	<b>BIDSF Project</b>	<b>C16.1 – CONDITIONING OF BUFFER STORAGE AREAS</b>  <b>BIDSF 016 9 001</b>	<b>C16.1</b> Contract
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## **CONTRACT**

### **CONDITIONING OF BUFFER STORAGE AREAS**

**CONTRACT N° : BIDSF 016 9 001**

between

**Jadrová a vyrad'ovacia spoločnosť, a.s.**

and

**ROBO Piešť'any, a.s.**

Dated: \_\_\_\_\_

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## BIDSF project C16.1

# CONDITIONING OF BUFFER STORAGE AREAS

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### A. The Contract Agreement

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## CONTRACT AGREEMENT

**This Agreement** made the \_\_\_\_\_ day of \_\_\_\_\_ 2013

Between, **Jadrová a vyrad'ovacia spoločnosť, a.s.** a state owned joint stock company duly organized and existing under the Laws of the Slovak Republic with its registered office located at Tomášikova 22, 821 02 Bratislava, Slovak Republic and registered with the Trade Register of the District court Bratislava I in section Sa under number 4649/B, Company Identification No.: 35 946 024, duly represented by Ing. Peter Čížnár – Chairman of the Board of Directors and Ing. Miroslav Obert – Vice-Chairman of the Board of Directors, entrusted with the relevant powers in compliance with the Statute of Jadrová a vyrad'ovacia spoločnosť, a.s. (hereinafter called "the Employer") of the one part,

and ROBO Piešťany, a.s., a joint stock company duly organized and existing under the Laws of Slovak Republic with its registered office located at Royova 2, 921 01 Piešťany, Slovak Republic and registered with the Trade Register of the District court Trnava in section Sa under insert number 10027/T, Company Identification No.: 36223204, duly represented by Ing. Robert Levčík – Vice-Chairman of the Board, entrusted with the relevant powers in compliance with the Statute of company ROBO Piešťany, a.s. (hereinafter called "the Contractor") of the other part.

Whereas the Employer desires that the Works known as "Conditioning of Buffer Storage Areas" should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

**The Employer and the Contractor agree** as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, for the purpose of interpretation, the priority of the documents shall be in accordance with the following sequence:
  - A. This Contract Agreement
  - B. The Letter of Acceptance
  - C. The Letter of Tender
  - D. The Conditions of Particular Application
  - E. The Appendix to Tender
  - F. The General Conditions
  - G. Clarification questions and answers
    - G1. Clarification questions and answers to Tender Documents
    - G2. Clarification questions and answers to Tender Proposal
  - H. The Employer's Requirements constituted by:
    - H0. Addendum No. 1 to the Tender Documents
    - H1. Technical Specification
    - H2. Time Schedule
    - H3. Drawings and other Documentation
    - H4. QA and QC surveillance requirements

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- H5. Safety and Technical Conditions
- I. The Contractor's Proposal constituted by:
- I1. Technical proposal
  - I2. Project Organization and Time Schedule,
  - I3. Price Schedules
  - I4. List of Subcontractors
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to design, execute and complete the Works and remedy any defects therein, in conformity with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price of Euro 399 835,00 that is: Three hundred ninety nine thousand eight hundred and thirty five Euros within 24 months from the Commencement date and in compliance with Time Schedule and in the manner prescribed by the Contract.
5. The Contractor acknowledges, that all eligible payments due to the Contractor pursuant to the Contract shall be approved by the Bank and therefore the Employer shall not be responsible for paying to the Contractor (or carrying out) any payments from the Contract other than those approved and accepted by the Bank in compliance with the terms and conditions set forth in this Contract.
6. This Agreement shall become effective on the following day after publication of this Agreement according to the Act 211/2000 Coll. on free disclosure of information and on change and amendment of certain acts (act of information freedom), as amended.

**In Witness** whereof the parties hereto have caused this Agreement to be executed the day and year first before written in accordance with their respective laws, in four (4) copies in English language each considered as original.

SIGNED by:

SIGNED by:

\_\_\_\_\_  
Ing. Miroslav Obert – Vice-Chairman of the  
Board of Directors

\_\_\_\_\_  
Ing. Robert Levčík – Vice-Chairman of the Board

\_\_\_\_\_  
Ing. Peter Čižnár – Chairman of the Board of  
Directors

for and on behalf of the Employer

for and on behalf of the Contractor

Date:

Date:

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### CONDITIONING OF BUFFER STORAGE AREAS

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#### B. The Letter of Acceptance

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## LETTER OF ACCEPTANCE

Bratislava, ..... January, 2013

TO: **ROBO Piešť'any, a.s., Royova 2, 921 01 Piešť'any, Slovak republic**

This is to notify you that your tender dated 12<sup>th</sup> of November 2012 for the execution of the **C16.1 – Conditioning of Buffer Storage Areas** for the Contract Price of the equivalent of Euro 399 835,00 that is: Three hundred ninety nine thousand eight hundred and thirty five Euro as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by us.

You are hereby required:

(a) to submit the performance security for 10% of the Accepted Contract Amount, in the currencies and proportions in which the Contract Price is payable;

(b) sign the attached Contract Agreement and return to;

Jadrová a vyrad'ovacia spoločnosť, a.s.  
BIDSF PMU - Procurement Group  
Tomášikova 22  
821 02 Bratislava  
Slovak Republic

(c) to commence performance of the said contract in accordance with the Contract Documents.

Authorised Signatures:

.....  
Ing. Peter Čížnár  
Chairman of the Board of Directors

.....  
Ing. Miroslav Obert  
Vice-Chairman of the Board of Directors

Name of Employer: Jadrová a vyrad'ovacia spoločnosť a.s.

Attachment: Contract Documents (Originals 1 - 4)

**Jadrová a vyrad'ovacia spoločnosť, a.s.,**  
**Nuclear and Decommissioning Company, plc.,**  
**Tomášikova 22, 821 02 Bratislava, Slovakia**  
Phone: +421/2/482 62 111, Fax: +421/2/482 62 905, e-mail: info@javys.sk, www.javys.sk



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#### D. The Conditions of Particular Application

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## CONDITIONS OF PARTICULAR APPLICATION TO GENERAL CONDITIONS

<b>1 General Provisions</b>	
1.1.1 The Contract	Add Sub-Clause 1.1.1.11  <b>"Intellectual and Industrial Property Rights"</b> means intellectual property rights referred to in Sub-Clause 17.5 [ <i>Intellectual and Industrial Property Rights</i> ]
1.1.2 Parties and Persons	Delete Sub-Clause 1.1.2.8 and substitute with:  <b>"Subcontractor"</b> means any person named in the Contract as a Subcontractor, or specialist Subcontractor, or any person appointed as a Subcontractor, for a part of the Works; and the legal successors in title to each of these persons.  Add Sub-Clause 1.1.2.11  <b>"PMU team"</b> means the Project Management Unit formed by the Employer, as part of the Employer's Shutdown Department to undertake the management and implementation of the BIDSF funded or co-funded projects for Bohunice NPP V1.  Add Sub-Clause 1.1.2.12  <b>"Commercial Code"</b> means Act No. 513/1991 Coll. Commercial Code, as subsequently amended.
1.1.3 Dates, Tests, Periods and Completion	Delete Sub-Clause 1.1.3.2. and substitute with: 1.1.3.2. <b>"Commencement Date"</b> means the date notified by the Engineer as specified under Sub-Clause 8.1.  Delete Sub-Clause 1.1.3.7 <b>"Defect Notification Period"</b> and substitute with:  1.1.3.7 <b>"Defect Notification Period"</b> or <b>"Contractor Warranty Period"</b> means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [ <i>Completion of Outstanding Work and Remedying Defects</i> ], as stated in the Appendix to Tender (with any extension under Sub-Clause 11.3 [ <i>Extension of Defects Notification Period</i> ]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [ <i>Taking Over of the Works and Sections</i> ].  Add Sub-Clause 1.1.3.10 <b>"Certificate of Temporary Operation"</b> means a certificate issued under Clause 10.2 [ <i>Taking Over of Parts of Work</i> ]
1.1.4 Money and Payments	Delete Sub-Clause 1.1.4.4 and substitute with: 1.1.4.4 "Final Payment Certificate" means the Final Deliverable Acceptance Protocol issued under sub-Clause 14.13 [Issue of Final Payment Certificate].  Delete Sub-Clause 1.1.4.7 and substitute with: 1.1.4.7 "Interim Payment



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	<p>Certificate" means a Deliverable Acceptance Protocol issued under Clause 14 [Contract Price and Payment] other than the Final Deliverable Acceptance protocol."</p> <p>Delete Sub-Clause 1.1.4.9 and substitute with: 1.1.4.9 "Payment Certificate" means a Deliverable Acceptance Protocol issued under Clause 14 [Contract Price and Payment]"</p>
1.1.5 Works and Goods	<p>Delete Sub-Clause 1.1.5.5 "Plant" and substitute with:</p> <p>1.1.5.5 <b>"Plant"</b> means equipment, machinery, and other tangible items including monitoring, information processing and communications related hardware and software systems, intended to form or forming part of the Permanent Works.</p>
1.1.6 Other Definitions	<p>Add the following definitions:</p> <p>1.1.6.10 The <b>"European Bank for Reconstruction and Development (EBRD) 'the Bank',"</b> is the Administrator of the grant(s), which refers to the funds made available to the Employer (the Recipient) under an Agreement between the Bank as the Administrator of funds of the Bohunice International Decommissioning Support Fund and the Recipient of such funds under the established rules.</p> <p>1.1.6.11 The <b>"Project"</b> means the project C16.1 – "Conditioning of Buffer Storage Areas", located at JAVYS Nuclear Power Plant Jaslovské Bohunice, Slovak Republic, for which the Works under this Contract shall be performed by the Contractor.</p> <p>1.1.6.12 The <b>"Programme"</b> means the document entitled "Time Schedule" and specified in H1 – Technical Specification.</p>
1.3 Communications	<p>Delete a) and b) and substitute by:</p> <p>Any document, information, notice, correspondence or other communication to be given by one Party to the other Party or to the Engineer relating to the Contract shall be in writing and in the English language and may be delivered in person (against receipt) or by letter (registered post and against receipt) or facsimile (confirmed by the addressee personal answer back), addressed to the other Party or the Engineer in accordance with the following provisions of this clause.</p>
1.4 Law and Language	<p>After the first paragraph add the following:</p> <p>Unless the Contract provides otherwise, the mutual contractual relationship explicitly not governed by the Contract shall be governed by the provisions of the Commercial Code. Without prejudice to any provision of this Contract, the Parties agrees that application of any legal regulation of the Slovak republic which is not mandatory is explicitly excluded in the scope in which its application could change (in the whole or in the part) meaning or content of any provision of this Contract.</p>
1.5 Priority of the Documents	<p>Delete and replace by:</p> <p>The documents forming the Contract are to be taken as mutually explanatory of one another. For purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:</p> <ol style="list-style-type: none"> <li>1) A. The Contract Agreement</li> <li>2) B. The Letter of Acceptance</li> </ol>

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	<p>3) C. The Letter of Tender</p> <p>4) D. The Conditions of Particular Application</p> <p>5) E. The Appendix to Tender</p> <p>6) F. The General Conditions</p> <p>7) G. Clarification questions and answers</p> <p style="padding-left: 20px;">G1 Clarification questions and answers to Tender Documents</p> <p style="padding-left: 20px;">G2 Clarification questions and answers to Tender Proposal</p> <p>8) H. The Employer's Requirements constituted by:</p> <p style="padding-left: 20px;">H0 Addendum no. 1 to Tender Documents</p> <p style="padding-left: 20px;">H1 Technical Specification</p> <p style="padding-left: 20px;">H2 Time Schedule</p> <p style="padding-left: 20px;">H3 Drawings and other documentation</p> <p style="padding-left: 20px;">H4 QA and QC surveillance requirements</p> <p style="padding-left: 20px;">H5 Safety and Technical Conditions</p> <p>9) I. The Contractor's Proposal constituted by:</p> <p style="padding-left: 20px;">I1 Technical Proposal</p> <p style="padding-left: 20px;">I2 Project organization and Time Schedule</p> <p style="padding-left: 20px;">I3 Price Schedules</p> <p style="padding-left: 20px;">I4 List of subcontractors</p> <p>If an Ambiguity or discrepancy is found in the documents, Section 266 of the Commercial Code shall apply.</p>
1.10 Employer's Use of Contractor's Documents	Delete last sub-paragraph of Sub-Clause 1.10 of the General Conditions and substitute with: "The Contractor hereby grants its irrevocable and unlimited consent to the Employer, for purposes other than those permitted under this Contract, to (i) use, (ii) copy, or (iii) communicate to a third party, the Contractor's Documents and other design documents (or any other documents provided under this Contract to the Employer) made by (or on behalf of) the Contractor."
1.15 Confidentiality	Add Sub-Clause 1.15: With the signature of this Contract the Contractor hereby gives its consent to publish on the website of the Employer and on any other places chosen by the Employer, for an indefinite time period, the whole Contract including any eventual future amendments and appendixes and enclosures of the Contract and any other documents related to the Contract. Also, the Contractor hereby gives its consent to publish on the website of the Employer and on any other places chosen by the Employer for an indefinite time period any invoices issued by the Contractor in relation to this Contract. The Employer shall bear all costs related to the publication of the above mentioned documents. To avoid any uncertainties, the Contractor grants also its consent to publish information underlying trade secrecy according § 17 of the Commercial Code contained in the above mentioned documents by means as stated above whereby the publication of these information does not represent breach of the trade secrecy by the Employer. Also, the Contractor hereby acknowledges that any information provided by the Contractor contained in the abovementioned documents shall not be considered as confidential

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	<p>according §271 of the Commercial Code.</p> <p>Despite of the above authorization of the Employer to publish the above mentioned documents, the Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous written agreement of the Employer. Without a written agreement of the Employer, the Contractor shall be liable for any damages caused by provision of this information to third persons.</p>
1.16 EBRD and Employer Audits	<p>Add Sub-Clause 1.16:</p> <p>The Contractor shall permit the Bank and/or the Employer to inspect the Contractor's accounts and records relating to the performance of the Contract and to have them audited by auditors acceptable to the Bank or the Employer.</p>
1.17 Authorized representative	<p>Add Sub-clause 1.17:</p> <p>Any action required or permitted to be taken, and any document required or permitted to be executed, with the exception of adjustments to the Contract Price or the Price Schedules or the Quantities and Prices under Clause 13.3 [Variations Procedure], under this Contract by the Employer or the Contractor may be taken or executed by the officials:</p> <p>For the Employer: as specified in E - Appendix to Tender, Sub-clause 1.1.2.4 &amp; 1.3</p> <p>For the Contractor: Ing. Robert Levčík – Vice-Chairman of the Board</p>
<b>2. The Employer</b>	
2.2 Permits, Licenses or Approvals	<p>At the end of Sub-Clause 2.2</p> <p>Any proposal, inspection, examination, testing, consent, approval or similar act by the Employer (including absence of disapproval) shall not relieve the Contractor from any responsibility, including responsibility for his errors, omissions, or discrepancies, and non-compliance with Sub-Clauses 5.3 [<i>Contractor's Undertaking</i>] and 5.4 [<i>Technical Standards and regulations</i>].</p>
2.4 Employer's Financial Arrangements	<p>At the end of Sub-Clause 2.4 add:</p> <p>Pursuant to an agreement between the Bank as the Administrator of the Fund (the Fund) and the Employer as Recipient of the grant(s) being administered by the Bank, the Employer intends using part of the proceeds of the grant(s) for eligible payments under the Contract. Payment by the Bank will be made on behalf of the Employer and only at the request of the Employer and upon approval by the Bank in accordance with the terms and conditions of the Grant Agreement entered by and between the Bank and the Employer on conditions of the Project funding and will be subject in all respects to the terms and conditions of that agreement. The proceeds of the Bank's grant(s) will not be used for payments to persons or entities or for any import of</p>

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	<p>goods if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. Except as the Bank may specifically otherwise agree, no other party other than the Employer shall derive any rights from the agreement or have any rights to the proceeds of the grant(s).</p>
<b>3. The Engineer</b>	
3.1 Engineer's Duties and Authority	<p>At the end of Sub-Clause 3.1 add: The duties of the Engineer shall be exercised by the Head of V1 Decommissioning preparation and realization section.</p>
3.2 Delegation by the Engineer	<p>Delete in the second paragraph the following text: "And who are fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]</p>
3.6 Management Meeting	<p>Add Sub-Clause 3.6: The Engineer may require the Contractor to attend management meeting at times and places to be specified by the Engineer. The Contractor shall appoint qualified personnel, with authority, to participate in such meetings. The business of each management meeting shall be to review the anticipated arrangements for future work and to resolve any matters raised in accordance with this Sub-Clause. The Engineer shall record the business of monthly progress meeting and provide copies of this record to those attending the meeting and to the Employer. The responsibility of the parties for any actions to be taken shall be included in such record and shall, if not agreed in accordance with the Contract, be submitted by the Engineer. The Contractor's Representative shall notify the Engineer at the earliest opportunity of specific likely future events or circumstances, which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3. The Contractor shall submit such estimate and/or proposal as soon as practicable. The Contractor's Representative shall co-operate with the Engineer in making and considering proposals to mitigate the effect of any such event or circumstances, and in carrying out instructions of the Engineer.</p>
<b>4. The Contractor</b>	
4.2 Performance Security	<p>In the second paragraph, replace the first sentence by the following: The Contractor shall deliver the Performance Security to the Engineer within 28 days after receiving the Letter of Acceptance.</p> <p>Delete the last paragraph and substitute with: After issuing of Taking-Over Certificate the Performance Security shall be reduced to two (2) per cent of the Contract price to cover the Contractor's obligations under Sub-clause 11 for additional period as stated in Appendix to Tender, Sub-clause 1.1.3.7 from the date of completion of Works.</p>

