers as defined in UIC Code596-6. The technical number is made up of the wagon compatibility code (1 letter) and the standard combined transport profile number (2 digits when width ≤ 2500 mm or 3 digits when 2500 < width ≤ 2600 mm). - P 32 - P 38 - P 45 - P 50 - P 55 - P 60 - P 65 - P 70 - P 80 - P 90 - P 341 - P 349 - P 351 - P 357 - P 380 - P 385 - P 380 - P 385 - P 390 - P 395 - P 400 - P 405 - P 410 - P 420 - Other | enumeration | Lot 1 / I |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|---|-------------|-----------|
| 10 | Design speed (km/h) | Design Speed of Track relevant for most parts of the section - V<80 - 80<=V<100 - 100<=V<120 - 120<=V<160 - 160<=V<200 - 200<=V<250 - 250<=V<300 - V>=300 | enumeration | Lot 1 / I |
| 11 | Design speed (km/h) [old parameter, only for reference] | Old parameter for design speed. Please refer to the new parameter with ranges. | double | |
| 12 | Max operating speed for passenger trains (km/h) | The highest operating speed allowed for passenger service taking into account technical characteristics of the infrastructure. - No speed limit set - V<80 - 80<=V<100 - 100<=V<120 - 120<=V<160 - 160<=V<200 - 200<=V<250 - 250<=V<300 - V>=300 | enumeration | Lot 1 / I |
| 13 | Max operating speed for freight trains (km/h) | The highest operating speed allowed for freight services taking into account technical characteristics of the infrastructure, however without additional axle load restrictions. - No speed limit set - V<80 - 80<=V<100 - 100<=V<120 - 120<=V<160 | enumeration | Lot 1 / I |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|---|-------------|-----------|
| 14 | Max inclination ‰ | Data must be encoded in %: 0 <= G <= 12,5% 12,5% < G <= 17,5% 17,5% < G <= 25,0% 25,0% < G | enumeration | Lot 1 / I |
| 15 | Max axle load (tonnes) | m < 16t 16t <= m < 18t 18t <= m < 20t 20t <= m < 22,5t 22,5t <= m < 25t 25t <= m < 27,5t 27,5t <= m < 30t m >= 30t | enumeration | Lot 1/I |
| 16 | Max axle load (kN) [old parameter, only for reference] | Old parameter for max axle load in kN. Please refer to the new parameter in tonnes. | double | |
| 17 | Pantograph gauge (mm) | 1600 mm (Euro-pantograph) 1950 mm (Type 1) 1520 mm track gauge and as defined in Appendix D of Regulation 1301/2014 Other Note: the listed systems are TSI compliant, 'other' systems are not TSI compliant | enumeration | Lot 1 / I |
| 18 | Voltage (Volt) | - 25 000 Volts, 50Hz AC - 15 000 Volts, 16 2/3 Hz AC - 3 000 Volts, DC - 1 500 Volts, DC - Other Note: the listed systems are TSI compliant, 'other' systems are not TSI compliant | enumeration | Lot 1/I |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|--|-------------|------------|
| 19 | Maximum train length (m) | - L<200 m - 200<=L<400 m - 400<=L<500 m - 500<=L<600 m - 600<=L<740 m - 740<=L<1050 m - 1050<=L<1500 m - L>=1500 m | enumeration | Lot 1/I |
| 20 | Maximum train length (m) [old parameter, only for reference] | Old parameter for "maximum train length". Please refer to the new parameter with ranges. | double | |
| 21 | Average travel time passenger (incl. stops) (hh:mm:ss) | Long distance trains only (minimum 200km), according to time table A complete coverage in data collection is not expected, a fair estimation will be considered sufficient. The Consultant is expected to propose a relevant methodology. | duration | Lot 1 / II |
| 22 | Average travel time freight (incl. stops) (hh:mm:ss) | Long distance trains only (minimum 200km) A complete coverage in data collection is not expected, a fair estimation will be considered sufficient. The Consultant is expected to propose a relevant methodology. | duration | Lot 1 / II |
| 23 | Passenger traffic flow (pax per year) | Number of passengers joining trains at stations in section A complete coverage in data collection is not expected, a fair estimation will be considered sufficient. The Consultant is expected to propose a relevant methodology. | double | Lot 1 / II |
