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Exhibit A05-5: Training

1 GENERAL

Id	Requirement	Referring to
A05-5:1.a	M Documentation, lecture material and training shall be in English or Norwegian.	
A05-5:1.b	K The tenderer shall provide complete hardware and software to cover the requirements described in this document. The full-cab simulator shall resemble the inside of the Trainsets driver's cab. The simulator shall have a motion system. <i>The solution can be VR-based simulator or a regular simulator.</i>	
A05-5:1.c	K Solutions to passenger-related requirements shall be presented by means of: <ul style="list-style-type: none"> • Layout drawings in 2D and 3D • Mock-up for: <ul style="list-style-type: none"> o Vestibule with toilet service area and part of a seating section o Lighting, luggage shelves, onboard passenger information systems, back-to-knee length, bicycles, etc. <i>The solution can be VR-based.</i>	

1.1 Training Plan

Id	Requirement	Referring to
A05-5:1.1.a	K The Contractor shall produce a Training plan. The Training plan shall show the Contractor's own training organisation, how the training will be implemented and executed, including a time schedule of the training aligned with the overall Project Plan and important milestones. <i>The Tenderer shall provide a preliminary Training plan with the tender.</i>	
A05-5:1.1.b	K The Training plan shall describe <ul style="list-style-type: none"> • the modules used for building the different training courses, their content, training methodology, learning objectives, number of days required and number of participants • facilities required for each module • location and premises • details on how the examination and evaluation will be conducted 	
A05-5:1.1.c	K The Training plan shall clearly show how the participants will obtain the correct level of capability, knowledge and skills.	

Exhibit A05-5: Training

Id	Requirement	Referring to
A05-5:1.1.d	<p>K The time schedule shall secure that the Operators have enough personnel trained for all important project phases where the Operators' personnel is involved.</p> <p><i>The Tenderer shall present a first draft of how this requirement is to be reached.</i></p>	

1.2 Personnel to train

Id	Requirement	Referring to
A05-5:1.2.a	<p>K The Contractor shall train fleet performance managers, engineering personnel, second-line maintenance personnel and engineers for the train systems directly.</p>	
A05-5:1.2.b	<p>K The Contractor shall develop Training courses for at least for but not limited to:</p> <ul style="list-style-type: none"> • Fleet performance managers • Engineering personnel • Engineers for the train systems • Second-line maintenance personnel for engineers, engineers for the diagnostic system and fleet performance managers. <p><i>The Tenderer shall deliver an outline of the Training courses and how the objectives for the courses will be reached, with the tender.</i></p>	
A05-5:1.2.c	<p>K The training of maintenance personnel, drivers and crew shall be based on a "train the trainer concept". In this concept the Contractor shall train head instructors and assess head instructors for them to pass the training. The head instructors will train relevant personnel and assess them for them to pass the training.</p>	
A05-5:1.2.d	<p>K The Contractor shall develop Training courses for the head instructors.</p> <p><i>The Tenderer shall provide a preliminary version of the Training courses that describes how the objectives will be reached and a time schedule for each specific Training course.</i></p> <p><i>The preliminary version shall also contain information regarding the types of educational technology tools the supplier will provide and how the head instructors can use these when training their respective personnel groups.</i></p> <p><i>By the term educational technology tools is meant desktop simulators, VR-goggles, 360-images, or other solutions that make the training more hands-on and time efficient.</i></p>	

Exhibit A05-5: Training

Id	Requirement	Referring to
A05-5:1.2.e	<p>K The Contractor shall deliver Training courses for:</p> <ul style="list-style-type: none"> • 20 head instructors for maintenance. • 20 head instructors for drivers. • 25 head instructors for and other onboard crew (conductors catering staff). 	
A05-5:1.2.f	<p>K A Training course for head instructors can have up to but not more than six participants per course.</p>	

1.3 Course content

Id	Requirement	Referring to
A05-5:1.3.a	<p>K The training concept shall be blended learning with focus on modern training technology which is both time effective and pedagogically beneficial.</p> <p>Blended learning is an optimal combination of classroom training, e-learning and simulator-based training.</p> <p><i>The Tenderer shall describe the pedagogical method of training that will be used and examples of technological solutions.</i></p>	
A05-5:1.3.b	<p>E The content of the Training plan, Training courses and training material shall be aligned with the design of the Trainset and other deliverables such as documentation at the final design reviews. For any changes in the design after final design review, the Contractor shall update the content of the Training Plan as applicable. This includes repeating already conducted training fully or partly as applicable and agreed between the parties.</p>	
A05-5:1.3.c	<p>K The content of each Training course shall be relevant for the personnel who receive instruction.</p>	

1.4 Course certificate

Id	Requirement	Referring to
A05-5:1.4.a	<p>K Each Training course shall be concluded by means of a written and practical examination. The written and practical examination shall be mandatory for all participants and shall be carried out in a way that clearly shows whether the participant is fit to carry out the tasks described in the objectives according to the level and role of the participant. The examination shall be prepared and conducted by the Contractor, together with representatives from Norske tog.</p>	
A05-5:1.4.b	<p>K The examination result, if successful, shall be stated on a "Training Course Certificate" confirming that the participant has obtained the correct level of qualification.</p>	

Exhibit A05-5: Training

Id	Requirement	Referring to
A05-5:1.4.c	K A Training Course Evaluation shall conclude all Training courses. The results of the evaluation shall be used for improvement of the Training Course. The evaluation Sheets shall be a part of the complete Training Course documentation.	
A05-5:1.4.d	K In case a course evaluation states that the learning objectives of the Training course in the view of Norske tog's personnel were not met, fully or partly, the Contractor shall, upon Norske tog's request, repeat those parts of the Training course. The Contractor shall do this at no cost for Norske tog.	
A05-5:1.4.e	K It should be some training requirements in document to cover overhaul and/or repair. The document should be in English or Norwegian language.	