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	The Employer shall return the reduced Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.
4.3 Contractor's Representative	After the third paragraph, add:  If the Contractor asks the Engineer for consent to a replacement of the Contractor's Representative, the Engineer shall not withhold his prior consent provided that suitable replacement person is appointed.  After the last paragraph, add:  If the Contractor's Representative, or such persons, is not fluent in Slovak and/or English, the Contractor shall make a competent interpreter available during all working hours.
4.4 Subcontractors	Delete Sub-Clause 4.4 (b) and substitute with:  (b) The prior consent of the Engineer in the form specified in Sub-Clause 1.3 shall be obtained to other proposed Subcontractors,  After the last paragraph, add:  (d) Where practicable, the Contractor shall give a fair and reasonable opportunity for contractors from Slovakia to be appointed as Subcontractors.  (e) Assignment of Benefit of Subcontractor  If a subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period, the Contractor shall so inform the Engineer and subject to the consent of the Engineer, the Contractor shall assign the benefit of such obligations to the Employer as of the expiry date of the relevant Defects Notification Period.
4.8 Safety Procedures	At the end of Sub-Clause 4.8 add:  The Contractor shall be solely responsible for conducting operations under this Contract to avoid risk of harm to the health and safety of persons and property and for inspecting and monitoring all its plant, equipment, materials, and work practices to ensure compliance with its obligations under this Contract.  The Contractor's failure to correct any unsafe condition or unsafe act by its employees or his Subcontractors may, at the sole discretion of the Engineer or the Employer, be grounds for notice by the Engineer or the Employer instructing the Contractor or his Subcontractors to immediately stop the affected works or operations until the unsafe act or condition is corrected to the Employer's satisfaction, at the Contractor's expense. In the event of immediate danger, verbal notice may be given followed by written notice within 2 days.  If the unsafe act or condition continues despite notice and reasonable opportunity to effect a resolution, the Employer may, at its sole discretion, correct, or have corrected, the unsafe act or condition at the

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	<p>Contractor's expense pursuant to Sub-Clause 11.4 [Failure to Remedy Defects] or terminate this Contract pursuant to Clause 15 [Termination by Employer].</p> <p>Except as stated below, the Contractor shall furnish all safety equipment required to safely complete the Works and shall require the use of such safety equipment, and shall provide safety instructions to its employees. All safety equipment must be manufactured to a standard acceptable to the Employer.</p> <p>As a minimum, the Contractor's Safety Procedures shall conform to and comply with:</p> <ul style="list-style-type: none"> <li>- All applicable laws, ordinances, statutes, rules, regulations, and codes governing safety and health in the workplace, and Contractor's specific scope of Works under this Contract.</li> <li>- The Contractor shall instruct its personnel on the requirements of his Safety Plan, other safety related plans, and coordinate with other contractors and subcontractors on Site regarding safety matters.</li> <li>- The Contractor shall take into account the provisions of the requirements of the Employer subject of H5 "Safety and Technical Conditions".</li> </ul>
4.9 Quality Assurance	After wording: The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract  to be added: in accordance with H4 "QA and QC Surveillance Requirements"
4.16 Transport of Goods	Delete in (a) 21 days' notice and replace for 30 days' notice.
4.19 Electricity, Water and Gas	At the end of Sub-Clause 4.19 add: By signing this Contract pursuant to § 289 paragraph 1 of the Commercial Code the Contractor undertakes to conclude a future contract on utilities and energies supply with the Employer. The subject matter of the future contract on utilities and energies supply shall be provision of utilities and energies by the Employer specified in part I3 of the Contract, Schedule A-5 – "Utility expenses" and Schedule A-6 – "Slovak resources" for the unit prices listed therein. The services provided in Schedule A-6 "Slovak resources" shall be charged in line with the future Contract on utilities and energies supply and the Contractor shall pay for it only in the case, if the Contractor exceeds the financial limit for these services provided in Schedule A-6 "Slovak resources", last row of the table "Price Total (max. 11 900 €)". The Contractor is obliged to supply the material and installation of the networks as described of the afore-mentioned energies and media within the site in necessary extent and is fully responsible for the provision of other services as specified in part I3 of the Contract, Schedule A-5 – "Utility expenses" and Schedule A-6 – "Slovak resources" that will be necessary for the performance of this Contract. The utilities



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	<p>and energies supplied in line with the future Contract on utilities and energies supply pursuant to Schedule A-5 "Utility expenses" and Schedule A-6 – "Slovak resources" shall be charged by the Employer to the Contractor during the implementation of the Contract based on its real consumption, the invoice will be issued by the Employer. Terms and method of invoicing of all utilities and energies associated with the implementation of this project shall be agreed in more detail in the future contract on utilities and energies supply in line with this sub-clause. The future Contract on utilities and energies supply shall be concluded by the Contractor without undue delay after signing the Contract and before the commencement of works on site upon the notice of the Employer in writing to conclude the Contract on utilities and energies supply delivered to the Contractor, in the wording as provided by the Employer to the Contractor. Conclusion of the afore-mentioned contract on utilities and energies supply by the Contractor is a precondition for the commencement of works on site. If the Contractor fails to conclude the afore-mentioned future contract on utilities and energies supply within the period stated above, the Contractor shall become delayed in performance of this Contract, with all consequences of delay by the Contractor anticipated in this Contract.</p>
4.20 Employer's Equipment And Free-Issue Material	<p>Not applicable</p> <p>The Employer will not make available equipment for the use of the Contractor.</p>
4.21 Progress Reports	<p>After the last paragraph, add:</p> <p>In addition to the Monthly Progress Reports identified above, the reports, programmes and schedules specified in H1 – Technical Specification shall be prepared, submitted by the Contractor to Engineer's in the form, format, and quantity required.</p> <p>Monthly submittals are due by the 5<sup>th</sup> day of the month following the month being reported on (or the last work-day before the 5<sup>th</sup> if the 5<sup>th</sup> occurs on a non-workday)</p>
4.22 Security on the Site	<p>To be added: The Contractor shall fulfil the requirements stated in H5 "Safety and Technical Conditions".</p>
4.23 Contractor's Operations on Site	<p>To be added: The Contractor shall fulfil the requirements stated in H5 "Safety and Technical Conditions".</p>
<b>5. Design</b>	
5.2 Contractor's Documents	<p>In the fourth paragraph replace:</p> <p>"each review period shall not exceed 21 days", by "each review period shall not exceed 42 days"</p>

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	<p>In the fourth paragraph after the first sentence add the following:</p> <p>If the Contractors' documentation is subject to permission or authorization of Regulators, the review and approval period shall be extended for the period of the Regulators' authorization.</p>
5.4 Technical Standards and Regulations	<p>After second paragraph add:</p> <p>National or international standards other than the Country's that ensure substantial equivalence or more stringent requirements will be acceptable, after approval by the Employer.</p>
5.6 As-Built Documents	<p>In the first paragraph, delete two copies and replace by three (3) copies in electronic version.</p> <p>In the last paragraph, delete types of copies and substitute types of electronic and hard copies in a format acceptable to the Engineer.</p>
<b>6. Staff and Labour</b>	
6.6 Facilities for Staff And Labour	<p>To be deleted and replaced by:</p> <p>The Employer shall ensure for the use by the Contractor and his personnel, of the following facilities/services:</p> <ol style="list-style-type: none"> <li>Office accommodation for the Contractor at Bohunice V1 NPP site of not more than 20m<sup>2</sup> in good decorative order and suitably furnished and with the following services: <ul style="list-style-type: none"> <li>- Heat, light and power at no cost to the Contractor,</li> <li>- International telephone lines for telephone, fax, and e-mail connections. The cost of all telephone calls shall be met by the Contractor,</li> <li>- Permission for reasonable use by the Contractor of other facilities, e.g. meeting rooms, by agreement with the Employer's management,</li> </ul> </li> <li>Provisions of information and documentation on all technical and commercial data, documentation, drawings etc. that could be relevant for the Project and establishment of adequate and optimised interfaces to other departments of Bohunice V1 NPP,</li> <li>Access to the Employer's controlled area, including required facilities for washing and changing clothes, toilets, etc.</li> <li>Access to the Employer's health and safety facilities, including dosimeters, industrial safety, first aid, ambulance and emergency services at no cost to the Contractor,</li> <li>Access to the Employer's canteen at the Bohunice V1 NPP site,</li> <li>Contractor's reasonable requirements for truck parking, car parking and storage (location shall be allocated by agreement with Employer's management) at the Bohunice V1 NPP site at no cost to the Contractor,</li> <li>Reasonable storage facilities for Contractor's Project Equipment (location shall be allocated by agreement with Employer's management),</li> <li>The Employer will obtain the required permits and licenses for the project from the regulatory authorities with support from the</li> </ol>



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	<p>Contractor.</p> <p>The above facilities/services requested by the Contractor and received free of charge (up to the financial limit in the amount of 11 900 €) from the Employer, shall be listed, signed and approved by the Employer pursuant to Schedule A-6 – “Slovak resources” using sample forms in H5 (Safety and Technical Conditions).</p>
<b>6.7</b> Health & Safety	<p>At the beginning of Sub-Clause 6.7, add:</p> <p>To the extent allowed by law, the Contractor shall assume all responsibility and liability with respect to all matters regarding the safety and health of its employees and the employees of his Subcontractors, with respect to the risks under this Contract.</p> <p>Add into second paragraph after wording “responsible for maintenance safety and protection against accidents” the words “in accordance with Decree of the Government of the SR No. 396/06 Coll.</p>
<b>6.8</b> Superintendence	<p>At the end of Sub-Clause 6.8 add: At least one of the Contractor’s superintending staff shall have a working knowledge of Slovak language or the Contractor shall have competent interpreting services available on Site during all working hours.</p> <p>The Contractor’s superintendant shall be certified to supervise the Works, pursuant to sec. 46a of the Act no. 50/1976 Coll. (Building Act) with certificate according to Act of National Council of Slovak Republic no. 138/1992 Coll. on Authorised Architects and Authorised Civil Engineers as amended.</p>
<b>6.9</b> <b>Contractor’s personnel</b>	<p>to be added after (d)</p> <ul style="list-style-type: none"> <li>e) is guilty of serious misconduct</li> <li>f) is involved in any conduct which is considered as fraudulent, corrupt, coercive or collusive practice</li> <li>g) fails to comply with Slovak Law in discharging his assigned duties</li> </ul> <p>The Contractor shall be aware that it may be obliged to pay the penalties set forth in Part H5 of the Contract “Safety and Technical Conditions” and resulting from its personnel failing to meet obligations specified in Part H5 of the Contract “Safety and Technical Conditions”.</p> <p>At the end of the last paragraph, add:</p> <p>Such replacement shall be at Contractor’s cost and shall not be cause of an extension of time under Sub-clause 8.4 (Extension of Time for Completion)</p>
<b>7. Plant, Materials and Workmanship</b>	
<b>7.1</b>	<p>At the end of the sub-clause add:</p>

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Manner of Execution	<p>Plant and Materials to be incorporated in the Works shall be new, unused, and of the most recent or up-to-date models and incorporate all recent improvements in design and materials, unless otherwise provided for in the Employer's Requirements.</p> <p>Where national standards of the Country are specified, Plant, Materials, and workmanship that meets other authoritative standards, and which ensure an equal or higher quality of performance and work execution, also acceptable.</p>
7.8 Royalties	<p>Delete Sub-Clause b) and substitute:</p> <p>The manipulation, transport and disposal of the wastes in accordance with part H1 of the Contract.</p>
7.9 Eligibility	<p>All Goods shall have their origin in eligible source countries as at 1st January 2013 they are: EU member states, Switzerland, and the EBRD's Countries of Operations.</p>
9. Tests on Completion	
9.1 Contractor's obligations	<p>Delete first paragraph of Sub-Clause 9.1, and substitute:</p> <p>The Contractor shall carry out the Tests on Completion in accordance with this Clause, and Sub-Clause 7.4 [<i>Testing</i>] and the H1 - Technical Specification [chapter Testing &amp; Acceptance], after providing the documents in accordance with Sub-Clause 5.6 [<i>As-Built Documents</i>] and Sub-Clause 5.7 [<i>Operation and Maintenance Manuals</i>].</p>
<b>10. Employer's Taking Over</b>	
10.1 Taking Over the Works and Sections	<p>Delete in the first paragraph the last sentence: "or is deemed to have been issued in accordance with this Sub-Clause."</p> <p>Replace in the last paragraph, in the last sentence "the Taking-Over Certificate shall be deemed to have been issued on the last day of that period", with "the Contractor shall be entitled to claim subject to Sub-Clause 20.1 [Contractor's Claims]".</p>
10.2 Taking Over of Parts of the Works	<p>Replace all text except the last paragraph by the following:</p> <p>Upon completion of relevant part of the Works and successful passing of Tests as specified under Sub-clause 9.1 of the Contract, the Engineer or appointed representative by him at the request of the Employer may request Building Authority to issue Certificate for Temporary Operation for any part of the Permanent Works. In this case:</p> <p>a) The Employer shall be responsible for operation of this part of the Works in compliance with operating and maintenance manuals developed by the Contractor and submitted in accordance to Sub-clause 5.7 [Operation and Maintenance Manuals]. During the transitory period of operation by the Employer of the part of the Works for which the Certificate for Temporary Operation was issued, the Contractor shall provide technical support for the operation as it is</p>

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	<p>specified in the H1 Technical specification, and</p> <p>b) The Contractor shall be liable for performing his contractual obligations in a due care and especially the responsibilities under the Sub-clause 17.2 [Contractor's Care of the Works] for the part of the equipment for which the Certificate for Temporary Operation was issued until completion of all Works, successful termination of the pre-commissioning and commissioning tests and issuance of the Taking-Over Certificate for the corresponding section."</p>
10.3 Interference with Tests on Completion	Replace in the first paragraph "the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed" with "it shall be entitled to claim subject to Sub-Clause 20.1 [Contractor's Claims]."
<b>11.Defects Liability</b>	
11.10 Unfulfilled obligations	<p>The following clause supplements sub-clause 11.10:</p> <p>The Latent Defects Liability Period for the Works which comprise all Works, Plant and Materials which are civil works and or civil structures shall be one hundred and twenty (120) months from the date of Completion of the Works or one hundred and fourteen (114) months from the date of issue of Performance Certificate for the facility (or any part thereof), whichever first occurs, unless specified otherwise herein.</p> <p>The Latent Defects Liability Period for the Works which comprise all Works, Plant and Materials other than civil works and or civil structures shall be sixty (60) months from the date of Completion of the Works or fifty four (54) months from the date of issue of Performance Certificate for the facility (or any part thereof), whichever first occurs, unless specified otherwise herein.</p> <p>If any Latent Defect shall appear in any part of the Works, Plant and Materials within the Latent Defects Liability Period the same shall with all reasonable speed be made good by the Contractor by repair or replacement at the Employer's option provided that the defect was caused by the negligence of the Contractor or if the defect would not have been disclosed by a reasonable examination prior to the expiry of the Defect Notification Period.</p> <p>The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares for the Plant and Materials for the Latent Defects Liability Period. Spare parts and components shall be supplied as promptly as possible, but at the most within six (6) months of placing the order and opening the letter of credit. In addition, in the event of termination of the production of spare parts, advance notification will be made to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will deliver a copy to the extent possible and at no cost the Employer of two such blueprints, drawings and specifications of the spare parts for the purpose of procuring such spare</p>

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	parts himself.
<b>13. Variation and Adjustments</b>	
13.1. Right to Vary	<p>After the first paragraph add the following:</p> <p>Substantial variations to the Contract including variations to the total Contract Price and to the Time for Completion of the Works must be made by means of an addendum and may not be instructed by the sole discretion of the Engineer.</p>
13.3 Variation Procedure	<p>Replace in the fourth paragraph "Upon instructing or approving a Variation, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine adjustments to the Contract Price and the Schedule of Payments." with "Upon instructing or approving a Variation, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine adjustments to the Contract Price in compliance with SCHEDULE A - QUANTITIES &amp; PRICES and the Schedule of Payments."</p>
13.5 Provisional Sums	Not applicable
13.6 Day work	Not applicable
<b>14. Contract Price and Payment</b>	
14.1 The Contract price	<p>a) delete and replace by:</p> <p>The Contract Price shall be the Accepted Contract Amount and shall be a fixed lump-sum including costs for design, manufacturing, supply, installation, testing, utility expenses (Schedule A-5 of the Contract), all staff costs, Subcontractors' costs, printing, communications, travel, accommodation, and the like, and all other costs incurred by the Contractor in carrying out the Works described in the Employer's Requirements and in accordance with the contractual requirements. The Contract Price shall not be subject to variation during the implementation of the Contract unless it is stated otherwise in the Contract's conditions. The Contract price shall be without any and all taxes, customs duties levied in the territory of the Slovak Republic.</p> <p>b) to be added after "<i>duties and fees required to be paid by him under the contract</i>", the following text "in the country of his operation".</p> <p>To be added in the end:</p> <p>In the field of taxes, customs duties and fees the course of action shall be taken in accordance with the Framework Agreement concluded between the EBRD and the Slovak Republic.</p> <p>(<a href="http://www.javys.sk/en/bidsf/framework-agreement">http://www.javys.sk/en/bidsf/framework-agreement</a>)</p>

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14.3 Application for Interim Payment Certificates	<p>At the end of Sub-Clause 14.3 add:</p> <p>Prior to issuing the Taking-Over Certificate for the Works, the Contractor shall not issue a Statement in an amount which would (after retention and other deductions) be less than the minimum amount of Statement (if any) stated in the Appendix to Tender. In this event, the Contractor shall give notice to the Engineer accordingly.</p>
14.4 Schedule of Payments	<p>Last paragraph delete and replace by:</p> <p>Referring to the first paragraph, the following Schedule of Payments shall be the basis for the payment milestones in which the Contract Price will be paid:</p> <p>Delivered on site and submission confirmed by the Deliverable Acceptance protocol of:</p> <ol style="list-style-type: none"> <li>1. Acceptance of the Inception report, QA Plan, Detailed Time Schedule 7 %</li> <li>2. Preliminary Environmental Study for building 760-III.1:V1 for the purposes of the ascertaining procedure pursuant to Act No. 24/2006 Coll. 10 %</li> <li>3. Acceptance of the Design documentation for the building permit (change in the functional use of the building) for building 760-III.1:V1 10 %</li> <li>4. Acceptance of the Documentation for the Notification of Building Modifications for the reinforcement of the grass plot between buildings 840M:V1 and 801:V1 10 %</li> <li>5. Completion of works in the building 740-VII.1A:V1, 760-1.3:V1, free grass area 25 %</li> <li>6. Completion of works in the building 760-III.1:V1 18 %</li> <li>7. Issuance of Taking-Over Certificate 10 %</li> <li>8. Acceptance of the Final Contract Completion Report 10 %</li> </ol>
14.6 Issue of Interim Payment Certificates	<p>Delete Sub-Clause 14.6 and substitute with:</p> <p>No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, the Engineer shall, within 28 days after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificates which approves the Employer's acceptance of the Contractor's deliverables and deliveries.</p>
14.7 Payment	<p>At the end of Sub-Clause 14.7 add:</p> <p>The following points shall be observed when submitting invoices for payment.</p> <p>All invoices with the accepted protocols and itemized specification of performed Works and delivered Goods with prices, shall be addressed</p>