| 24 | Passenger traffic flow (trains per year) | Number of passenger trains using each section A complete coverage in data collection is not expected, a fair estimation will be considered sufficient. The Consultant is expected to propose a relevant methodology. | double | Lot 1 / II |
| 25 | Freight traffic flow (trains per year) | Number of freight trains using each section. A complete coverage in data collection is not expected, a fair estimation will be considered sufficient. The Consultant is expected to propose a relevant methodology. | double | Lot 1 / II |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|---|-------------|------------|
| 26 | Freight traffic flow (gross tons per year) | Number of tons of freight carried through each section. A complete coverage in data collection is not expected, a fair estimation will be considered sufficient. The Consultant is expected to propose a relevant methodology. | double | Lot 1 / II |
| 27 | Congestion | Indication of sections and nodes declared congested – not congested, – congested (definition to be agreed between the Contractor and COM before the second loop starts) – heavily congested (i.e. declared congested in the meaning of Directive 2012/34/EU) | enumeration | Lot 1 / II |
| 28 | Clearance or structure gauge | It is not necessary to fill in this parameter if "Track gauge (mm)", "dual gauge" and "Structure gauge (EN 15273)" are already filled-in. Please note that the TENtec parameter "Structure gauge" was called earlier "Load gauge (UIC Type)". | string | |
| 29 | ETCS Status | If ETCS in operation, please fill in parameters "ETCS Baseline" and "ETCS Level"!-ETCS in operation-ETCS under construction-No ETCS | enumeration | DMT |
| 30 | ETCS baseline | Following options: - preBaseline 2 (with compatibility to SRS version before 2.3.0d) - Baseline 2 (with compatibility to SRS version 2.3.0d) - Baseline 3 | enumeration | DMT |
| 31 | ETCS Level | Following options: 1 / 2 / 3 — ETCS level 1 is mainly designed as an add-on to or overlays a conventional line already equipped with lineside signals and train detection systems. — ETCS level 2 do not require lineside signals. The movement authority is communicated directly from a Radio Block Centre (RBC) to the onboard unit using GSM-R. — ETCS Level 3 allows for the introduction of a "moving block" technology which does not require lineside signals and train detection systems. Remarks: — In case of multiple ETCS levels installed (e.g. ETCS level 2 with fall-back ETCS level 1), indicate the level in normal operational mode — In case of ETCS L1, please fill in parameter "ETCS Infill" | enumeration | DMT |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|--|-------------|----------|
| 32 | ETCS Infill | No ETCS L1 infill functionality required (only balises) – Yes – ETCS L1 with Euroloop infill functionality required on-board – Yes – ETCS L1 with Radio infill functionality required on-board – Yes – ETCS L1 with both euroloop and radio infill functionality required on-board | enumeration | |
| 33 | Existence and need of Class B-signalling systems | Yes – required on-board Yes – optional on-board (as fall-back system) No Remarks: If yes, please fill in parameter "Name of Class B-signalling system"; TENtec does not include separate sections for stations. Therefore if trains are still required to need Class B system to move on a line section equipped with ETCS (due to e.g. station not being equipped with ETCS or line section not completely equipped with ETCS), please indicate 'yes-required on-board' in this parameter. | enumeration | |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|------------------------------------|--|-------------|----------|
| No. | | 1. ALSN; 2. ASFA; 3. ATB First Generation; 4. ATB New Generation; 5. ATP (Ireland); 6. ATP-VR/RHK; 7. BACC; 8. CAWS; 9. Crocodile; | Data type | Exercise |