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	<p>and sent to the Employer who will approve them and forward them to the Bank for payment. The Bank in turn will approve the invoices prior to paying the Contractor on behalf of the Employer.</p> <p>All foreign invoices shall be issued bilingually in English and Slovak language.</p> <p>The name and telephone number of a person who may be contacted in case of need to raise queries shall be quoted on the invoice.</p> <p>The contract number and the payment milestone shall be quoted on the invoice.</p> <p>Invoices shall be marked as an invoice showing invoice number, issue date, delivery date of goods and services, due date of the invoice, business address of the Employer and Contractor, their company registration number and TINs. When services are provided into other EU member country, the VAT duty shall be transferred to the Employer. In the case that goods are delivered into other EU member country, the Contractor shall state reference pursuant to which he applies the VAT exemption.</p> <p>The invoice shall include also a column marked "Gross" (Price without taxes), a column marked "Taxes" (tax rates and tax) and column marked "Net". The amount to be shown in the column "Gross" is the amount corresponding to the payment milestone and shall be free from any and all taxes, customs duties or other fees or mandatory payments levied by, or in the territory of, the Slovak Republic. The amount to be shown in column "Net" is the amount to be invoiced after deduction of the corresponding amortization rate of the Advance payment. In the column "Taxes" shall be the amount of the all taxes, customs duties or other fees or mandatory payments levied by, or in the territory of, the Slovak Republic. The Bank will only make payments after the original signed copy of the Contract has been returned via the Employer to the Bank and only on submission of original invoices and original supporting receipts.</p> <p>Invoice payments will be made by direct transfer to the bank account specified in the Contract.</p> <p>Full details of the bank account where payment shall be made shall also be stated on the invoices, including currency of the account and SWIFT number (if available).</p> <p>For the purpose of the refunding of the taxes, customs duties levied by, or in the territory of, the Slovak Republic;</p> <ul style="list-style-type: none"> <li>- The VAT number (VAT registration in Slovak tax office obtained on the basis of the registration of the Contractor in Slovak Republic) should be inscribed on the invoices or the VAT registration number from its country if it is not registered in Slovak Republic and</li> <li>- The Contractor should enclose the relevant documents (invoices, others) demonstrating the amount and payment of the required</li> </ul>
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	<p>refunding amount.</p> <p>Number of Invoices: 2 originals and 2 copies</p> <p>b) and c) to be deleted and replaced by:</p> <p>All payments, including refunding amounts, should be made within sixty days of the acceptance by the Employer of the Contractor's valid invoice, with full supporting documentation in accordance with the requirements of the Contract.</p> <p>Notwithstanding, submittal requirements mentioned elsewhere, the following submittals, in the prescribed form/format are prerequisite to payment (other than any approved Advance Payment):</p> <ul style="list-style-type: none"> <li>- Insurance Certificates and Securities;</li> <li>- Health and Safety Plan;</li> <li>- Programme;</li> <li>- Quality Manual/Planning of quality management system</li> </ul>
14.8. Delayed Payment	<p>The first sentence to be replaced by the following:</p> <p>If the Contractor does not receive payment in accordance with Sub-Clause 14.7, the Contractor shall be entitled to claim a per annum delay interest, from the due unpaid amount for each day of delay pro rata, in the amount of 1% above 1M EURIBOR, divided by number of weeks in the given calendar year, unless the Employer is able to prove that has submitted the invoice to the Bank in accordance with Sub-Clause 2.4.</p> <p>To be added at the end:</p> <p>For purposes of this Clause 14.8 "1M EURIBOR" means the percentage rate per annum determined by the European Banking Federation for the offering of deposits in Euro for a period of one month, displayed on the appropriate page of the Telerate screen or Reuters screen as of 11.00 a.m. (CET) on the due date. If no such screen rate is available, 1M EURIBOR shall be the arithmetic mean (rounded downward to four decimal places) of the rates as supplied to the Employer at its request quoted by three reference banks, selected by the Employer, to leading banks in the European interbank market, as of 11.00 a.m. (CET) on the due date.</p>
14.9 Payment of Retention Money	Not applicable
<b>15.Termination by the Employer</b>	
15.2 Termination by Employer	<p>After item (f) insert:</p> <p>(g) In the judgment of the Employer, the Contractor has engaged in corrupt, fraudulent, coercive or collusive practices in competing for or in the executing of the Contract. For the purpose of this Clause:</p>

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	<ul style="list-style-type: none"> <li>(i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party.</li> <li>(ii) "Fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation.</li> <li>(iii) "Coercive practice" means impairing or harming, or threatening to impair or harm, direct or indirectly, any party or the property of the party to influence improperly the actions of a party.</li> <li>(iv) "Collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.</li> </ul>
<b>17. Risk and Responsibility</b>	
17.1 Indemnities	<p>This clause shall be replaced by the following:</p> <p>Liability for damage that has occurred as a consequence of, or in relation to, the Contract shall be governed by the provisions of Section 373 and subsequent sections of the Commercial Code as set forth herein. Therefore, if the Contractor breaches its stipulated Contract obligations, or any applicable legal regulations, and causes the Employer damage the Contractor shall compensate for the damage in compliance with the following principles:</p> <p>(a) The Contractor shall compensate all damages and all costs incurred to the Employer as a consequence of, or in relation with, the failure of the Contractor to comply with his obligations in the Contract or in the applicable legal regulations.</p> <p>(b) Damages shall not include loss of profit.</p> <p>(c) Damages shall include, but (subject to the exclusion in (b) above) not be limited to, damage that occurs as a consequence of, or in relation with:</p> <ul style="list-style-type: none"> <li>(i) Bodily injury, sickness, disease or death of any person whatsoever arising out of, or in the course of, or by reason of the Contractor's design, execution and completion of, the Works and the remedying of any defects.</li> <li>(ii) Damage to, or loss of, any property, which has arisen as a consequence of, or in relation with: <ul style="list-style-type: none"> <li>- a defect or imperfection of the Contractor's design, the execution and completion of the Works and the remedying of any defects;</li> <li>- breach of an obligation pursuant to this Contract by the Contractor, the Contractor's Personnel or by any other person for whom the Contractor is liable;</li> </ul> </li> </ul>



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	<p>- a failure to notify a defect or imperfection in the Contractor's design or the Employer's instruction, if the Contractor is responsible for notifying such defect or imperfection pursuant to the Contract.</p> <p>If the Employer breaches any of its stipulated Contract obligations, or any applicable legal regulations, and causes damage to the Contractor, the Employer shall compensate for the damage in compliance with the following principles:</p> <p>(a) Subject to (b), (c) (d) and (e) below, the Employer shall compensate all damages and all costs incurred to the Contractor as a consequence of, or in relation with, the failure of the Employer to comply with his obligations in the Contract or in the applicable legal regulations.</p> <p>(b) Damages shall not include loss of profit.</p> <p>(c) The Employer shall compensate for costs and/or damages only up to a total compensation amount of 100% of the Contract Price.</p> <p>(d) The Employer shall not be obliged to compensate for any damage caused to the Contractor for a delay in the Employer's obligation to pay the Contractor on time. Only the provisions of Clause 14.8 shall apply to any such delayed payments, and</p> <p>(e) The Employer shall not be obliged to compensate for any damage that is covered by insurance pursuant to Clause 18.1.</p> <p>The indemnity provisions of this Clause 17.1 shall not apply to Clause 17.5.</p>
17.5 Intellectual and Industrial Property Rights	<p>At the beginning of the Sub-Clause add the following new paragraph:</p> <p>The Intellectual Property Rights in all software shall remain vested in the owner of such rights.</p> <p>Delete the second paragraph.</p> <p>The third paragraph shall be replaced by the following:</p> <p>The Employer hereby gives a promise of indemnity pursuant to Section 725 of the Commercial Code and undertakes to indemnify the Contractor for any evidenced damages or expenses incurred by the Contractor as the result of a third party claim brought against the Contractor in connection with the Contractor discharging its obligations under this agreement and which is or was:</p> <p>(a) An unavoidable result of the Contractor's compliance with the Employer's Requirements, or</p> <p>(b) A result of any Works being used by the Employer,</p> <p style="padding-left: 40px;">(i) For a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or</p> <p style="padding-left: 40px;">(ii) In conjunction with any thing not supplied by the Contractor,</p>

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	<p>unless such use was disclosed to the Contractor prior to the Commencement Date or is stated in the Contract.</p> <p>Such obligation to indemnify shall exist only in the event that the cost, expense or damage to the Contractor has not been caused by wilful misconduct or grossly negligent actions by the Contractor and that the Contractor has diligently defended such claim. For the purposes of this promise of indemnity, the Employer hereby confirms having requested the Contractor to perform the activities set out in this agreement, without the Contractor having been under a prior legal obligation to do so. The Employer shall not be liable to the Contractor for any indirect or consequential damages or loss profit.</p> <p>Fourth paragraph shall be replaced by the following:</p> <p>The Contractor hereby gives a promise of indemnity pursuant to Section 725 of the Commercial Code and undertakes to indemnify the Employer for any evidenced damages or expenses incurred by the Employer as the result of a third party claim brought against the Employer in connection with the Employer discharging its obligations under this agreement and which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.</p> <p>Such obligation to indemnify shall exist only in the event that the cost, expense or damage to the Employer has not been caused by wilful misconduct or grossly negligent actions by the Employer and that the Employer has diligently defended such claim. For the purposes of this promise of indemnity, the Contractor hereby confirms having requested the Employer to perform the activities set out in this agreement, without the Employer having been under a prior legal obligation to do so. The Contractor shall not be liable to the Employer for any indirect or consequential damages or loss profit.</p> <p>At the beginning of the fifth paragraph add the following:</p> <p>Whenever a Party receives a notice of any claim, it shall give notice to the other Party within 28 days of receiving the claim.</p>
<b>17.7</b> Nuclear Liability	Add Sub-Clause 17.7: Liability for Nuclear Damage.  Nuclear third party liability shall be governed by the provisions of Vienna Convention on Civil Liability for Nuclear Damage of May 21, 1963 and in accordance with act No 541/2004 Coll. of December 1, 2004 of the Slovak Republic on the peaceful use of nuclear energy and on amendments and supplements to certain acts as amended together with Act No. 125/2006 Coll. on State supervision of work safety.  All terms used in this clause shall have the same meaning as defined in Vienna Convention on Civil Liability for Nuclear Damage of May 21, 1963, except in case of international acts or omissions.
<b>18. Insurance</b>	

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18.1 , 18.2, 18.3, 18.4	<p>Clauses 18.1 to 18.4 to be deleted and replaced with :</p> <p>18.1. Requirements for Insurances</p> <p>Contractor shall obtain and maintain in full force and effect during the term of this Contract (project) the insurance described below on terms and conditions approved by the Employer, and shall provide to the Employer certificates evidencing such coverage of the Contractor, Sub-contractors and the Employer:</p> <p><u>In the course of the implementation of the civil part of the project:</u></p> <ul style="list-style-type: none"> <li>(a) Insurance of costs related to implementation of the Works including all materials, salaries, transport expenses, prices, and fees that are subject of the Contract in the course of construction, erection/installation, and testing. The insurance shall include expenses for demolition and for removal of demolition debris and cover also damages resulting from errors in the design, use of defective material and deficiencies in the works performed. The insurance shall also cover the Works in the usual extent during the warranty period, at least 24 months after the handing over of the Works.</li> <li>(b) Insurance against loss of, and damage to, the property in the possession, use, care or administration of the Employer on the site in the course of construction, erection/installation, dismantling, demolition and testing of the Works in the value of the Employer's property endangered by these activities.</li> <li>(c) Insurance against loss of, and damage to, materials and equipment in the course of their transportation to the site.</li> <li>(d) Insurance against loss of, and damage to, the property of the Contractor on the site (construction machinery, equipment, devices, tools, etc).</li> <li>(e) The insurance indicated in Items (a) and (b) shall cover all risks of construction and erection/installation including but not limited to risks of fire, flood, storm wind, and earthquake. Assessment of the insured property shall amount to its 100% replacement value.</li> <li>(f) General damages liability insurance and liability insurance against damage caused by a defective product, against damage to health or against damage to things resulting from the activities of the policyholder or caused by a defective product. The insurance limit shall be the limit for an insured event amounting to no less than 1 000 000 EUR. The damages liability insurance shall also cover damage caused by the manipulation with asbestos and other hazardous substances as well as damage caused by the pollution of the environment resulting from the leakage of polluting or hazardous substances.</li> <li>(g) Third party liability insurance against injury to health and/or material damage caused to third parties resulting from</li> </ul>
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	<b>BIDSF Project</b>	<b>C16.1 – CONDITIONING OF BUFFER STORAGE AREAS</b>  <b>BIDSF 016 9 001</b>	<b>C16.1</b> The Conditions of Particular Application
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	<p>construction, erection/installation, and testing on the site in the minimum amount of 1 000 000 EUR.</p> <p>(h) Compulsory third party liability (motor) insurance pursuant to Slovak laws.</p> <p>The periods of submission of insurance are stated in Appendix to Tender, Sub-Clause 18.1.</p>
<b>20. Claims, dispute and arbitration</b>	
20.2, 20.3, 20.4, 20.7, 20.8	Clauses 20.2, 20.3, 20.4, 20.7 and, 20.8 to be deleted
20.5.	<p>To be deleted and replaced with the following:</p> <p>"All disputes arising from the execution of or in connection with the Contract shall be first settled through amicable negotiation between the Parties. Each Party must appoint representatives with authority to settle the dispute.</p> <p>Where the Parties are unable to settle a dispute within fifty-six (56) days from the date of receipt by one Party of the written notice from the other Party specifying that a dispute exists and giving details about such a dispute, either Party may refer the dispute to arbitration in accordance with Section 20.6."</p>
20.6. Arbitration	<p>First sentence to be deleted and replaced with:</p> <p>"Disputes, which can not be settled amicably pursuant to section 20.5. shall be finally settled by international arbitration."</p> <p>Delete the text:</p> <p>"The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, and any decision of the DAB, relevant to the dispute. Nothing shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.</p> <p>Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence nor shall arguments previously put before the DAB to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DAB shall be admissible in evidence in the arbitration.</p> <p>Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Engineer and the DAB shall not be altered by reason of any arbitration being conducted during the progress of the Works."</p> <p>and replace with the text:</p> <p>"The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the</p>

	<b>BIDSF Project</b>	<b>C16.1 – CONDITIONING OF BUFFER STORAGE AREAS BIDSF 016 9 001</b>	<b>C16.1</b> The Conditions of Particular Application
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	<p>Engineer, relevant to the dispute. Nothing shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.</p> <p>Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties and the Engineer shall not be altered by reason of any arbitration being conducted during the progress of the Works.</p> <p>The place of arbitration shall be Bratislava, Slovak Republic.</p> <p>The arbitration shall be governed by the law defined in sub-clause 1.4 (Law and Language).</p> <p>The arbitration decision shall be final and binding upon the Parties.</p> <p>The costs of the arbitration shall be in the discretion of the arbitrators.”</p>
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	<b>BIDSF Project</b>	<b>C16.1 – CONDITIONING OF BUFFER STORAGE AREAS BIDSF 016 9 001</b>	<b>C16.1</b> The Appendix to Tender
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## BIDSF project C16.1

### CONDITIONING OF BUFFER STORAGE AREAS

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E. The Appendix to Tender

<b>ROBO</b> Piešťany, a.s.	TENDER BID C16.1 –CONDITIONING OF BUFFER STORAGE AREAS BIDSF 016 9 001	APPENDIX TO TENDER
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## APPENDIX TO TENDER

Item	Sub-clause	Entry
Employer's name and address	1.1.2.2.&1.3	Jadrová a vyraďovacia spoločnosť, a.s. Tomášikova 22, 821 02 Bratislava Slovak Republic
Contractor's name and address	1.1.2.3.&1.3	ROBO Piešťany, a.s., Royova 2, 921 01 Piešťany
Engineer's name and address	1.1.2.4.&1.3	Mr. Jaroslav Mičúch - Head of V1 Decommissioning preparation and implementation section  Jadrová a vyraďovacia spoločnosť, a.s. Tomášikova 22, 821 02 Bratislava Slovak Republic
Time for completion of the Works	1.1.3.3.	24 months from the Commencement date and in compliance with Time Schedule
Defects Notification period	1.1.3.7.	730 calendar days
Electronic transmission systems	1.3	e-mail or fax – accompanied with a letter
Governing Law	1.4	Slovak law
Ruling language	1.4	English
Language of communications	1.4	English
Time for access to the Site	2.1	21 calendar days from the Commencement date
Amount of Performance Security	4.2	10% of the Accepted Contract Amount, in the currencies and proportions in which the Contract Price is payable
Period for notifying unforeseeable errors, faults and defects in the Employer's Requirements	5.1	21 calendar days
Normal working hours	6.5	8 hours per day from 7.00 a.m. till 7.00 p.m. from Mondays to Fridays
Delay damages for the Works	8.7&14.15(b)	One-tenth percent of the Contract Price per calendar day, in the proportions of currencies in which the Contract Price is payable
Maximum amount delay damages	8.7	Ten percent of the final Contract Price
Percentage for adjustment of Provisional Sums	13.5(b)	Not applicable




	TENDER BID C16.1 –CONDITIONING OF BUFFER STORAGE AREAS BIDSF 016 9 001	APPENDIX TO TENDER
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Tables of Adjustment Data	13.8	Not applicable
Total advance payment	14.2	Not to exceed ten percent of the Contract Price.
Number and timing of instalments	14.2	The advance payment can be invoiced once for 10 % of Accepted Contract Amount after the Employer's receipt of required Performance Security and Advance Payment Guarantee(s).
Currencies and proportions	14.2	The advance payment shall be invoiced in the corresponding proportions of currencies in which the Contract Price is payable
Repayment amortization of advance payment	14.2 (b)	The amortization rate is equal to 1/8 of the advanced amount
Percentage of retention	14.3	Not applicable
Limit of Retention Money	14.3	Not applicable
Plant and Materials intended for the Works	14.5	Not applicable
Minimum amount of Interim Payment Certificates	14.6	Generally, not less than an amount equivalent to euros 50,000
Contractor's bank account	14.7	
Currency/currencies of payment	14.15	Euros or as stated in the Contract
Periods of submission of insurance:		
(a) evidence of insurance	18.1	21 calendar days
(b) relevant policies	18.1	28 calendar days
Minimum amount of third party insurance	18.1	€ 1 000 000

  
 ROBO  
 Piešťany, a.s.  
 Rayova 2, 921 01 Piešťany  
 tel.: +421 33 77 63 211

Ing. Robert Levčík in the capacity of Vice-Chairman of the Board  
 duly authorised to sign Tenders for and on behalf of ROBO Piešťany, a.s.  
 Date: 12<sup>th</sup> November 2012



	<b>BIDSF Project</b>	<b>C16.1 – CONDITIONING OF BUFFER STORAGE AREAS BIDSF 016 9 001</b>	<b>C16.1</b> The General Conditions
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## BIDSF project C16.1

# CONDITIONING OF BUFFER STORAGE AREAS

### F. The General Conditions

Conditions of Contract  
for **PLANT and Design-Build**

FOR ELECTRICAL AND MECHANICAL WORKS  
AND FOR BUILDING AND ENGINEERING  
WORKS DESIGNED BY THE CONTRACTOR

General Conditions

1st Edition 1999

FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS  
INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS  
INTERNATIONALE VEREINIGUNG BERATENDER INGENIEURE  
FEDERACION INTERNACIONAL DE INGENIEROS CONSULTORES

# General Conditions

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# General Conditions

## General Provisions

### 1.1. Definitions

In the Conditions of Contract ("these Conditions"), which include Particular Conditions and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

#### 1.1.1 The Contract

- 1.1.1.1 **"Contract"** means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Employer's Requirements, the Schedules, the Contractor's Proposal, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.
- 1.1.1.2 **"Contract Agreement"** means the contract agreement (if any) referred to in Sub-Clause 1.6 [*Contract Agreement*].
- 1.1.1.3 **"Letter of Acceptance"** means the letter of formal acceptance, signed by the Employer, of the Letter of Tender, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.1.4 **"Letter of Tender"** means the document entitled letter of tender, which was completed by the Contractor and includes the signed offer to the Employer for the Works.
- 1.1.1.5 **"Employer's Requirements"** means the document entitled employer's requirements, as included in the Contract and any additions and modifications to such document in accordance with the Contract Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the Works.
- 1.1.1.6 **"Schedules"** means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include data lists and schedules of payments and/or prices.
- 1.1.1.7 **"Contractor's Proposal"** means the document entitled proposal, which the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Contractor's preliminary design.
- 1.1.1.8 **"Tender"** means the Letter of Tender and all other documents with the Contractor submitted with the Letter of Tender, as included in the Contract.
- 1.1.1.9 **"Appendix to Tender"** means the completed pages entitled appendix to tender which are appended to and form part of the Letter of Tender.

**1.1.2  
Parties and Persons**

- 1.1.1.10 **"Schedule of Guarantees"** and **"Schedule of Payments"** mean the documents so named (if any) which are comprised in the Schedules.
- 1.1.2.1 **"Party"** means the Employer or the Contractor, as the context requires.
- 1.1.2.2 **"Employer"** means the person named as employer in the Appendix to Tender and the legal successors in title to this person.
- 1.1.2.3 **"Contractor"** means the person(s) named as contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person(s).
- 1.1.2.4 **"Engineer"** means the person appointed by the Employer to act as the Engineer for the purposes of the Contract and named in the Appendix to Tender, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.4 [*Replacement of the Engineer*].
- 1.1.2.5 **"Contractor's Representative"** means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [*Contractor's Representative*], who acts on behalf of the Contractor.
- 1.1.2.6 **"Employer's Personnel"** means the Engineer, the assistants referred to in Sub-Clause 3.2 [*Delegation by the Engineer*] and all other staff, labour and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel.
- 1.1.2.7 **"Contractor's Personnel"** means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- 1.1.2.8 **"Subcontractor"** means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.9 **"DAB"** means the person or three persons so named in the Contract or other person(s) appointed under Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*] or Sub-Clause 20.3 [*Failure to Agree Dispute Adjudication Board*].
- 1.1.2.10 **"FIDIC"** means the Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers.

**1.1.3  
Dates, Tests, Periods  
and Completion**

- 1.1.3.1 **"Base Date"** means the date 28 days prior to the latest date for submission of the Tender.
- 1.1.3.2 **"Commencement Date"** means the date notified under Sub-Clause 8.1 [*Commencement of Works*].
- 1.1.3.3 **"Time for Completion"** means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [*Time for Completion*], as stated in the Appendix to Tender (with any extension under Sub-Clause

8.4 *[Extension of Time for Completion]*), calculated from the Commencement Date.

- 1.1.3.4 **"Tests on Completion"** means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 *[Tests on Completion]* before the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.5 **"Taking-Over Certificate"** means a certificate issued under Clause 10 *[Employer's Taking Over]*.
- 1.1.3.6 **"Tests after Completion"** means the tests (if any) which are specified in the Contract and which are carried out under Clause 12 *[Tests after Completion]* after the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.7 **"Defects Notification Period"** means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 *[Completion of Outstanding Work and Remedying Defects]*, as stated in the Appendix to Tender (with any extension under Sub-Clause 11.3 *[Extension of Defects Notification Period]*), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 *[Taking Over of the Works and Sections]*.
- 1.1.3.8 **"Performance Certificate"** means the certificate issued under Sub-Clause 11.9 *[Performance Certificate]*.
- 1.1.3.9 **"day"** means a calendar day and **"year"** means 365 days.

#### 1.1.4

##### Money and Payments

- 1.1.4.1 **"Accepted Contract Amount"** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- 1.1.4.2 **"Contract Price"** means the price defined in Sub-Clause 14.1 *[The Contract Price]*, and includes adjustments in accordance with the Contract.
- 1.1.4.3 **"Cost"** means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.4.4 **"Final Payment Certificate"** means the payment certificate issued under Sub-Clause 14.13 *[Issue of Final Payment Certificate]*.
- 1.1.4.5 **"Final Statement"** means the statement defined in Sub-Clause 14.11 *[Application for Final Payment Certificate]*.
- 1.1.4.6 **"Foreign Currency"** means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.
- 1.1.4.7 **"Interim Payment Certificate"** means a payment certificate issued under Clause 14 *[Contract Price and Payment]*, other than the Final Payment Certificate.
- 1.1.4.8 **"Local Currency"** means the currency of the Country.
- 1.1.4.9 **"Payment Certificate"** means a payment certificate issued under Clause 14 *[Contract Price and Payment]*.

- 1.1.4.10 **"Provisional Sum"** means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [*Provisional Sums*].
- 1.1.4.11 **"Retention Money"** means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [*Application for Interim Payment Certificates*] and pays under Sub-Clause 14.9 [*Payment of Retention Money*].
- 1.1.4.12 **"Statement"** means a statement submitted by the Contractor as part of an application, under Clause 14 [*Contract Price and Payment*], for a payment certificate.

## 1.1.5

### Works and Goods

- 1.1.5.1 **"Contractor's Equipment"** means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 **"Goods"** means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 **"Materials"** means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
- 1.1.5.4 **"Permanent Works"** means the permanent works to be executed by the Contractor under the Contract.
- 1.1.5.5 **"Plant"** means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.
- 1.1.5.6 **"Section"** means a part of the Works specified in the Appendix to Tender as a Section (if any).
- 1.1.5.7 **"Temporary Works"** means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 **"Works"** mean the Permanent Works and the Temporary Works, or either of them as appropriate.

## 1.1.6

### Other Definitions

- 1.1.6.1 **"Contractor's Documents"** means the calculations, computer programs and other software, drawings manuals models and other document of a technical nature (if any) supplied by the Contractor under the Contract; as described in Sub-Clause 5.2 [*Contractor's Documents*].
- 1.1.6.2 **"Country"** means the country in which the Site (or most of it) is located where the Permanent Works are to be executed.
- 1.1.6.3 **"Employer's Equipment"** means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Employer's Requirements; but does not include Plant which has not been taken over by the Employer.
- 1.1.6.4 **"Force Majeure"** is defined In Clause 19 [*Force Majeure*].

- 1.1.6.5 **"Laws"** means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.
- 1.1.6.6 **"Performance Security"** means the security (or securities, if any) under Sub-Clause 4.2 [*Performance Security*].
- 1.1.6.7 **"Site"** means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 **"Unforeseeable"** means not reasonably foreseeable by an experienced contractor by the date for submission of the Tender.
- 1.1.6.9 **"Variation"** means any change to the Employer's Requirements or the Works, which is instructed or approved as a variation under Clause 13 [*Variations and Adjustments*].

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## 1.2.

### Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the Interpretation of these Conditions.

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## 1.3

### Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Appendix to Tender; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Appendix to Tender. However:
  - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
  - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

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## 1.4

### Land and Language

The Contract shall be governed by the law of the country (or other jurisdiction) stated in the Appendix to Tender.

If there are versions of any part of the Contract which are written in more than one language, the version which is in the ruling language stated in the Appendix to Tender shall prevail.

The language for communications shall be that stated in the Appendix to Tender. If no language is stated there, the language for communications shall be the language in which the Contract (or most of it) is written.

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## 1.5

### Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement (if any),
- (b) the Letter of Acceptance,
- (c) the Letter of Tender,
- (d) the Particular Conditions,
- (e) these general Conditions,
- (f) the Employer's Requirements,
- (g) the Schedules, and
- (h) the Contractor's Proposal and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

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## 1.6

### Contract Agreement

The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless they agree otherwise. The Contract Agreement shall be based upon the form annexed to the Particular Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

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## 1.7

### Assignment

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

- (a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and
- (b) may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

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## 1.8

### Care and Supply of Documents

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Engineer six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site a copy of the Contract, publications named in the Employer's Requirements, the Contractor's Documents and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

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## 1.9

If a Party becomes aware of an error or defect of technical nature in a document which was prepared for use executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

**Errors in the Employer's Requirements**

If the Contractor suffers delay and/or incurs Cost as a result of an error in the Employer's Requirements, and an experienced contractor exercising due care would not have discovered the error when scrutinising the Employer's Requirements under Sub-Clause 5.1 *[General Design Obligations]*, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 *[Contractor's Claims]* to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 *[Extension of Time for Completion]*, and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been so discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

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**1.10****Employer's Use of Contractor's Documents**

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

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**1.11****Contractor's Use of Employer's Documents**

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor may at his cost copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

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**1.12****Confidential Details**

The Contractor shall disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Contractor's compliance with the Contract.



**1.13**  
**Compliance with Laws**

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Particular Conditions:

- (a) the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the Employer's Requirements as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

**1.14**

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**Joint Several Liability**

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;
  - (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and
  - (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.
- 

## **The Employer**

**2.1**

**Right of Access to the Site**

The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Appendix to Tender. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Employer's Requirements. However, the Employer may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Appendix to Tender, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as may be required to enable the Contractor to proceed in accordance with the programme submitted under Sub-Clause 8.3 *[Programme]*.

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 *[Contractor's Claims]* to:

- (a) an extension of time for any such delay, if completion is or will be delayed under Sub-Clause 8.4 *[Extension of Time for Completion]*, and ,
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After, receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

## 2.2

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### Permits, Licences or Approvals

The Employer shall (where he is in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor:

- (a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
- (b) for the Contractor's applications for any permits, licences or approvals required by the Laws of the Country:
  - (i) which the Contractor is required to obtain under Sub-Clause 1.13 *[Compliance with Laws]*,
  - (ii) for the delivery of Goods, including clearance through customs, and
  - (iii) for the export of Contractor's Equipment when it is removed from the Site.

## 2.3

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### Employer's Personnel

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 *[Co-operation]*, and
- (b) take actions similar to those which the Contractor is required to take under subparagraphs (a), (b) and (c) of Sub-Clause 4.8 *[Safety Procedures]* and under Sub-Clause 4.18 *[Protection of the Environment]*.

## 2.4

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### Employer's Financial Arrangements

The Employer shall submit, within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price (as estimated at that time) in accordance with Clause 14 *[Contract Price and Payment]*. If the Employer intends to make any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.

## 2.5

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### Employer's Claims

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Engineer shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 *[Electricity, Water and Gas]*, under Sub-Clause 4.20 *[Employer's Equipment and Free-Issue Material]*, or for other services requested by the Contractor.

The notice shall be given as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Engineer shall then proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor,

and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [*Extension of Defects Notification Period*].

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

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## The Engineer

### 3.1 Engineer's Duties and Authority

The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer undertakes not to impose further constraints on the Engineer's authority, except as agreed with the Contractor.

However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- (b) the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
- (c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.

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### 3.2 Delegation by the Engineer

The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [*Determinations*].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language*].

Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined

by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act the Engineer. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;
- (b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

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### 3.3

#### **Instructions of the Engineer**

The Engineer may issue to the Contractor (at any time) instructions which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [*Variations and Adjustments*] shall apply.

The contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. These instructions shall be given in writing.

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### 3.4

#### **Replacement of the Engineer**

If the Employer intends to replace the Engineer, the Employer shall, not less than 42 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer. The Employer shall not replace the Engineer with a person against whom the Contractor raises reasonable objection by notice to the Employer, with supporting particulars.

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### 3.5

#### **Determinations**

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract taking due regard of all relevant circumstances.

The Engineer shall give notice to both Parties of each agreement or determination with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [*Claims Disputes and Arbitration*].

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## **The Contractor**

### 4.1

#### **Contractor's General Obligations**

The Contractor shall design, execute and complete the Works in accordance with the Contract, and shall remedy any defects in the Works. When completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract.

The Contractor shall provide the Plant and Contractor's Documents specified in the Contract and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.

The Works shall include any work which is necessary to satisfy the Employer's Requirements, Contractor's Proposal and Schedules, or is implied by the Contract, and all works which (although not mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operation, of the Works.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations, of all methods of construction and of all the Works.

The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.

## 4.2

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### **Performance Security**

The Contractor shall obtain (at his cost) a Performance Security for proper performance in the amount and currencies stated in the Appendix to Tender. If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.

The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract in the event of:

- (a) failure by the Contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event the Employer may claim the full amount of the Performance Security,
- (b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Sub-Clause 2.5 [*Employer's Claims*] or Clause 20 [*Claims, Disputes and Arbitration*], within 42 days after this agreement or determination,
- (c) failure by the Contractor to remedy a default within 42 days after receiving the Employer's notice requiring the default to be remedied, or
- (d) circumstances which entitle the Employer to termination under Sub-Clause 15.2 [*Termination by Employer*], irrespective of whether notice of termination has been given.

The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses (resulting from a claim under the Performance Security to the extent to which the Employer was not entitled to make the claim.

The Employer shall return the Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.

#### **4.3 Contractor's Representative**

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Engineer's prior consent, and the Engineer shall be notified accordingly.

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [*Instructions of the Engineer*].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Engineer has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language*].

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#### **4.4 Subcontractors**

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall not be required to obtain consent to suppliers of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
- (b) the prior consent of the Engineer shall be obtained to other proposed Subcontractors; and
- (c) the Contractor shall give the Engineer not less than 28 day's notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site.

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#### **4.5 Nominated Subcontractors**

In this Sub-Clause, "nominated Subcontractor" means a Subcontractor whom the Engineer, under Clause 13 [*Variations and Adjustments*], instructs the Contractor to employ as a Subcontractor. The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars.

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#### **4.6 Co-operation**

The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- (a) the Employer's Personnel,
- (b) any other contractors employed by the Employer, and
- (c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

The Contractor shall be responsible for his construction activities on the Site, and shall co-ordinate his own activities with those of other contractors to the extent (if any) specified in the Employer's Requirements.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Engineer in the time and manner stated in the Employer's Requirements.

#### 4.7

##### Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 *[Contractor's Claims]* to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 *[Extension of Time for Completion]*, and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

#### 4.8

##### Safety Procedures

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 *[Employer's Taking Over]*, and

- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

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#### 4.9

##### **Quality Assurance**

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

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#### 4.10

##### **Site Data**

The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which come into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- (d) the Laws, procedures and labour practices of the Country, and
- (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

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#### 4.11

##### **Sufficiency of the Accepted Contract Amount**

The Contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data] and any further data relevant to the Contractor's design.

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper design, execution and completion of the Works and the remedying of any defects.



#### 4.12

##### Unforeseeable Physical Conditions

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Engineer as soon as practicable.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Engineer may give. If an instruction constitutes a Variation, Clause 13 [*Variations and Adjustments*] shall apply.

If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine (i) whether and (If so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favourable conditions were encountered, the Engineer may proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Engineer may take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which may be made available by the Contractor, but shall not be bound by any such evidence.

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#### 4.13

##### Rights of Way and Facilities

The Contractor shall bear all costs and charges for special and/or temporary rights-of-way which he may require, including those for access to the Site. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the Site which he may require for the purposes of the Works.

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#### 4.14

##### Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or

- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

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#### 4.15

##### **Access Route**

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route,
- (d) the Employer does not guarantee the suitability or availability of particular access routes, and
- (d) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

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#### 4.16

##### **Transport of Goods**

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall give the Engineer not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

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#### 4.17

##### **Contractor's Equipment**

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the work. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

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#### 4.18

##### **Protection of the Environment**

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Employer's Requirements, and shall not exceed the values prescribed by applicable Laws.

**4.19**  
**Electricity, Water and Gas**

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Employer's Requirements. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [*Employer's Claims*] and Sub-Clause [*Determinations*]. The Contractor shall pay these amounts to the Employer.

**4.20**

**Employer's Equipment and Free-Issue Material**

The Employer shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Employer's Requirements. Unless otherwise stated in the Employer's Requirements:

- (a) the Employer shall be responsible for the Employer's Equipment except that
- (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [*Employer's Claims*] and Sub-Clause 3.5 [*Determinations*]. The Contractor shall pay these amounts to the Employer.