| 34 | Name of Class B-signalling system | 10. DAAT; 11. EBICAB700; 12. EBICAB900; 13. EuroSIGNUM; 14. EuroZUB; 15. EVM; 16. GW ATP; 17. INDUSI; 18. INDUSI/PZB; 19. KCVB; 20. KCVP; 21. KVB; 22. KVBP; 23. LS; 24. LZB; 25. MEMORII+; 26.NEXTEO; 27. PKP with radio stop function; 28. RETB; 29. RSDD/SCMT; 30. SELCAB; 31. SHP; 32. SSC; 33. TBL1; 34. TBL1+; 35. TBL2; 36. TPWS; 37. TVM300; 38. TVM430; 39. ZUB123; 40. Other Preselected list from: http://www.era.europa.eu/Document-Register/Pages/List-of-Class-B-systems.aspx: Remarks: — In case of selection of 'Other', indicate the name in the comment field. | enumeration | |
| | | In case of selection of 'Other', indicate the name in the comment field. In case of multiple Class B-systems installed, indicate the Class B-system in the normal operational mode | | |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|---|-------------|----------|
| 35 | GSM-R status | GSM-R in operation GSM-R under construction No GSM-R Remark: GSM-R : Global System for Mobile Communications - Railway | enumeration | DMT |
| 36 | Existence and need of roaming to public GSM-network | - Yes – required on-board (as normal communication mode) - Yes – optional on-board for some operators (as fall-back communication mode) - No | enumeration | |
| 37 | Existence and need of other Class B-radio system | Yes- required on-board Yes-optional on-board (as fall-back system) No If yes, please fill in parameter "Name of Class B-radio system" | enumeration | |
| 38 | Name of Class B-radio system | 1. UIC Radio Chapter 1-4; 2. UIC Radio Chapter 1-4+6; 3. UIC Radio Chapter 1- 4 + (Irish system); 4. UIC Radio Chapter 1-4+6+7; 5. BR 1845; 6. BR 1609; 7. FS ETACS and GSM; 8. UIC Radio Chapter 1-4 (TTT radio system installed at Cascais line); 9. TTT radio system CP_N; 10. PKP radio system; 11. VR trainr; 12. TRS — The Czech Railways radio system; 13. LDZ radio system; 14. CH-Greek Railways radio system; 15. UIC Radio Chapter Bulgaria; 16. The Estonian radio system; 17. The Lithuanian radio system; 18. Other Preselected list from decision 2006/679/EC - Annex B — Part 2. http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L:2006:284:FULL&from=EN: Remark: In case of selection of 'Other', indicate the name in the 'Coment' field. | enumeration | |
| 39 | Theoretical Capacity (trains per year) | At the moment no proper definition available. The parameter will be kept, no data collection foreseen for time being. In future shall be filled in based on assessment of Infrastructure Managers | double | |



2. Roads



| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|--|-------------|-----------|
| 1 | Туре | - 1=motorways, - 5=Rural road with separate directions (Roads outside the boundaries of a built-up area), - 6=Rural two-lane road (Roads outside the boundaries of a built-up area), - 9=Urban roads (Road within the boundaries of a built-up area), - 90=ferries | enumeration | Lot 1 / I |
| 2 | Lanes forward | Number of traffic lanes in forward direction | integer | Lot 1 / I |
| 3 | Lanes backward | Number of traffic lanes in backward direction | integer | Lot 1 / I |
| 4 | Design speed (km/h) | If not available, use prevailing speed limit. | double | Lot 1 / I |
| 5 | Long. Gradient (%) | Defined by the maximum gradient found in the section. | double | |
| 6 | Max permitted weight for vehicles (tons) | Minimum of maximum permitted weight on parts of the section (e.g. existing bridge) | double | |
| 7 | Max axle load (kN) | Minimum of maximum permitted weight on parts of the section (e.g. existing bridge) | double | |
| 8 | Total Hour Capacity Forward (Cars per hour per lane) | Lane hour capacity forward direction - Use minimum in case of different capacities on different parts of the section. Passenger car (Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons, including the driver) | double | |
| 9 | Total Hour Capacity Backward (Cars per hour per lane) | Lane hour capacity backward direction - Use minimum in case of different capacities on different parts of the section. Passenger car (Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons, including the driver) | double | |
| 10 | Freight traffic flow (tons per year) | If just estimates available, please use the upcoming comment-field for explanation. | double | |