The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Employer's Requirements. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Engineer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer of liability for any shortage, defect or default not apparent from a visual inspection.

**4.21**

**Progress Reports**

Unless otherwise stated in the Particular Conditions monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed oil work which is known to-be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection, testing, commissioning and trial operation;
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main Item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
  - (i) commencement of manufacture,
  - (ii) Contractor's inspections,
  - (iii) tests, and
  - (iv) shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 *[Records of Contractor's Personnel and Equipment]*;
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of Variations, notices given under Sub-Clause 2.5 *[Employer's Claims]* and notices given under Sub-Clause 20.1 *[Contractor's Claims]*;
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

#### 4.22

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##### **Security of the Site**

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and
- (b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site.

#### 4.23

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##### **Contractor's Operations on Site**

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Engineer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects notification Period, such Goods as are required for the Contractor to fulfill obligations under the Contract.

#### **4.24 Fossils**

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 *[Contractors Claims]* to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 *[Extension of Time for Completion]*, and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine these matters.

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## **Design**

#### **5.1 General Design Obligations**

The Contractor shall carry out, and be responsible for, the design of the Works. Design shall be prepared by qualified designers who are engineers or other professionals who comply with the criteria (if any) stated in the Employer's Requirements. Unless otherwise stated in the Contract, the Contractor shall submit to the Engineer for consent the name and particulars of each proposed designer and design Subcontractor.

The Contractor warrants that he, his designers and design Subcontractors have the experience and capability necessary for the design. The Contractor undertakes that the designers shall be available to attend discussions with the Engineer at all reasonable times, until the expiry date of the relevant Defects Notification Period.

Upon receiving notice under Sub-Clause 8.1 *[Commencement of Works]*, the Contractor shall scrutinise the Employer's Requirements (including design criteria and calculations, if any) and the items of reference mentioned in Sub-Clause 4.7 *[Setting Out]*. Within the period stated in the Appendix to Tender, calculated from the Commencement Date, the Contractor shall give notice to the Engineer of any error, fault or other defect found in the Employer's Requirements or these items of reference.

After receiving this notice, the Engineer shall determine whether Clause 13 *[Variations and Adjustments]* shall be applied, and shall give notice to the Contractor accordingly. If and to the extent that (taking account of cost and time) an experienced contractor exercising due care would have discovered the error, fault or other defect when examining the Site and the Employer's Requirements before submitting the Tender, the Time for Completion shall not be extended and the Contract Price shall not be adjusted.

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#### **5.2 Contractor's Documents**

The Contractor's Documents shall comprise the technical documents specified in the Employer's Requirements, documents required to satisfy all regulatory approvals, and the documents described in Sub-Clause 5.6 *[As-Built Documents]* and Sub-Clause 5.7 *[Operation and Maintenance Manuals]*. Unless otherwise stated in the Employer's Requirements, the Contractor's Documents shall be written in the language for communications defined in Sub-Clause 1.4 *[Law and Language]*.

The Contractor shall prepare all Contractor's Documents, and shall also prepare any other documents necessary to instruct the Contractor's Personnel. The Employer's Personnel shall have the right to inspect the preparation of all these documents, wherever they are being prepared.

If the Employer's Requirements describe the Contractor's Documents which are to be submitted to the Engineer for review and/or for approval, they shall be submitted accordingly, together with a notice as described below. In the following provisions of this Sub-Clause, (i) "review period" means the period required by the Engineer for review and (if so specified) for approval, and (ii) "Contractor's Documents" exclude any documents which are not specified as being required to be submitted for review and/or for approval.

Unless otherwise stated in the Employer's Requirements, each review period shall not exceed 21 days, calculated from the date on which the Engineer receives a Contractor's Document and the Contractor's notice. This notice shall state that the Contractor's Document is considered ready, both for review (and approval, if so specified) in accordance with this Sub-Clause and for use. The notice shall also state that the Contractor's Document complies with the Contract, or the extent to which it does not comply.

The Engineer may, within the review period, give notice to the Contractor that a Contractor's Document fails (to the extent stated) to comply with the Contract. If a Contractor's Document so fails to comply, it shall be rectified, resubmitted and reviewed (and, if specified, approved) in accordance with this Sub-Clause at the Contractor's cost.

For each part of the Works, and except to the extent that the prior approval or consent of the Engineer shall have been obtained:

- (a) in the case of a Contractor's Document which has (as specified) been submitted for the Engineer's approval:
  - (i) the Engineer shall give notice to the Contractor that the Contractor's Document is approved, with or without comments, or that it fails (to the extent stated) to comply with the Contract;
  - (ii) execution of such part of the Works shall not commence until the Engineer has approved the Contractor's Document; and
  - (iii) the Engineer shall be deemed to have approved the Contractor's Document upon the expiry of the review periods for all the Contractor's Documents which are relevant to the design and execution of such part, unless the Engineer has previously notified otherwise in accordance with sub-paragraph (i);
- (b) execution of such part the Works shall not commence prior to the expiry of the review periods for all the Contractor's Documents which are relevant to its design and execution;
- (c) execution of such part of the Works shall be in accordance with these reviewed (and, if specified, approved) Contractor's Documents; and
- (d) if the Contractor wishes to modify any design or document which has previously been submitted for review (and if specified approval) the Contractor shall immediately give notice to the Engineer. Thereafter, the Contractor shall submit revised documents to the Engineer in accordance with the above procedure.

If the Engineer instructs that further Contractor's Documents are required, the Contractor shall prepare them promptly.

Any such approval or consent, or any review (under this Sub-Clause or otherwise), shall not relieve the Contractor from any obligation or responsibility.

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### 5.3

#### **Contractor's Undertaking**

The Contractor undertakes that the design, the Contractor's Documents, the execution and the completed Works will be in accordance with:

- (a) the Laws in the Country, and
- (b) the documents forming the Contract, as altered or modified by Variations.

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### 5.4

#### **Technical Standards and Regulations**

The design, the Contractor's Documents, the execution and the completed Works shall comply with the Country's technical standards, building, construction and environmental Laws, Laws applicable to the product being produced from the Works, and other standards specified in the Employer's Requirements, applicable to the Works, or defined by the applicable Laws.

All these Laws shall, in respect of the Works and each Section, be those prevailing when the Works or Section are taken over by the Employer under Clause 10 [*Employer's Taking Over*]. References in the Contract to published standards shall be understood to be references to the edition applicable on the Base Date, unless stated otherwise.

If changed or new applicable standards come into force in the Country after the Base Date, the Contractor shall give notice to the Engineer and (if appropriate) submit proposals for compliance. In the event that:

- (a) the Engineer determines that compliance is required, and
- (b) the proposals for compliance constitute a variation,

then the Engineer shall initiate a Variation in accordance with Clause 13 [*Variations and Adjustments*].

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### 5.5

#### **Training**

The Contractor shall carry out the training of Employer's Personnel in the operation and maintenance of the Works to the extent specified in the Employer's Requirements. If the Contract specifies training which is to be carried out before taking-over, the Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until this training has been completed.

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### 5.6

#### **As-Built Documents**

The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed. These records shall be kept on the Site and shall be used exclusively for the purposes of this Sub-Clause. Two copies shall be supplied to the Engineer prior to the commencement of the Tests on Completion.

In addition, the Contractor shall supply to the Engineer as-built drawings of the Works, showing all Works as executed, and submit them to the Engineer for review under Sub-Clause 5.2 [*Contractor's Documents*]. The Contractor shall obtain the consent of the Engineer as to their size, the referencing system, and other relevant details.

Prior to the issue of any Taking-Over Certificate, the Contractor shall supply to the Engineer the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer's Requirements. The Works shall not be considered

to be completed for the purposes of taking-over under Sub-Clause 10.1 *[Taking Over of the Works and Sections]* until the Engineer has received these documents.

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## 5.7

### **Operation and Maintenance Manuals**

Prior to commencement of the Test on Completion, the Contractor shall supply to the Engineer provisional operation and maintenance manuals in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair the Plant.

The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 *[Taking Over of the Works and Sections]* until the Engineer has received final operation and maintenance manuals in such detail, and any other manuals specified in the Employer's Requirements for these purposes.

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## 5.8

### **Desing Error**

If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's Documents, they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause

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## **Staff and Labour**

## 6.1

### **Engagement of Staff and Labour**

Except as otherwise stated in the Employer's Requirements, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport.

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## 6.2

### **Rates of Wages and Conditions of Labour**

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

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## 6.3

### **Persons in the Service of Employer**

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel.

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## 6.4

### **Labour Laws**

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

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## 6.5

### **Working Hours**

No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours stated in the Appendix to Tender, unless:

- (a) otherwise stated in the Contract,
- (b) the Engineer gives consent or,
- (c) the work is unavoidable or necessary for the protection of life or property or the safety of the Works, in which case the Contractor shall immediately advise the Engineer.



**6.6  
Facilities for Staff  
And Labour**

Except as otherwise stated in the Employer's Requirements, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Employer's Requirements.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

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**6.7**

**Health and Safety**

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

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**6.8**

**Contractor's  
Superintendence**

Throughout the design and execution of the Works, and as long thereafter as is necessary to fulfill the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [*Law and Language*]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

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**6.9**

**Contractor's  
Personnel**

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) persist in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

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#### 6.10

##### **Records of Contractor's Personnel and Equipment**

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

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#### 6.11

##### **Disorderly Conduct**

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

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## **Plant, Materials and Workmanship**

#### 7.1

##### **Manner of Execution**

The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognised good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

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#### 7.2

##### **Samples**

The Contractor shall submit the following samples of Materials, and relevant information, to the Engineer for review in accordance with the procedures for Contractor's Documents described in Sub-Clause 5.2 [*Contractor's Documents*]:

- (a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
- (b) additional samples instructed by the Engineer as a Variation.

Each sample shall be labelled as to origin and intended use in the Works.

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#### 7.3

##### **Inspection**

The Employer's Personnel shall at all reasonable times:

- (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- (b) during production, manufacture and construction (at the Site and elsewhere) be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Engineer whenever any work is ready and before its covered up, put out of sight, or packaged or storage or transport. The

Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

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#### 7.4

##### Testing

This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Engineer may, under Clause 13 [*Variations and Adjustments*], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Engineer shall give the Contractor not less than 24 hours' notice of the Engineer's intention to attend the tests. If the Engineer does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Engineer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed the Engineer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Engineer has not attended the tests, he shall be deemed to have accepted the readings as accurate.

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#### 7.5

##### Rejection

If, as result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject the Plant, Materials, design or workmanship by giving notice to the Contractor, with reasons. The contractor shall then promptly make good the defect and ensure that rejected item complies with the Contract.

If the Engineer requires this Plant, Materials, design or workmanship to be retested the tests shall be repeated under the same terms and conditions. If the rejection and

retesting cause the Employer to Incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*], pay these costs to the Employer.

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## 7.6

### Remedial Work

Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:

- (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
- (b) remove and re-execute any other work which is not in accordance with the Contract, and
- (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay to the Employer all costs arising from this failure.

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## 7.7

### Ownership of Plant and Materials

Each Item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is delivered to the Site;
- (b) when the Contractor is entitled to payment of the value of the Plant and Materials under Sub-Clause 8.10 [*Payment for Plant and Materials in Event of Suspension*].

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## 7.8

### Royalties

Unless otherwise stated in the Employer's Requirements, the Contractor shall pay all royalties, rents and other payments for:

- (a) natural Materials obtained from outside the Site, and
  - (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.
- 

## Commencement, Delays and Suspension

### 8.1

#### Commencement of Work

The Engineer shall give the Contractor not less than 7 days' notice of the Commencement Date. Unless otherwise stated In the Particular Conditions, the Commencement Date shall be within 42 days after the Contractor receives the Letter of Acceptance.

The Contractor shall commence the design and execution of the Works as soon as is reasonably practicable after Commencement date, and shall then proceed with the Works with due expedition and without delay.

## 8.2

### Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Work or Section (as the case may be), including:

- (a) achieving the passing of the Tests on completion, and
- (b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*].

## 8.3

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### Programme

The Contractor shall submit a detailed time programme to the Engineer within 28 days after receiving the notice under Sub-Clause 8.1 [*Commencement of Works*]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design, Contractor's Documents, procurement, manufacture, inspection, delivery to Site, construction, erection, testing, commissioning and trial operation,
- (b) the periods for reviews under Sub-Clause 5.2 [*Contractor's Documents*] and for any other submissions, approvals and consents specified in the Employer's Requirements,
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
  - (i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
  - (ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities,

The Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work increase the Contract Price or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [*Variation Procedure*].

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer in accordance with this Sub- Clause.

## 8.4

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### Extension of Time for Completion

The Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to an extension of the Time for Completion if and to the extent that completion for the

purposes of Sub-Clause 10.1 *[Taking Over of the Works and Sections]* is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 *[Variation Procedure]*),
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Sub-Clause 20.1 *[Contractor's Claims]*. When determining each extension of time under Sub-Clause 20.1, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

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## 8.5

### Delays Caused by Authorities

If the following conditions apply, namely:

- (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) these authorities delay or disrupt the Contractor's work, and
- (c) the delay or disruption was Unforeseeable,

then this delay or disruption will be considered as a cause of delay under subparagraph (b) of Sub-Clause 8.4 *[Extension of Time for Completion]*.

---

## 8.6

### Rate of Progress

If, at any time:

- (a) actual progress is too slow to complete within the Time for Completion, and/or
- (b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 *[Programme]*,

other than as a result of a cause listed in Sub-Clause 8.4 *[Extension of Time for Completion]*, then the Engineer may instruct the Contractor to submit under Sub-Clause 8.3 *[Programme]*, a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Engineer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 *[Employer's Claims]* pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 8.7 below.

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## 8.7

### Delay Damages

If the Contractor fails to comply with Sub-Clause 8.2 *[Time for Completion]*, the Contractor shall subject to Sub-Clause 2.5 *[Employer's Claims]* pay delay damages to the Employer for this default. These delay images shall be the sum stated in the Appendix to Tender, which shall be paid for every day which shall elapse between the

relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Appendix to Tender.

These delay damages shall be the only damages due from the Contractor for such default, other than In the event of termination under Sub-Clause 15.2 [*Termination by Employer*] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

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## 8.8

### **Suspension of Work**

The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

The Engineer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clause 8.9, 8.10 and 8.11 shall not apply.

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## 8.9

### **Consequences of Suspension**

If the Contractor suffers delay and/or incurs Cost from complying with the Engineer's instructions under Sub-Clause 8.8 [*Suspension of Work*] and/or from resuming the work, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [*Suspension of Work*].

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## 8.10

### **Payment for Plant and Materials in Event of Suspension**

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/or Materials which have not been delivered to Site, if:

- (a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than 28 days, and
- (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Engineer's instructions.

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## 8.11

### **Prolonged Suspension**

If the suspension under Sub-Clause 8.8 [*Suspension of Work*] has continued for more than 84 days, the Contractor may request the Engineer's permission to proceed. If the Engineer does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [*Variations and Adjustments*] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [*Termination by Contractor*].

**8.12  
Resumption of Work**

After the permission or instruction to proceed is given, the Contractor and the Engineer shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension.

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## **Tests on Completion**

**9.1**

**Contractor's Obligations**

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [*Testing*], after providing the documents in accordance with Sub-Clause 5.6 [*As-Built Documents*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*].

The Contractor shall give to the Engineer not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Engineer shall instruct.

Unless otherwise stated in the Particular Conditions, the Tests on Completion shall be carried out in the following sequence:

- (a) pre-commissioning tests, which shall include the appropriate inspections and ("dry" or "cold") functional tests to demonstrate that each item of Plant can safely undertake the next stage, (b);
- (b) commissioning tests, which shall include the specified operational tests to demonstrate that the Works or Section can be operated safely and as specified, under all available operating conditions; and
- (c) trial operation, which shall demonstrate that the Works or Section perform reliably and in accordance with the Contract.

During trial operation, when the Works are operating under stable conditions, the Contractor shall give notice to the Engineer that the Works are ready for any other Tests on Completion, including performance tests to demonstrate whether the Works conform with criteria specified in the Employer's Requirements and with the Schedule of Guarantees.

Trial operation shall not constitute a taking-over under Clause 10 [*Employer's Taking Over*]. Unless otherwise stated in the Particular Conditions, any product produced by the Works during trial operation shall be the property of the Employer.

In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed each of the Tests on Completion described in sub-paragraph (a), (b) or (c), the Contractor shall submit a certified report of the results of these Tests to the Engineer.

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**9.2**

**Delayed Tests**

If the Tests on Completion are being unduly delayed by the Employer, Sub-Clause 7.4 [*Testing*] (fifth paragraph) and/or Sub-Clause 10.3 [*Interference with Tests on Completion*] shall be applicable.

If Tests on Completion are being unduly delayed by Contractor, the Engineer may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days



within that period as the Contractor may fix and of which he shall give notice to the Engineer.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

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### 9.3

#### Retesting

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 *[Rejection]* shall apply, and the Engineer or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

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### 9.4

#### Failure to Pass Tests on Completion

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 *[Retesting]*, the Engineer shall be entitled to:

- (a) order further repetition of Tests on Completion under Sub-Clause 9.3;
- (b) if the failure deprives the Employer of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 *[Failure to Remedy Defects]*; or
- (c) issue a Taking-Over Certificate, if the Employer so requests.

In the event of sub-paragraph (c), the Contractor shall then proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 *[Employer's Claims]* and Sub-Clause 3.5 *[Determinations]*.

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## Employer's Taking Over

### 10.1

#### Taking Over of the Works and Sections

Except as stated in Sub-Clause 9.4 *[Failure to Pass Tests on Completion]*, the Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 *[Time for Completion]* and except as allowed in sub-paragraph (a) below and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Engineer for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion be complete and ready for taking over. If the Works are divided into Sections the Contractor may similarly apply for a Taking-Over Certificate for each Section.

Engineer shall, within 28 days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate to the Contractor stating the date on which the Works or Section were completed in accordance with the Contract, except

- for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor's application with the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

## 10.2

### **Taking Over of Parts of the Works**

The Engineer may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.

The Employer shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

- (a) the part which is used shall be deemed to have been taken over as from the date on which it is used,
- (b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and
- (c) if requested by the Contractor, the Engineer shall issue a Taking-Over Certificate for this part.

After the Engineer has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.

If the Contractor incurs Cost as a result of the Employer taking over and/or using a part of the Works, other than such use as is specified in the Contract or agreed by the Contractor, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to payment of any such Cost plus reasonable profit, which shall be included in the Contract Price. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine this Cost and profit.

If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced for any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [*Delay Damages*], and shall not affect the maximum amount of these damages.

**10.3**  
**Interference with Tests**

If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Employer is responsible, the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

The Engineer shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Engineer shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

**10.4**  
**Surfaces Requiring Reinstatement**

Except as otherwise stated in a taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

## Defects Liability

**11.1**  
**Completion of Outstanding Work and Remedying Defects**

In order that the Works and Contractor's Documents, and each Section shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:

- (a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
- (b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.

**11.2**  
**Cost of Remedying Defects**

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] shall be executed at the risk and cost of the Contractor, if and to the extent that work is attributable to:

- (a) the design of the Works other than a part of the design for which the Employer is responsible (if any),
- (b) Plant, Materials or workmanship not being in accordance with the Contract,

- (c) improper operation or maintenance which was attributable to matters for which the Contractor is responsible (under Sub-Clauses 5.5 to 5.7 or otherwise), or
- (d) failure by the Contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Employer, and Sub-Clause 13.3 [*Variation Procedure*] shall apply.

### 11.3

#### **Extension of Defects Notification Period**

The Employer shall be entitled subject to Sub-Clause 2.5 [*Employer's Claims*] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However, a Defects Notification Period shall not be extended by more than two years.

If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [*Suspension of Work*] or Sub-Clause 16.1 [*Contractor's Entitlement to Suspend Work*], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.

### 11.4

#### **Failure to Remedy Defects**

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Employer may (at his option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;
- (b) require the Engineer to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [*Determinations*]; or
- (c) in the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

### 11.5

#### **Removal of Defective Work**

If the defect or damage cannot be remedied expeditiously on the site and the Employer gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant, as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

### 11.6

#### **Futher Tests**

If the work of remedying of any defect or damage may affect the performance of the Works, the Engineer may require the repetition of any the tests described in the

Contract, including Tests on Completion and/or Tests after Completion. The requirement shall be made by notice within 28 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [*Costs of Remedying Defects*], for the cost of the remedial work.

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**11.7****Right of Access**

Until the Performance Certificate has been issued, the Contractor shall have the right of access to all parts of the Works and to records of the operation and performance of the Works, except as may be inconsistent with the Employer's reasonable security restrictions.

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**11.8****Contractor to Search**

The Contractor shall, if required by the Engineer, search for the cause of any defect under the direction of the Engineer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Cost of the search plus reasonable profit shall be agreed or determined by the Engineer in accordance with Sub-Clause 3.5 [*Determinations*] and shall be included in the Contract Price.

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**11.9****Performance certificate**

Performance of the Contractor's obligations shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

The Engineer shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Performance Certificate shall be issued to the Employer.

Only the Performance Certificate shall be deemed to constitute acceptance of the Works.

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**11.10****Unfulfilled Obligations**

After the Performance Certificate has been issued, each Party shall remain liable for the fulfillment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

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**11.11****Clearance of Site**

Upon receiving the Performance Certificate the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

If all these items have not been removed within 28 days after the Employer receives a copy of the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the cost incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

## Test after Completion

### 12.1

#### Procedures for Tests after Completion

If Tests after Completion are specified in the Contract, this Clause shall apply. Unless otherwise stated in the Particular Conditions, the Employer shall:

- (a) provide all electricity, equipment, fuel, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the Tests after Completion efficiently, and
- (b) carry out the Tests after Completion in accordance with the manuals supplied by the Contractor under Sub-Clause 5.7 [*Operation and Maintenance Manuals*] and such guidance as the Contractor may be required to give during the course of these Tests; and in the presence of such Contractor's Personnel as either Party may reasonably request.

The Tests after Completion shall be carried out as soon as is reasonably practicable after the Works or Section have been taken over by the Employer. The Employer shall give to the Contractor 21 days' notice of the date after which the Tests after Completion will be carried out. Unless otherwise agreed, these Tests shall be carried out within 14 days after this date, on the day or days determined by the Employer.

If the Contractor does not attend at the time and place agreed, the Employer may proceed with the Tests after Completion, which shall be deemed to have been made in the Contractor's presence, and the Contractor shall accept the readings as accurate.

The results of the Tests after Completion shall be compiled and evaluated by both Parties. Appropriate account shall be taken of the effect of the Employer's prior use of the Works.

### 12.2

#### Delayed Tests

If the Contractor incurs Cost as a result of any unreasonable delay by the Employer to the Tests after Completion, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine this Cost and profit.

If, for reasons not attributable to the Contractor, a Test after Completion on the Works or any Section cannot be completed during the Defects Notification Period (or any other period agreed upon by both Parties), then the Works or Section shall be deemed to have passed this Test after Completion.

### 12.3

#### Retesting

If the Works, or a Section, fail to pass the Tests after Completion:

- (a) sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] shall apply, and
- (b) either Party may then require the failed Tests and the Tests after Completion on any related work, to be repeated under the same terms and conditions.

If and to the extent that this failure and retesting are attributable to any of the matters listed in sub-paragraphs (a) to (d) of Sub-Clause 11.2 [*Cost of remedying Defects*]

and cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 *[Employer's Claims]* pay these costs to the Employer.

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## 12.4

### **Failure to Pass Tests After Completion**

If the following conditions apply, namely:

- (a) the Works, or a Section, fail to pass any or all of the Tests after Completion,
- (b) the relevant sum payable as non-performance damages for this failure is stated (or its method of calculation is defined) in the Contract, and
- (c) the Contractor pays this relevant sum to the Employer during the Defects Notification Period,

then the Works or Section shall be deemed to have passed these Tests after Completion.

If the Works, or a Section, fail to pass a Test after Completion and the Contractor proposes to make adjustments or modifications to the Works or such Section, the Contractor may be instructed by (or on behalf of) the Employer that right of access to the Works or Section cannot be given until a time that is convenient to the Employer. The Contractor shall then remain liable to carry out the adjustments or modifications and to satisfy this Test, within a reasonable period of receiving notice by (or on behalf of) the Employer of the time that is convenient to the Employer. However, if the Contractor does not receive this notice during the relevant Defects Notification Period, the Contractor shall be relieved of this obligation and the Works or Section (as the case may be) shall be deemed to have passed this Test after Completion.

If the Contractor incurs additional Cost as a result of any unreasonable delay by the Employer in permitting access to the Works or Plant by the Contractor, either to investigate the causes of a failure to pass a Test after Completion or to carry out any adjustments or modifications, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 *[Contractor's Claims]* to payment of any such Cost plus reasonable profit, which shall be included in the Contract Price

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine this Cost and profit.

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## **Variations and Adjustments**

### 13.1

#### **Right to Vary**

Variations may be initiated by the Engineer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal. A Variation shall not comprise the omission of any work which is to be carried out by others.

The Contractor shall execute and be bound by each Variation unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, (ii) it will reduce the the safety or suitability of the Works, or (iii) it will have an adverse impact on the achievement of the Schedule of Guarantees. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction.

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### 13.2

#### **Value Engineering**

The Contractor may, at any time, submit to the Engineer a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost

to the Employer of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Employer of the completed Works, or (iv) otherwise be of benefit to the Employer.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [*Variation Procedure*].

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### 13.3

#### **Variation Procedure**

If the Engineer requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

- (a) a description of the proposed design and/or work to be performed and a programme for its execution,
- (b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [*Programme*] and to the Time for Completion, and
- (c) the Contractor's proposal for adjustment to the Contract Price.

The Engineer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [*Value Engineering*] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Engineer to the Contractor, who shall acknowledge receipt.

Upon instructing or approving a Variation, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine adjustments to the Contract Price and the Schedule of Payments. These adjustments shall include reasonable profit, and shall take account of the Contractor's submissions under Sub-Clause 13.2 [*Value Engineering*] if applicable.

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### 13.4

#### **Payment in Applicable Currencies**

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

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### 13.5

#### **Provisional Sums**

Each Provisional Sum shall only be used, in whole or in part in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct:

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and value under Sub-Clause 13.3 [*Variation Procedure*]; and/or
- (b) Plant, Materials or services to be purchased by the Contractor for which there shall be included in the Contract Price:
  - (i) the actual amounts paid (or due to be paid) by the Contractor, and
  - (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Appendix to Tender shall be applied.



The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

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**13.6****Daywork**

For work of a minor or incidental nature, the Engineer may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the daywork schedule included in the Contract, and the following procedure shall apply. If a daywork schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

Except for any items for which the daywork schedule specifies that payment is not due, the Contractor shall deliver each day to the Engineer accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- (a) the names, occupations and time of Contractor's Personnel,
- (b) the identification, type and time of Contractor's Equipment and Temporary Works, and
- (c) the quantities and types of Plant and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [*Application for Interim Payment Certificates*].

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**13.7****Adjustment for  
Changes in Legislation**

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date which affect the Contractor in the performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations made after the Base Date, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay if completion is or will be delayed under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

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**13.8****Adjustment for  
Changes in Cost**

In this Sub-Clause, "table of adjustment data" means the completed table of adjustment data included in the Appendix to tender. If there is no such table of adjustment data, this Sub-Clause shall not apply.

If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labour, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not

covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in costs.

The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:

$$P_n = a + b \frac{L_n}{L_o} + c \frac{E_n}{E_o} + d \frac{M_n}{M_o} + \dots$$

where:

"P<sub>n</sub>" is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period "n", this period being a month unless otherwise stated in the Appendix to Tender;

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

"b", "c", "d", ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

"L<sub>n</sub>", "E<sub>n</sub>", "M<sub>n</sub>", ... are the current cost indices or reference prices for period "n", expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

"L<sub>o</sub>", "E<sub>o</sub>", "M<sub>o</sub>", ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.

The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Engineer. For this purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.

In cases where the "currency of index" (stated in the table) is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of the Country, of this relevant currency on the above date for which the index is required to be applicable.

Until such time as each current cost index is available, the Engineer shall determine a provisional index for the Issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.

If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price: whichever is more favourable to the Employer.

The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.

## Contract Price and Payment

### 14.1

#### The Contract Price

Unless otherwise stated in the Particular Conditions:

- (a) the Contract Price shall be the lump sum Accepted Contract Amount and be subject to adjustments in accordance with the Contract;
- (b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated in Sub-Clause 13.7 [*Adjustments for Changes in Legislation*];
- (c) any quantities which may be set out in a Schedule are estimated quantities and are not to be taken as the actual and correct quantities of the Works which the Contractor is required to execute; and
- (d) any quantities or price data which may be set out in a Schedule shall be used for the purposes stated in the Schedule and may be inapplicable for other purposes.

However, if any part of the Works is to be according to quantity supplied or work done, the provisions for measurement and evaluation shall be as stated in the Particular Conditions. The Contract Price shall be determined accordingly subject to adjustments in accordance with the Contract.

### 14.2

#### Advance Payment

The Employer shall make an advance payment, as an interest-free loan for mobilisation and design, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions shall be as stated in the Appendix to Tender.

Unless and until the Employer receives this guarantee, or if the total advance payment is not stated in the Appendix to Tender, this Sub-Clause shall not apply.

The Engineer shall issue an Interim Payment Certificate for the first instalment after receiving a Statement (under Sub-Clause 14.3 [*Application for Interim Payment Certificates*]) and after the Employer receives (i) the Performance Security in accordance with Sub-Clause 4.2 [*Performance Security*] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

The advance payment shall be repaid through percentage deductions in Payment Certificates. Unless other percentages are stated in the Appendix to Tender:

- (a) deductions shall commence in the Payment Certificate in with the total of all certified interim payments (excluding the advance payment and deductions and

- repayments of retention) exceeds ten per cent (10%) of the Accepted Contract Amount less Provisional Sums; and
- (b) deductions shall be made at the amortization rate of one quarter (25%) of the amount of each Payment Certificate (excluding the advance payment and deductions and repayments of retention) in the currencies and proportions of the advance payment, until such time as the advance payment has been repaid.

If the advance payment has not been repaid prior the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [*Termination by Employer*], Clause 16 [*Suspension and Termination by Contractor*] or Clause 19 [*Force Majeure*] (as the case may be), the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

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#### 14.3

##### **Application for Interim Payment Certificates**

The Contractor shall submit a Statement in six copies to the Engineer after the end of the period of payment stated in the Contract (if not stated, after the end of each month), in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the relevant report on progress in accordance with Sub-Clause 4.21 [*Progress Reports*].

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- (a) the estimated contract value of the works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);
- (b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [*Adjustment for Changes in Legislation*] and Sub-Clause 13.8 [*Adjustment for Changes in Cost*];
- (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Appendix to tender to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Appendix to Tender;
- (d) any amounts to be added and deducted for the advance payment and repayments in accordance with Sub-Clause 14.2 [*Advance Payment*];
- (e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [*Plant and Materials intended for the Works*];
- (f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [*Claims, Disputes and Arbitration*]; and
- (g) the deduction of amounts certified in all previous Payment Certificates.

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#### 14.4

##### **Schedule of Payment**

If the Contract Includes a Schedule of Payments specifying the instalments in which Contract Price will be paid, then, unless otherwise stated in this Schedule:

- (a) the instalments quoted in the Schedule of Payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [*Application for Interim Payment Certificates*]
- (b) Sub-Clause 14.5 [*Plant and Materials intended for the Works*] shall not apply; and
- (c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than

that on which the Schedule of Payments was based, then the Engineer may proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine revised instalments, which shall take account of the extent to which progress is less than that on which the instalments were previously based.

If the Contract does not include a Schedule of Payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

#### 14.5

##### **Plant and Materials intended for the Works**

If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [*Application for Interim Payment Certificates*].

If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Appendix to Tender, this Sub-Clause shall not apply.

The Engineer shall determine and certify each addition if the following conditions are satisfied:

- (a) The Contractor has:
  - (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
  - (ii) Submitted statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence;

and either:

- (b) the relevant Plant and Materials:
  - (i) are those listed in the Appendix to Tender for payment when shipped,
  - (ii) have been shipped to the country, en route to the Site, in accordance with the Contract; and
  - (iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Engineer together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Employer in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [*Advance Payment*] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration;

or

- (c) the relevant Plant and Materials:
  - (i) are those listed in the Appendix to Tender for payment when delivered to the site, and
  - (ii) have been delivered to and are stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

The additional amount to be certified shall be the equivalent of eighty percent of the Engineer's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.

The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [*Application for Interim Payment Certificates*]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

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#### 14.6

##### **Issue of Interim Payment Certificates**

No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, the Engineer shall, within 28 days after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificate which shall state the amount which the Engineer fairly determines to be due, with supporting particulars.

However, prior to issuing the Taking-Over Certificate for the Works, the Engineer shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Appendix to Tender. In this event the Engineer shall give notice to the Contractor accordingly.

An Interim Payment Certificate shall not be withheld for any other reason although:

- (a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- (b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A payment Certificate shall not be deemed to indicate the Engineer's acceptance approval consent or satisfaction.

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#### 14.7

##### **Payment**

The Employer shall pay to the Contractor:

- (a) the first instalment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub-Clause 4.2 [*Performance Security*] and Sub-Clause 14.2 [*Advance Payment*], whichever is later;
- (b) the amount certified in each Interim Payment certificate within 56 days after the Engineer receives the Statement and supporting documents; and
- (c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate.

Payment of the amount due in each currency shall be made into bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.

**14.8**  
**Delayed payment**

If the Contractor does not receive payment in accordance with Sub-Clause 14.7 *[Payment]*, the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 *[Payment]*, irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.

Unless otherwise stated in the Particular Conditions, these financing charges shall be calculated at the annual rate of three percentage points above the discount rate of the central bank in the country of the currency of payment, and shall be paid in such currency.

The Contractor shall be entitled to this payment without formal notice or certification and without prejudice to any other right or remedy.

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**14.9**

**Payment of Retention Money**

When the Taking-Over Certificate has been Issued for the Works, and the Works have passed all specified tests (including the Tests after Completion, if any), the first half of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a Taking-Over Certificate is issued for a Section, the relevant percentage of the first half of the Retention Money shall be certified and paid when the Section passes all tests.

Promptly after the latest of the expiry dates of the Defects Notification Periods the outstanding balance of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a Taking-Over Certificate was issued for a Section, the relevant percentage of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section.

However, if any work remains to be executed under Clause 11 *[Defects Liability]* or Clause 12 *[Tests after Completion]*, the Engineer shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

The relevant percentage for each Section shall be the percentage value of the Section as stated in the Appendix to Tender. If the percentage value of a Section is not stated in the Appendix to Tender, no percentage of either half of the Retention Money shall be released under this Sub-Clause in respect of such Section.

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**14.10**

**Statement at Completion**

Within 87 days after receiving the Taking-Over Certificate for Works, the Contractor shall submit to the Engineer six copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 *[Application for Payment Certificates]*, showing:

- (a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The Engineer shall then certify in accordance with Sub Clause 14.6 *[Issue of Interim Payment Certificates.]*

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**14.11**

**Application for Final Payment Certificate**

Within 56 days after receiving the performance Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in details in a form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Engineer and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 *[Obtaining Dispute Adjudication Board's Decision]* or Sub-Clause 20.5 *[Amicable Settlement]*, the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement.

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#### 14.12

##### **Discharge**

When submitting the Final Statement, the Contractor shall submit a written discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the out-standing balance of this total in which event the discharge will be effective on such date.

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#### 14.13

##### **Issue of Final Payment Certificate**

Within 28 days after receiving the Final Statement and written discharge in accordance with Sub-Clause 14.11 *[Application for Final Payment Certificate]* and Sub-Clause 14.12 *[Discharge]*, the Engineer shall issue, to the Employer, the Final Payment Certificate which shall state:

- (a) the amount which is finally due, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled the balance (if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.

If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 *[Application for Final Payment Certificate]* and Sub-Clause 14.12 *[Discharge]*, the Engineer shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days the Engineer shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

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#### 14.14

##### **Cessation of Employer's Liability**

The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

- (a) in the Final Statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 *[Statement at Completion]*.



However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer.