| 11 | Freight traffic flow (trucks per year) | If just estimates available, please use the upcoming comment-field for explanation. | double | |
| 12 | Percentage of heavy goods vehicles (%) | Percentage of heavy goods vehicles (%) | double | |
| 13 | Passenger traffic flow (pax per year) | If traffic flow is only known for one direction, multiply with 2. | integer | |
| 14 | Passenger traffic flow | If traffic flow is only known for one direction, multiply with 2. | double | |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|---|-----------|----------|
| | (cars per year) | Passenger car (Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons, including the driver) | | |
| 15 | Number of fatal accident | Number of fatal accident | integer | |
| 16 | Part of a tolled road | YES /NO | boolean | |
| 17 | Road toll for cars(euro per km) | Euro per km Passenger car (Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons, including the driver) | double | |
| 18 | Road toll for trucks(euro per km) | Euro per km; Regardless of weight and distance | double | |
| 19 | Intelligent Transport Systems | YES / NO | boolean | |
| 20 | Average travel time (Passengers cars)(hh:mm:ss) | Passenger cars (Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons, including the driver) | duration | |
| 21 | Average travel time (Trucks and busses)(hh:mm:ss) | Trucks and busses | duration | |
| 22 | Ferry Frequency | Ferries per day (-1 for non-ferry links)(direct ferry link=continuation of TEN-T link) | integer | |
| 23 | Part of a user-charged road | YES /NO | boolean | |
| 24 | Road user-charge for cars | Euro per 24hours Passenger car (Road motor vehicle, other than a moped or a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons, including the driver) | double | |
| 25 | Road user-charge for trucks | Euro per 24hours ; Truck relevant for long distance transport (minimum 200km) | double | |
| 26 | Lanes | Total number of traffic lanes | double | |
| 27 | Road toll for all trucks | Euro per km; Regardless of weight and distance. | double | |
| 28 | Road toll for all busses | Euro per km; Regardless of weight and distance. | double | |





3. Airports

| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|---|-------------|-----------|
| 1 | Туре | International / Domestic | enumeration | |
| 2 | Activity | Freight / Passenger / Passenger and Freight | enumeration | |
| 3 | Capacity (planes per day) | If "planes per hour" were used, please indicate it in the upcoming comment-field. | integer | |
| 4 | Number of runways | Number of runways | integer | |
| 5 | Length of the longest runways (m) | Length of the longest runways (m) | double | |
| 6 | Connection with rail | YES - integrated into long distance rail network - rail shuttle NO - other local public shuttle (such as METRO) | boolean | Lot 1 / I |
| 7 | Commercial aircraft movements (1000 movements) | Per year | double | |
| 8 | Max frequency (movements per hour) | Max frequency (movements per hour) | double | |
| 9 | Passenger capacity (persons) | Per year | double | |
| 10 | Passenger traffic flow (pax per year) | Passenger traffic flow (pax per year) | double | |
| 11 | Tonnes transhipped (thousand tonnes) | Tonnes transhipped (thousand tonnes) | double | |
| 12 | Freight capacity (t/year) | Freight capacity (t/year) | double | |
| 13 | Freight traffic flow (tons per year) | Freight traffic flow (tons per year) | double | |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|---|-------------|----------|
| 14 | Max size of aircraft | ICAO Code: Airplane Wingspan; Outer Main Gear Wheel Span Code A <15 m (49.2 ft); <4.5 m (14.8 ft) Code B 15 m (49.2 ft) <24 m (78.7 ft); 4.5 m (14.8 ft) <6 m (19.7 ft) Code C 24 m (78.7 ft) <36 m (118.1 ft); 6 m (19.7 ft) <9 m (29.5 ft) Code D 36 m (118.1 ft) <52 m (170.6 ft); 9 m (29.5 ft) <14 m (45.9 ft) Code E 52 m (170.6 ft) <65 m (213.3 ft); 9 m (29.5 ft) <14 m (45.9 ft) | enumeration | |
| | | Code F 65 m (213.3 ft) <80 m (262.5 ft); 14 m (45.9 ft) <16 m (52.5 ft) | | |
| 15 | Intelligent Transport Systems(ATM, SESAR) | European air traffic management network' (EATMN Systems and procedures for airspace management. Systems and procedures for air traffic flow management. Systems and procedures for air traffic services, in particular flight data processing systems, surveillance data processing systems and human-machine interface systems. Communications systems and procedures for ground-to-ground, air-to-ground and air-to-air communications. Navigation systems and procedures. Surveillance systems and procedures. Systems and procedures for aeronautical information services. Systems and procedures for the use of meteorological information. Others | enumeration | |





4. Inland Waterways

| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---------------------------------|--|-------------|-----------|
| | | Network Links | | |
| 1/ | NodeA | Flow direction (water current) from NodeA to NodeB which represent the downstream direction. For a canal this sequence will follow the distance marks defined by the waterway authority. | string | Lot 2/I |
| 2/ | NodeB | Flow direction (water current) from NodeA to NodeB which represent the downstream direction. For a canal this sequence will follow the distance marks defined by the waterway authority. | string | Lot 2/1 |
| 1' | Water flow direction | "Yes" - for the sections where the direction of the section in GIS layer corresponds to the water flow "No" -for the sections where the direction of the section in GIS layer does not correspond to the water flow For a canal this sequence will follow the distance marks defined by the waterway authority. | boolean | Lot 2 / I |
| 3 | Active | Whether stretch is open/operational. Allows inclusion of planned infrastructure within the network. | boolean | Lot 2 / I |
| 4 | Active From | Date at which network link was available. | date | Lot 2 / I |
| 5 | Active To | Date at which network link ceased to be available. | date | Lot 2 / I |
| 6 | Waterway name | Identifier for river or canal (Suggest to use the RIS-Index WWNAME) | string | Lot 2 / I |
| 7 | Fairway Section Code | RIS Index Fairway section Code assigned by the national authorities. It represents the coding of a waterway section within a national network and is only unique in combination with the country code. Cross references to RIS implementation tables. e.g. DE-00700 for the Elbe River in Germany | string | Lot 2 / I |
| 8 | Waterway type | river, canal, lake | enumeration | Lot 2 / I |
| 9 | CEMT class | Categories of navigable inland waterways: Class (length/beam) I to III, IV, V a, V b, VI a, VI b, VI c, VII | enumeration | Lot 2 / I |
| 10 | Zone | I, II, III, IV, R (Directive 2006/87/EC) | enumeration | Lot 2 / I |
| 11 | Local Knowledge Requirements | Whether local knowledge requirements (LKR) are applicable on this stretch, normally due to difficult nautical conditions. Refer to: http://www.unece.org/fileadmin/DAM/trans/doc/2010/sc3wp3/ECE-TRANS-SC3-2010-12e.pdf http://www.unece.org/fileadmin/DAM/trans/doc/2014/sc3wp3/ECE-TRANS-SC3-2010-12-c1e.pdf | boolean | Lot 2 / I |
| 12 | Maximal length of vessel/convoy | Maximum allowed vessel/convoy size in length Please encode "999" for no limit. | double | Lot 2 / I |
| 13 | Maximal width of vessel/convoy | Maximum allowed vessel/convoy size in width Please encode "999" for no limit. | double | Lot 2 / I |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|--|-----------|-----------|
| 14 | Maximal draught of vessel/convoy | Maximum allowed vessel/convoy size in draught. (For free flowing river this is not a fixed value.) | double | Lot 2 / I |
| 15 | Fairway width | Minimum width of the waterway of the section. | double | Lot 2 / I |
| 16 | Fairway depth | Minimum depth of the waterway of the section. | double | Lot 2 / I |
| 17 | Water level | Variable value for the free flowing rivers such as the Rhine, Elbe and Danube. Water level is equal to the fairway depth in case of regulated river, canal or lake. For free flowing rivers, usage of the fairway depth at GLW (Gleichwertiger Wasserstand, Rhine) or RNW (Regulated Niedrigwasserstand, Danube) is suggested. | double | Lot 2 / I |