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**14.15****Currencies of Payment**

The Contract Price shall be paid in the currency or currencies named in the Appendix to Tender. Unless otherwise stated in the Particular Conditions, if more than one currency is so named, payments shall be made as follows:

- (a) if the Accepted Contract Amount was expressed in Local Currency only:
    - (i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Appendix to Tender, except as otherwise agreed by both Parties;
    - (ii) payments and deductions under Sub-Clause 13.5 [*Provisional Sums*] and Sub-Clause 13.7 [*Adjustments for Changes in Legislation*] shall be made in the applicable currencies and proportions; and
    - (iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [*Application for Interim Payment Certificates*] shall be made in the currencies and proportions specified in sub-paragraph (a)(1) above;
  - (b) payment of the damages specified in the Appendix to Tender shall be made in the currencies and proportions specified in the Appendix to Tender;
  - (c) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties;
  - (d) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer to the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
  - (e) if no rates of exchange are stated in the Appendix to Tender, they shall be those prevailing on the Base Date and determined by the central bank of the Country.
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## Termination by Employer

**15.1****Notice to Correct**

If the Contractor fails to carry out any obligation under the Contract the Engineer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

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**15.2****Termination by Employer**

The Employer shall be entitled to terminate the Contract if the Contractor:

- (a) fails to comply with Sub-Clause 4.2 [*Performance Security*] or with a notice under Sub-Clause 15.1 [*Notice to Correct*],
- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- (c) without reasonable excuse fail:
  - (i) to proceed with the Works in accordance with Clause 8 [*Commencement, Delays and Suspension*], or
  - (ii) to comply with a notice issued under Sub-Clause 7.5 [*Rejection*] or Sub-Clause 7.6 [*Remedial Work*], within 28 days after receiving it,

- (d) Subcontracts the whole of the Works or assigns the Contract without the required agreement,
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
- (f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity commission or thing of value, as an inducement or reward:
  - (i) for doing or forbearing to do any action in relation to the Contract, or
  - (ii) for showing or forbearing to show favour or disfavor to any person in relation to the Contract,

or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately.

The employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.

The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods Contractor's Documents and other design documents made by or on behalf of the Contractor.

The Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

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## 15.3

### Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub-Clause 15.2 *[Termination by Employer]* has taken effect, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

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## 15.4

### Payment after Termination

After a notice of termination under Sub-Clause 15.2 5 *[Determination by Employer]* has taken effect, the Employer may:

- (a) proceed in accordance with Sub-Clause 2.5 [*Employer's Claims*],
- (b) withhold further payments to the Contractor until the costs of design, execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or
- (c) recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [*Valuation at Date of Termination*]. After recovering any such losses, damages and extra costs, the Employer shall pay any balance to the Contractor.

## 15.5

### **Employer's Entitlement to Termination**

The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor.

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [*Cessation of Work and Removal of Contractor's Equipment*] and shall be paid in accordance with Sub-Clause 19.6 [*Optional Termination Payment and Release*].

## **Suspension and Termination by Contractor**

## 16.1

### **Contractor's Entitlement to Suspend Work**

If the Engineer fails to certify in accordance with Sub-Clause 14.6 [*Issue of Interim Payment Certificates*] or the Employer fails to comply with Sub-Clause 2.4 [*Employer's Financial Arrangements*] or Sub-Clause 14.7 [*Payment*], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [*Delayed Payment*] and to termination under Sub-Clause 16.2 [*Termination by Contractor*].

If the Contractor subsequently receives such Payment Certificate evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (c) payment of any such Cost plus reasonable profit which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 *[Determinations]* to agree or determine these matters.

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## 16.2

### Termination by Contractor

The Contractor shall be entitled to terminate the Contract if:

- (a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 *[Contractor's Entitlement to Suspend Work]* in respect of a failure to comply with Sub-Clause 2.4 *[Employer's Financial Arrangements]*,
- (b) the Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
- (c) the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 *[Payment]* within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 *[Employer's Claims]*),
- (d) the Employer substantially fails to perform his obligations under the Contract,
- (e) the Employer fails to comply with Sub-Clause 1.6 *[Contract Agreement]* or Sub-Clause 1.7 *[Assignment]*,
- (f) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 *[Prolonged Suspension]*, or
- (g) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

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## 16.3

### Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 *[Employer's Entitlement to Termination]*, Sub-Clause 16.2 *[Termination by Contractor]* or Sub-Clause 19.6 *[Optional Termination, Payment and Release]* has taken effect the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Engineer for the protection of life or property or for the safety of the Works,
- (b) hand over Contractor's Documents Plant Materials and other work, for which the Contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety and leave the Site.

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## 16.4

### Payment on Termination

After a notice of termination under Sub-Clause 16.2 *[Termination by Contractor]* has taken effect, the Employer shall promptly:

- (a) return the Performance Security to the Contractor
- (b) pay the Contractor in accordance with Sub-Clause 19.6 *[Optional Termination, Payment and Release]*, and
- (c) pay to the Contractor the amount of any loss of profit or other loss or damage sustained by the Contractor as a result of this termination.

## Risk and Responsibility

### 17.1

#### Indemnities

The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily Injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and
- (b) damage to or loss of any property, real or personal (other than the Works) to the extent that such damage or loss:
  - (i) arises out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, and
  - (ii) is attributable to any negligence, wilful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [*Insurance Against Injury to Persons and Damage to Property*].

### 17.2

#### Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [*Taking Over of the Works and Sections*]) for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Employer.

After responsibility has accordingly passed to the Employer the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over certificate, until this outstanding work has been completed.

If any loss or damage happens to the Works Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [*Employer's Risks*], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a taking- Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

**17.3****Employers Risks**

The risks referred to in Sub-Clause 17.4 below are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,
- (c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,
- (d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,
- (g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, if any, and
- (h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.

**17.4****Consequences of Employer's Risks**

If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Engineer and shall rectify this loss or damage to the extent required by the Engineer.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (f) and (g) of Sub-Clause 17.3 [*Employer's Risks*] reasonable profit on the Cost shall also be included.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

**17.5****Intellectual and Industrial Property Rights**

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceeding pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Employer shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

- (a) an unavoidable result of the Contractor's compliance with the Employer's Requirements, or

- (b) a result of any Works being used by the Employer
  - (i) for a purpose other than that indicated by, the reasonably to be inferred from the Contract, or
  - (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base date or is stated in the Contract.

The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the Contractor's design manufacture, construction or execution of the Works, (ii) the use of Contractor's Equipment, or (iii) the proper use of the Works.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

## 17.6

### Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under Sub-Clause 16.4 *[Payment on Termination]* and Sub-Clause 17.1 *[Indemnities]*.

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 *[Electricity, Water and Gas]*, Sub-Clause 4.20 *[Employer's Equipment and Free-Issue Material]*, Sub-Clause 17.1 *[Indemnities]* and Sub-Clause 17.5 *[Intellectual and Industrial Property Rights]*, shall not exceed the sum stated in the Particular Conditions or (if a sum is not so stated) the Accented Contract Amount.

This Sub-Clause shall not limit liability in any case of fraud deliberate default or reckless misconduct by the defaulting Party.

## Insurance

### 18.1

#### General Requirements for Insurances

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms consistent with the details annexed to the Particular Conditions.

If policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint

insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, within the respective periods stated in the Appendix to Tender (calculated from the Commencement Date), submit to the other Party:

- (a) evidence that the insurances described in this Clause have been effected, and
- (b) copies of the policies for the insurances described in Sub-Clause 18.2 *[Insurance for Works and Contractor's Equipment]* and Sub-Clause 18.3 *[Insurance against Injury to Persons and Damage to Property]*.

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted the insuring Party shall also give notice to the Engineer.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Employer in accordance with these obligations liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Payments by one to the other Party shall be subject to Sub-Clause 2.5 (Employer's Claims) or Sub-Clause 20.1 (Contractor's Claims), as applicable

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## 18.2

### **Insurance for Works Equipment**

The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than full reinstatement cost including cost of



demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 *[General Requirements for Insurances]*, until the date of issue of the Taking-Over Certificate for the Works.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 *[Defects Liability]* and Clause 12 *[Tests after Completion]*).

The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.

Unless otherwise stated in the Particular Conditions, insurances under this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage,
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 *[Employer's Risks]*,
- (d) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 *[Employer's Risks]*, excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Appendix to Tender (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (e) may however exclude loss of, damage to, and reinstatement of:
  - (i) a part of the Works which is in defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (II) below),
  - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if his other part is in a defective condition due to a defect in its design, materials or workmanship
  - (iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and
  - (iv) Goods while they are not in the Country subject to Sub-Clause 14.5 *[Plant and Materials intended for the Works]*.

If, more than one year after the Base date, the cover described in Sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.5 *[Employer's Claims]* to payment as the Contractor should have expected to have paid such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clauses 18.1 (General Requirements for insurances).

**18.3****Insurance against Injury to Persons and Damage to Property**

The insuring Party shall Insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [*Insurance for Works and Contractors Equipment*]) or to any person (except persons insured under Sub-Clause 18.4 [*Insurance for Contractor's Personnel*]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Appendix to Tender, with no limit on the number of occurrences. If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.

Unless otherwise stated In the Particular Conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties,
- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things Insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
  - (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
  - (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and
  - (iii) a cause listed in Sub-Clause 17.3 [*Employer's Risks*], except to the extent that cover is available at commercially reasonable terms.

**18.4****Insurance for Contractor's Personnel**

The Contractor shall effect and maintain insurance against liability for claims damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Employer and the Engineer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works For a Subcontractor's employees, the insurance may be effected by the Subcontractor but the Contractor shall be responsible for compliance with this Clause.

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## Force Majeure

**19.1****Definition of Force Majeure**

In this Clause, "Force Majeure" means an exceptional event or circumstance:

- (a) which is beyond a Party's control
- (b) which such Party could not reasonably have provided against before entering into the Contract
- (c) which, having arisen such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies
- (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,
- (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

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## 19.2

### Notice of Force Majeure

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

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## 19.3

### Duty to Minimise Delay

Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

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## 19.4

### Consequences of Force Majeure

If the Contractor is prevented from performing any of his obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [*Notice of Force Majeure*] and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) in extension of time for any such delay if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*] and
- (b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 (Definition of force Majeure) and, in the case of sub-paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost.

After receiving this notice the Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

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## 19.5

### Force Majeure Affecting Sub-contractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in

this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

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## 19.6

### **Optional Termination, Payment and Release**

If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [*Notice of Force Majeure*], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [*Cessation of Work and Removal of Contractor's Equipment*].

Upon such termination, the Engineer shall determine the value of the work done and issue a Payment Certificate which shall include:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;
- (c) any other Cost or liability which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works;
- (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
- (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.

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## 19.7

### **Release from Performance under the Law**

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract entitles the Parties to be released from further performance of the Contract then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance without prejudice to the rights of either Party in respect of any previous breach of the Contract and
  - (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [*Optional Termination Payment and Release*] if the Contract had been terminated under Sub-Clause 19.6
- 

## **Claims, Disputes and Arbitration**

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## 20.1

### **Contractor's Claims**

If the Contractor considers himself to be entitled to any extension of the time for Completion and/or any additional payment under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstances giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Engineer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8. 4 [*Extension of Time for Completion*] and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

## 20.2

### **Appointment of the Dispute Adjudication Board**

Disputes shall be adjudicated by a DAB in accordance with Sub-Clause 20.4 *[Obtaining Dispute Adjudication Board's Decision]*. The Parties shall jointly appoint a DAB by the date 28 days after a Party gives notice to the other Party of its intention to refer a dispute to a DAB in accordance with Sub-Clause 20.4.

The DAB shall comprise, as stated in the Appendix to Tender, either one or three suitably qualified persons ("the members"). If the number is not so stated and the Parties do not agree otherwise, the DAB shall comprise three persons.

If the DAB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The Parties shall consult both these members and shall agree upon the third member, who shall be appointed to act as chairman.

However, if a list of potential members is included in the Contract, the members shall be selected from those on the list, other than anyone who is unable or unwilling to accept appointment to the DAB.

The agreement between the Parties and either the sole member ("adjudication") or each of the three members shall incorporate by reference the General Conditions of Dispute Adjudication Agreement contained in the Appendix to these General Conditions, with such amendments as are agreed between them.

The terms of the remuneration of either the sole member or each of the three members shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

If at any time the Parties so agree, they may appoint a suitably Qualified person or persons to replace any one or more members of the DAB. Unless the Parties agree otherwise, the appointment will come into effect if a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment. The replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause.

The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DAB (including each member) shall expire when the DAB has given its decision on the dispute referred to it under Sub-Clause 20.4 *[Obtaining Dispute Adjudication Board's Decision]*, unless other disputes have been referred to the DAB by that time under Sub-Clause 20.4, in which event the relevant date shall be when the DAB has also given decisions on those disputes.

## 20.3

### **Failure to Agree Dispute Adjudication Board**

If any of the following conditions apply namely:

- (a) the Parties fail to agree upon the appointment of the sole member of the DAB by the date stated in the first paragraph of Sub-Clause 20.2 *[Appointment of the Dispute Adjudication Board]*,
- (b) either Party fails to nominate a member (for approval by the other Party) of a DAB of three persons by such date,
- (c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DAB by such date, or
- (d) the Parties fails to agree upon the appointment of a replacement person within 42 days after the date on which the sole member or one of the three members declines to act or is unable to act as result of death, disability, resignation or termination of appointment,

then the appointing entity or official named in the Appendix to Tender shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DAB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.

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## 20.4

### **Obtaining Disputer Adjudication Board's Decision**

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, then after a DAB has been appointed pursuant to Sub-Clauses 20.2 [*Appointment of the DAB*] and 20.3 [*Failure to Agree DAB*] either Party may refer the dispute in writing to the DAB for its decision, with copies to the other Party and the Engineer. Such reference shall state that it is given under this Sub-Clause.

For a DAB of three persons, the DAB shall be deemed to have received such reference on the date when it is received by the chairman of the DAB.

Both Parties shall promptly make available to the DAB all information, access to the Site, and appropriate facilities, as the DAB may require for the purposes of making a decision on such dispute. The DAB shall be deemed to be not acting as arbitrator(s).

Within 84 days after receiving such reference, or the advance payment referred to in Clause 6 of the Appendix - General Conditions of Dispute Adjudication Agreement, whichever date is later, or within such other period as may be proposed by the DAB and approved by both Parties, the DAB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. However, if neither of the Parties has paid in full the invoices submitted by each member pursuant to Clause 6 of the Appendix, the DAB shall not be obliged to give its decision until such invoices have been paid in full. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.

If either Party is dissatisfied with the DAB's decision, then either Party may within 28 days after receiving the decision, give notice to the other Party of its dissatisfaction. If the DAB fails to give its decision within the period of 84 days (or as otherwise approved) after receiving such reference or such payment, then either Party may within 28 days after this period has expired, give notice to the other Party of its dissatisfaction.

In either event, this notice of dissatisfaction shall state that it is given under this Sub-Clause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in Sub-Clause 20.7 [*Failure to Comply with Dispute Adjudication Board's Decision*] and Sub-Clause 20.8 [*Expiry of Dispute Adjudication Board's Appointment*], neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Sub-Clause.

If the DAB has given its decision as to a matter in dispute to both Parties, and no notice of dissatisfaction has been given by either Party within 28 days after it received the DAB's decision, then the decision shall become final and binding upon both Parties.

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## 20.5

### **Amicable Settlement**

Where notice of dissatisfaction has been given under Sub-Clause 20.4 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be

commenced on or after the fifty-sixth day after the day on which notice of dissatisfaction was given, even if no attempt at amicable settlement has been made

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## 20.6

### Arbitration

Unless settled amicably, any dispute in respect of which the DAB's decision (if any) has not become final and binding shall be finally settled by international arbitration. Unless otherwise agreed by both Parties:

- (a) the dispute shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce,
- (b) the dispute shall be settled by three arbitrators appointed in accordance with these Rules, and
- (c) the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.4 *[Law and Language]*.

The arbitrator(s) shall have full power to open up, review and revise any certificate determination, instruction, opinion or valuation of the Engineer, and any decision of the DAB, relevant to the dispute. Nothing shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the DAB to obtain its decision or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DAB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Engineer and the DAB shall not be altered by reason of any arbitration being conducted during the progress of the Works.

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## 20.7

### Failure to Comply with Dispute Adjudication Board's Decision

In the event that:

- (a) neither Party has given notice of dissatisfaction within the period stated in Sub-Clause 20.4 *[Obtaining Dispute Adjudication Board's Decision]*
- (b) the DAB's related decision (if any) has become final and binding, and
- (c) a Party fails to comply with this decision,

then the other Party may, without prejudice to any other rights it may have refer the failure itself to arbitration under Sub-Clause 20.6 *[Arbitration]*. Sub-Clause 20.4 *[Obtaining Dispute Adjudication Board's Decision]* and Sub-Clause 20.5 *[Amicable Settlement]* shall not apply to this reference.