| 18 | Maximum sailing speed | Maximum allowed vessel/convoy speed. No regulations apply for the Rhine. In case of differentiated speed per draught, the speed of the maximum allowed vessel type will be filled in. Please encode "999" for no speed regulation. | double | Lot 2 / I |
| 19 | Access charge | Whether distance based access charges are applied on this section, (e.g. per km or per ton-km) | boolean | Lot 2 / I |
| 20 | Presence of a maintenance plan | Whether a maintenance plan exists covering the section. | boolean | Lot 2 / I |
| 21 | Presence of a maintenance plan - dates: Dates from / to | The dates for which the maintenance plan applies. | string | Lot 2 / I |
| 22 | Number of days below agreed low water level | The number of days per year at which the water level is below GLW or RNW for free flowing river sections. For other fairway categories, this is not applicable. GLW and RNW refer to reference water levels that guarantee a certain fairway depth. For the Danube river, this equals 2.50 metres everywhere. For the Rhine, it differs from section to section: 2.80 up to Duisburg, 2.50 for Duisburg – Koblenz, 1.90 for Koblenz – Mainz, 2.10 for Mainz – Iffezheim. | integer | Lot 2 / I |
| 23 | Number of days below regulation 1315/2013 draught | The number of days per year at which fairway depth is below 2.8 meters, thus not allowing vessel draughts deeper than 2.5 meters (including a safety margin of 30 centimeters). | integer | Lot 2 / I |
| 24 | Number of days above agreed high water level | Number of days above agreed high water level per year. | integer | Lot 2 / I |
| 25 | Announced waterway obstructions (planned non-availability) | Number of days per year where navigation is not possible due to planned events. | integer | Lot 2 / I |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise | | |
|--------------|---|---|-------------|-----------|--|--|
| 26 | Unannounced waterway obstructions (unplanned non- availability) | Number of days per year where navigation is not possible due to unplanned obstructions. | integer | Lot 2 / I | | |
| 27 | Unavailability due to ice | Number of days per year where navigation is not possible due to ice. | integer | Lot 2 / I | | |
| 28 | Navigation reliability (%) | Percentage based on the number of days per year, on which the waterway is available for navigation and meets the minimum requirements for draught, for height under bridges for three-layer container transport and for beam of the respective CEMT class. For waterways of class IV and higher, the requirements of pushed convoys apply. For class I-III, the requirements of vessels and barges apply. | double | Lot 2 / I | | |
| 29 | Hydrological services | Presence of services such as water-level gauges and water level prognosis. | boolean | Lot 2 / I | | |
| 30 | Ship passages both direction | Total number of commercial ship passages (both directions) | integer | Lot 2 / I | | |
| 31 | Ship passages downstream | Number of commercial ship passages from NodeA to NodeB | integer | Lot 2 / I | | |
| 32 | Ship passages upstream | Number of commercial ship passages from NodeB to NodeA | integer | Lot 2 / I | | |
| 33 | Freight traffic flow (tons per year) | Tonnes transported on a section, per year. | double | Lot 2 / I | | |
| 34 | Intelligent Transport Systems (RIS) | In operation, Yes/No | boolean | Lot 2 / I | | |
| | | Locks | | | | |
| 1 | Service times | Opening hours (in off-season period) per week. | double | Lot 2 / I | | |
| 2 | Vessel Traffic | Number of Vessels Through the Lock System per year. | integer | Lot 2 / I | | |
| 3 | Full Year Lock Operation? | Will the lock be used at all water levels? | boolean | Lot 2 / I | | |
| Lock Chamber | | | | | | |
| 1 | Chamber Configuration | Dropdown List: Single, Double, Three or more | enumeration | Lot 2 / I | | |
| 2 | Chamber lock width | Width (metres) inside chamber | double | Lot 2 / I | | |





| | TFNIng Tackwing | | | | | | |
|-----|--|--|-------------|------------|--|--|--|
| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise | | | |
| 3 | Chamber lock length | Length (metres) inside chamber | double | Lot 2 / I | | | |
| 4 | Chamber lock depth | Depth of water at lock (metres) entrance/exit | double | Lot 2 / I | | | |
| 5 | Chamber lock height | Air-draft Restriction (metres) if applicable. | double | Lot 2 / I | | | |
| 6 | Width of lock bay | Minimum Width (metres) of Lock Gates (at entrance or exit) | double | Lot 2 / I | | | |
| 7 | Average operation time | Length of time in minutes to operate one lock cycle. | duration | Lot 2 / I | | | |
| | Bridges | | | | | | |
| 1 | Movable bridge Whether bridge is moveable (to allow ships to pass) | | | | | | |
| 2 | Full span of fairway | Does bridge cover the full span of the fairway? | boolean | Lot 2 / I | | | |
| 3 | Passage height limit (meters) | Height limit (metres) above normal water level for fixed bridges, closed moveable bridges, or other overhead structures. | double | Lot 2 / I | | | |
| 4 | Movable bridge passage height (raised/open) | Height limit (metres) above normal water level, for moveable bridge when raised/open. Please encode "999" for no height limit. To be encoded only for all movable bridges. | double | Lot 2 / I | | | |
| 5 | Passage width limit. | Width limit (metres) through bridge or equivalent overhead structures. | double | Lot 2 / I | | | |
| 6 | Movable bridge service times | Number of hours that movable bridge service is available per week. | double | Lot 2 / I | | | |
| | | Port Terminals | | | | | |
| 1 | Activity | Dropdown: Containers Only, Conventional Only, Mixed. | enumeration | Lot 2 / II | | | |
| 2 | Public Availability | Whether terminal is publicly available. To be <i>not publicly available</i> means that the terminal is a dedicated private facility e.g. at a steelworks. | boolean | Lot 2 / II | | | |
| 3 | Handling Charges (Euros/TEU) | Terminal Charges Applied per Container TEU | double | Lot 2 / II | | | |
| 4 | Connection with rail | Dropdown: No, Yes-Inactive, Yes-Active-Direct-Ship-to-Train, Yes-Active-Other. Whether rail connection exists at terminal, whether it is being used, and whether trains can be loaded at the quay alongside IWT vessels. | enumeration | Lot 2 / II | | | |
| 5 | Shore Side Electricity | Whether shore side electricity is provided for IWT vessels | boolean | Lot 2 / II | | | |
| 6 | Cargo handling capacity in tonnes per annum. | Dropdown: < 0,5m, 0,5-3m Tonnes, 3-10m Tonnes, >10m Tonnes. (Definitions agreeing with Blue Book Source) | enumeration | Lot 2 / II | | | |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|---|-------------|------------|
| 7 | Total Quay Length (metres) | Total quay length in metres. | double | Lot 2 / II |
| 8 | Storage capacity in m2 | Capacity of terminal area in square metres. | double | Lot 2 / II |
| 9 | Storage capacity in TEU | Capacity of terminal area for storing containers (TEU) | double | Lot 2 / II |
| 10 | Terminal service time | Hours open per week. | double | Lot 2 / II |
| | Mooring places | | | |
| 1 | Mooring places capacity in nr of vessels | Capacity – number of vessel spaces. | integer | Lot 2 / II |
| 2 | Mooring places capacity in m2 | Capacity – area in square metres. | double | Lot 2 / II |
| 3 | Mooring place available for vessels with dangerous goods | Whether vessels carrying dangerous goods can use mooring places. | boolean | Lot 2 / II |
| | | Refuelling Point for Alternative Fuels | | |
| 1 | Type of Refuelling Point | Terminal, Tank, Mobile Container, Bunker Vessel/barge, Other | enumeration | Lot 2 / II |
| 2 | Type of Alternative Fuel | Electricity, Hydrogen, Biofuels, Natural gas (CNG and or LNG), LPG, Other | enumeration | Lot 2 / II |





5. Ports

| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|---|-------------|-----------------------|
| | | Ports | | |
| 1 | Port UN\LO Code | ISO Country code and UN Location Identifier. (XX XXX) | string | Lot 2 / II |
| 2 | Port Activity | DROPDOWN: Freight/ Passenger/ Passenger & Freight | enumeration | Lot 2 / II MoS / I |
| 3 | Number of Terminals (no) | Number of terminals within inland port | integer | Lot 2 / II |
| 4 | Total Quay Length (metres) | Total quay length in metres. | double | Lot 2 / II |
| 5 | Throughput Capacity in nr of TEU | Annual throughput capacity for containers (TEU per year) if applicable. | double | Lot 2 / II |
| 6 | Bunkering facilities | Does port offer bunkering facilities? | boolean | Lot 2 / II |
| 7 | Alternative Fuels | Does port offer alternative fuels? (Reference: Directive 2014/94/EU) | boolean | Lot 2 / II |
| 8 | Waste reception facilities | Does port offer waste reception facilities? | boolean | Lot 2 / II |
| 9 | Ice breaking equipment | Does port require ice breaking facilities? | boolean | Lot 2 / II |
| 10 | Dredging equipment | Does port have dredging equipment? | boolean | Lot 2 / II |
| 11 | Type of Port | Maritime (default) / Inland Waterways / Maritime and Inland Waterways | enumeration | MoS/I |
| 12 | Area (km2) | All land- and water-area which belongs to the port. | double | |
| 13 | Maximum draught (m)-natural or dredged | Maximum draught of ship which may enter the port | double | MoS/I |
| 14 | Port terminals (ha) | Port terminals (ha) | double | MoS / II |
| 15 | Combined terminals (no. of rail tracks) | Combined terminals (no. of rail tracks) | integer | MoS/I |
| 16 | Combined terminals (ha) | Combined terminals (ha) | double | MoS / II |





| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|--|--|-----------|----------|
| 17 | Passenger or cruise terminal (passenger) | Passenger or cruise terminal (pass) | integer | MoS / II |
| 18 | No. of passengers (per year) | No. of passengers (per year) | integer | MoS / II |
| 19 | Passenger Traffic Flow (pax per year) | Passenger Traffic Flow (pax per year) | integer | MoS / II |
| 20 | Freight Traffic Flow (tons per year) | Freight Traffic Flow (tons per year) | double | MoS/I |
| 21 | Freight capacity (tons per year) | Freight capacity (tons per year) | double | MoS / II |
| 22 | Port traffic (no. of vessels per year) | Port traffic (no. of vessels per year) | integer | MoS/I |
| 23 | Connection with rail | YES / NO | boolean | MoS / I |
| 24 | Rail connection (no. of tracks) | Number of tracks connecting the port to the hinterland network. | integer | MoS / I |
| 25 | Rail connection (tons/year) | Capacity of the rail connection (tons/year) | double | MoS / I |
| 26 | Transhipment facilities for intermodal transport | YES / NO | boolean | MoS/I |
| 27 | Road connection (no. of lanes) | Total no. of lanes (sum of forward-/backward lanes), connecting the port to the hinterland network. | integer | MoS/I |
| 28 | Road connection (tons/year) | Capacity of the road connection (tons/year) | double | MoS / I |
| 29 | Waterway connection (CEMT class) | All classes; only Inland Waterways are meant, because a port can be connected to any other port in principle | string | MoS / I |
| 30 | Intelligent Transport System(VTMIS) | In operation YES / NO | boolean | MoS / II |





6. Rail Road Terminals

| No. | TENtec Technical Parameter Name | Definition | Data type | Exercise |
|-----|---|---|-----------|----------|
| 1 | Area (km2) | All land- and water-area which belongs to the platform. | double | |
| 2 | Freight traffic flow (tons per year) | Freight traffic flow (tons per year) | double | |
| 3 | Freight capacity (tons per year) | Freight capacity (tons per year) | double | |
| 4 | Rail connection (no. of tracks) | Number of tracks connecting the port to the hinterland network. | double | |
| 5 | Road connection (no. of lanes) | Total no. of lanes (sum of forward-/backward lanes), connecting the port to the hinterland network. | double | |
| 6 | Intelligent Transport Systems (ERTMS) | In operation YES / NO. | boolean | |
| 7 | Intelligent Transport Systems (Road-ITS) | In operation YES / NO. | boolean | |