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## 20.8

### Expiry of Dispute Adjudication Board's Appointment

If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DAB in place whether, by reason of the expiry of the DAB's appointment or otherwise:

- (a) Sub-Clause 20.4 *[Obtaining Dispute Adjudication Board's Decision]* and Sub-Clause 20.5 *[Amicable Settlement]* shall not apply, and
  - (b) the dispute may be referred directly to arbitration under Sub-Clause 20.6 *[Arbitration]*
-



# APPENDIX

## General Conditions of Dispute Adjudication Agreement

<b>1</b>	Each "Dispute Adjudication Agreement" is tripartite agreement by and between:
<b>Definitions</b>	<ul style="list-style-type: none"><li>(a) the "Employer";</li><li>(b) The "Contractor" ; and</li><li>(c) The "Member" who is defined in the Dispute Adjudication Agreement as being:<ul style="list-style-type: none"><li>(i) the sole member of the "DAB" (or "adjudicator") and, where this is the case, all references to the "Other Members" do not apply,</li><li>or</li><li>(ii) one of the three persons who are jointly called the "DAB" (or "dispute adjudication board") and, where this is the case, the other two persons are called the "Other Members".</li></ul></li></ul> <p>The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Adjudication Agreement, which incorporates this Appendix. In the Dispute Adjudication Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.</p>
<b>2</b>	
<b>General Provisions</b>	<p>The Dispute Adjudication Agreement shall take effect when the Employer, the Contractor and each of the Members (or Member) have respectively each signed a dispute adjudication agreement.</p> <p>When the Dispute Adjudication Agreement has taken effect, the Employer and the Contractor shall each give notice to the Member accordingly. If the Member does not receive either notice within six months after entering into the Dispute Adjudication Agreement, it shall be void and ineffective.</p> <p>This employment of the Member is a personal appointment. No assignment or subcontracting of the Dispute Adjudication Agreement is permitted without the prior written agreement of all the parties to it and of the Other Members (if any).</p>
<b>3</b>	
<b>Warranties</b>	<p>The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Engineer. The Member shall promptly disclose, to each of them and to the Other Members (if any ), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.</p> <p>When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:</p> <ul style="list-style-type: none"><li>(a) experienced in the work which the Contractor is to carry out under the Contract,</li><li>(b) Experienced in the interpretation of contract documentation, and</li><li>(c) fluent in the language for communications defined in the Contract.</li></ul>
<b>4</b>	
<b>General Obligations of The Member</b>	<p>The Member shall:</p> <ul style="list-style-type: none"><li>(a) have no interest financial or otherwise in the Employer, the Contractor or the Engineer, nor any financial interest in the Contract except for payment under the Dispute Adjudication Agreement;</li></ul>

- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Adjudication Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Adjudication Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Engineer, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Adjudication Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
- (e) comply with the annexed procedural rules and with Sub-Clause 20.4 of the Conditions of Contract;
- (f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
- (g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Engineer regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Adjudication Agreement;
- (h) ensure his/her availability for any site visit and hearings as are necessary; and
- (i) treat the details of the Contract and all the DAB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any).

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## 5

### **General Obligations of the Employer and the Contractor**

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DAB's activities under the Contract and the Dispute Adjudication Agreement, and except to the extent that prior agreement is given by the Employer, the Contractor and the Other Members (if any). The Employer and the Contractor shall be responsible for compliance with this provisions, by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

- (a) be appointed as an arbitrator in any arbitration under the Contract;
- (b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he/she relieved from liability under the preceding paragraph.

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## 6

### **Payment**

The payment shall be paid follows, in the currency named in the Dispute Adjudication Agreement:

- (a) a daily fee shall be considered as payment in full for:
  - (i) each working day spent reading submissions, attending hearings (if any), preparing decisions, or making site visits (if any); and
  - (ii) each day or part of day up to maximum of two days travel time each direction for the journey (if any) between the Member's home and site or another location of a meeting with Other Members (if any) and/or the Employer and the Contractor;
- (b) all reasonable expenses incurred in connections with the Member's duties, including the cost of secretarial services, telephone calls, courier charges, faxes and telexes, travel expenses, hotel and subsistence costs; a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (a) of this Clause; and
- (c) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The daily fee shall be as specified in the Dispute Adjudication Agreement:

Immediately after the Dispute Adjudication Agreement takes effect, the Member shall, before engaging in any activities under the Dispute Adjudication Agreement, submit to the Contractor, with a copy to the Employer, an invoice for (a) an advance of twenty-five (25) percent of the estimated total amount of daily fees to which he/she will be entitled and (b) an advance equal to the estimated total expenses that he/she shall incur in connection with his/her duties. Payment of such invoice shall be made by the Contractor upon his receipt of the invoice. The Member shall not be obliged to engage in activities under the Dispute Adjudication Agreement until each of the Members has been paid in full for invoices submitted under this paragraph.

Thereafter the Member shall submit to the Contractor, with a copy to the Employer invoices for the balance of his/her daily fees and expenses, less the amounts advanced. The DAB shall not be obliged to render its decision until invoices for all daily fees and expenses of each Member for making a decision shall have been paid in full.

Unless paid earlier in accordance with the above, the Contractor shall pay each of the Member's invoices in full within 28 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Adjudication Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DAB; and without prejudice to the Employers rights remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Sub-Clause 14.8 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 28 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice to the Employer and the Contractor. The notice shall take effect when received by them both. Any such notice shall be final and binding on the Employer, the Contractor and the Member.

7

**Default of the Member**

If the Member fails to comply with any obligation under Clause 4, he/she shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DAB which are rendered void or ineffective

8

**Disputes**

Any dispute or claim arising out of or In connection with this Dispute Adjudication Agreement, or the breach, termination or invalidity thereof, shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.

## Annex

## PROCEDURAL RULE

- 1 The Employer and the Contractor shall furnish to the DAB one copy of all documents which the DAB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the matter in dispute. All communications between the DAB and the Employer or the Contractor shall be copied to the other Party. If the DAB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.
- 2 The DAB shall proceed in accordance with Sub-Clause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors the DAB shall:

  - (a) act fairly and Impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and
  - (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.
- 3 The DAB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.
- 4 Except as otherwise agreed in writing by the Employer and the Contractor, the DAB shall have power to adopt an Inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Engineer, and to proceed in the absence of any party who the DAB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.
- 5 The Employer and the Contractor empower the Dab, among other things, to:

  - (a) establish the procedure to be applied in deciding a dispute,
  - (b) Decide upon the DAB's own jurisdiction, and as to the scope of any dispute referred to it,
  - (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules,
  - (d) take the initiative in ascertaining the facts and matters required for a decision,
  - (e) make use of its own specialist knowledge, if any,
  - (f) decide upon the payment of financing charges in accordance with the Contract,
  - (g) decide upon any provisional relief such as interim or conservatory measures, and
  - (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute.
- 6 The DAB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DAB shall make and give its decision in accordance with Sub-Clause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the Dab comprises three persons:

- (a) it shall convene in private after a hearing, If any, in order to have discussions and prepare its decision;
  - (b) it shall endeavor to reach a unanimous decision: if this proves impossible, the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare written report for submission to the Employer and the Contractor; and
  - (c) if a Member fails to attend a meeting or hearing, or to fulfill any required function, the other two Members may nevertheless proceed to make a decision, unless:
    - (i) either the Employer or the Contractor does not agree that they do so, or
    - (ii) the absent Member is the chairman and he/she instructs the other Member to not make a decision.
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## **BIDSF project C16.1**

# **CONDITIONING OF BUFFER STORAGE AREAS**

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H1 Technical Specification  
(Doc.Id. C161-TS-PMU-06001/EN.rev2.valid)

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## DEFINITIONS, ABBREVIATIONS AND ACRONYMS

<b>ARSOZ</b>	Administrator database for maintenance and reparation
<b>BIDSF</b>	Bohunice International Decommissioning Support Fund (established and administered by EBRD in accordance with the Rules)
<b>BOZP</b>	Health & Safety
<b>Building Act Coll.</b>	Act No. 50/1976 Coll. on Land-use Planning and Building Order (Building Act), as amended Collection of laws
<b>Contractor</b>	Company selected by the Employer for development of the works
<b>CS9</b>	Central storage area no. 9
<b>EBRD</b>	European Bank for Reconstruction and Development as the Administrator of grant funds on behalf of the contributors to the BIDSF
<b>EC</b>	European Commission
<b>Employer</b>	JAVYS, a.s.
<b>EPS</b>	Electronic Fire Signalization System
<b>EU</b>	European Union
<b>FIDIC</b>	International Federation of Consulting Engineers
<b>FPS</b>	Fire Protection System
<b>I&amp;C</b>	Instrumentation & Control
<b>ICM</b>	Interface Control Manual
<b>IDO</b>	Immediate Decommissioning Option
<b>IK</b>	ID (identification card)
<b>IS RAO</b>	Interim Storage of Radioactive Waste
<b>ISO</b>	International Organization for Standardization
<b>JAVYS</b>	Jadrova a vyradovacia spoločnosť, a.s. (Nuclear and Decommissioning Company, plc.)
<b>MSK</b>	MSK seismic scale - Medvedev Sponhauer Karnik scale
<b>MZP SR</b>	Ministry of Environment of the Slovak Republic
<b>NFPA</b>	National Fire Protection Association
<b>NPP</b>	Nuclear Power Plant
<b>NRA (UJD SR)</b>	Slovak Nuclear Regulatory Authority (Úrad jadrového dozoru SR)
<b>OHSAS</b>	Occupational Health and Safety Assessment Series
<b>PMU</b>	Project Management Unit
<b>QA</b>	Quality Assurance
<b>QAP</b>	Quality Assurance Plan
<b>SE</b>	Slovenské elektrárne
<b>SO</b>	Civil Structures system
<b>SOPOS</b>	Technical inspection and testing report
<b>SPP</b>	Company Slovenský Plynárenský Priemysel

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**UVZ**                      Public Health Authority (Úrad verejného zdravotníctva)  
**V1 NPP**                Jaslovské Bohunice V1 NPP  
**WC**                      Toilet room

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## 1. INTRODUCTION

### 1.1 BACKGROUND

Based on Slovak Government Decision No. 801/1999 Coll. and the Agreement on the Accession to the European Union, the Slovak Republic undertook the early shut down of the V1 Nuclear Power Plant in Bohunice. Unit 1 of the plant was shut down on 31<sup>st</sup> December 2006. Unit 2 was shut down on 31<sup>st</sup> December 2008.

Activities related to the V1 NPP operation termination and decommissioning are performed through projects financed by the Bohunice International Decommissioning Support Fund (BIDSF). The Fund was created on the basis of the Frame Agreement between the Slovak Republic and the European Bank for Reconstruction and Development (EBRD) of 16<sup>th</sup> November 2001.

According to the approved decommissioning option, that is “Immediate Decommissioning” (IDO), the V1 decommissioning consists of immediate and continuous dismantling of the equipment and facilities and subsequently demolition of the buildings. The objective of the decommissioning process is the dismantling of the V1 NPP technological equipment and structures and final disposal of the waste. The two units of V1 NPP contain significant amount of material (roughly 800 000 tons), therefore one of the requirements for the V1 NPP decommissioning process is to handle this large amount of waste in a safe manner. The project C16.1 refers to facilities for buffer storage of waste.

### 1.2 OBJECTIVES

The objective of the project C16.1 is to prepare some buildings for their use as storage areas or as external storage areas for waste (in accordance with the Act No. 223/2001 Coll. on wastes as amended and with the regulation of the Ministry of Environment of the Slovak Republic No. 284/2001 Coll., establishing the Wastes catalogue).

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The purpose of the present C16.1 Technical Specification is to specify the requirements for implementation of the activities needed for conditioning of the selected buildings.

Buildings and outdoor areas selected for use as C16.1 buffer storage are as follows:

- 760-II.3/4/5:V1, maintenance training centre
- 760-III.1:V1, workshop on V1 site
- 740-VII.1A:V1, workshop for machinery
- 760-1.3:V1, workshop- abrasive plant
- A free area with grass planted located between the Interim Spent Fuel Storage Building 840M:V1 and the Auxiliary Building 801:V1

Figure 2 below shows the location of these buildings and areas within V1 NPP.

### 1.3 DESCRIPTION OF THE ACTUAL BUILDINGS CONDITION AND EXISTING EQUIPMENT

The buildings selected and the external area that will be used as buffer storages as part of project C16.1 are not contaminated with radioactivity. These buildings are located within the V1 NPP security fence in order to limit the flow of material only to the site of V1 NPP.

The current status of each building and external area selected to be used as buffer storages is described in this section below.

Drawings and plans are provided in Appendix 1.

Building drawings (plan views and elevation drawings, including front elevations) of the selected buildings are provided in the Tender Document, volume III.iii in the form of CD-ROM.

#### **Building 760-II.3/4/5:V1, MAINTENANCE TRAINING CENTRE**

The 760-II.3/4/5:V1 building (maintenance training centre) is an assembly hall of rectangular footprint (top view) with metal bearing structure and masonry external walls with window fillings around the perimeter. The roof is covered with asphalt strips, which are in good condition. The length of the building is 171 m, the width is 22 m. Entrance to the building is made through door openings or steel gates; there is also the possibility of transport of large-dimensional components, in the lengthwise direction, the building is crossed by a railway. In the interior of the building, a 25-tonne bridge crane is located. The building is equipped with fire protection, heating and lighting system.

Total area of the building: 3,762 m<sup>2</sup>

Current useful area: approximately 3,400 m<sup>2</sup>

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Final useful area (after the C16.1 project termination): approximately 3,400 m<sup>2</sup>

A large number of equipment items and materials are currently stored inside the building.

#### **Building 760-III.1: V1, WORKSHOP ON V1 SITE**

The 760-III.1:V1 building (workshop on V1 site) is a rectangular brick hall with dimensions: 42 m x 12 m. The roof of the building is made of steel beams covered with channelled zinc-coated plate. Internal side of the roof (ceiling) is insulated and covered with soffit of multi-wall polycarbonate (Lexan). In some places, on the ridge of the roof, the covering sheet metal is corroded. Natural light is provided through window fillings around the building perimeter. Approximately 1/3 of the entire area of the roof is corroded.

The building is equipped with a fire protection system. The building is provided with heating system. Artificial light is provided by interior suspended lamps. The assembly hall is separated from the office premises and the WC. There are cracks (fissures) in the external corners of the building. Machines and equipment as well as materials used during the maintenance are located here.

Total area of the building: 504 m<sup>2</sup>

Current useful area: approximately 450 m<sup>2</sup>

Final useful area (after the C16.1 project termination): approximately 450 m<sup>2</sup>

#### **Building 740-VII.1A: V1, WORKSHOP FOR MACHINERY**

The 740-VII.1A:V1 building (workshop for machinery) has footprint dimensions of 45 m x 12 m. The arrangement of the building is separated in two parts; the bearing construction is made up of steel frame roofed with steel trusses and zinc-coated plate covering.

The external walls are composite – masonry and steel with embedded window openings. Entrance to the building is through large-dimensional steel gates in three places.

The building is equipped with a fire protection system. The building is heated and has interior lighting. In addition to the assembly hall, there is a WC and offices in the building. There is installed equipment, machines and material in the building. In the office, there is office furniture.

Total area of the building: 540 m<sup>2</sup>

Current useful area: approximately 500 m<sup>2</sup>

Final useful area (after the C16.1 project termination): approximately 500 m<sup>2</sup>

#### **Building 760-1.3: V1, WORKSHOP - ABRASIVE PLANT**

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The 760-1.3:V1 building (workshop - abrasive plant) has irregular footprint dimensions of 42 m x 20 m and train rails cross the building.

The bearing construction is made of reinforced-concrete prefabricated frame roofed with reinforced concrete beams and thermal insulation roof panels and hydro-insulating layer. Hydro-insulating layer is damaged in several places. In the external walls, steel single windows and two large dimensional steel gates are embedded.

The building is equipped with fire protection system, it is heated and has interior lighting. In terms of arrangement, within the great hall, the office part and WC is separated. Machines and equipment are located here and the building is divided into several working areas.

Total area of the building: 840 m<sup>2</sup>

Current useful area: approximately 750 m<sup>2</sup>

Final useful area (after the C16.1 project termination): approximately 760 m<sup>2</sup>

#### **OUTDOOR AREA BETWEEN 840M:V1 AND 801:V1 (CS9-central storage)**

This is a free area with grass planted having dimensions of approximately 70 m x 60 m (see the drawing on CD-ROM attached to the tender documentation), located between 840M:V1 (Interim Spent Fuel Storage) building and 801:V1 (Reactor Building) building. As shown in the pictures below, the external area is currently empty of materials and there is not a fence around it.

Total area of the building: 4,200 m<sup>2</sup>

Current useful area: approximately 0 m<sup>2</sup>

Final useful area (after the C16.1 project termination): approximately 3,660 m<sup>2</sup>

## **1.4 SITE CONDITIONS**

The Contractor shall perform all buildings (and area) conditioning activities, as well as the related waste management activities, within the V1 NPP Bohunice site. The location has the environmental and seismic conditions, indicated in the following paragraphs.

### **1.4.1 SITE ENVIRONMENTAL CONDITIONS**

The Bohunice site is situated within the region of Blatnianska Priehlbina Depression, 60 km northeast of the capital of Slovakia, Bratislava. V1 NPP Bohunice is located near the town of Trnava (70,000 inhabitants), the spa town of Piešťany (30,000 inhabitants) and at a distance of 3 km from the municipality of Jaslovské Bohunice.

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Local meteorological conditions, cumulative over the past 40 years in the Bohunice site, are the following.

#### 1.4.2 SEISMIC CONDITIONS

Seismic activity of the given region is focused on Dobrá Voda area, where the second strongest earthquake on Slovak territory was registered. For Bohunice area, 6° to 7° of MSK scale of seismic hazard in macro-seismic intensity values was calculated with respect to a 475 year return period. Max. horizontal ground surface acceleration is 0.344 g; max. vertical ground surface acceleration is 0.214 g.

Current standards for civil construction at Slovakia are the only requirement.

## 2. SCOPE OF SUPPLY

The Contractor shall be responsible for performing all building conditioning works and procuring materials, tools and means needed for, as well as for the management of the produced waste in accordance with the sub-clauses of this clause indicated below.

The Contractor shall develop the project documentation and implement the necessary modification and conditioning works in order to reach a condition of the selected buildings that would allow their use for buffer storage purposes, all through the decommissioning process.

### 2.1 PROJECT DESCRIPTION

It is necessary to condition the buildings and external areas selected as buffer storage areas specified in the section 1.2 (760-II.3/4/5:V1, 760-III.1:V1, 740-VII.1A:V1, 760-1.3:V1 buildings and external area between 840M:V1 and 801:V1 buildings), that are no longer needed following the shutdown of V1 NPP.

The scope of works covers all activities related to the conditioning of buffer storage. Tools and materials to be used are specified in the sections 2.4 and 2.5.

Main project tasks to be addressed are as follows:

- Elaboration of the project documentation, including the Detailed Work Plan;
- Elaboration of other documentation required for the project implementation, such as the safety documentation, documentation for hazardous waste management, if such waste occurs (see requirements in section 2.6 Technical Documentation);
- Preparatory and auxiliary works:
  - Establishment of waste management areas (mainly areas for containers in which the waste will be transported to the specified location).
  - Sorting waste according to its type.

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- Transportation of the produced waste to the specified location, where the materials will be reused, recycled or disposed of.
- Buildings modification works (conditioning).

It is the responsibility of the Contractor to perform all analyses, tests, inspections and other activities which might be considered necessary to ensure that the design, materials and workmanship are satisfactory for the service specified in the chapter 2.2, or required by common usage or good practice.

## 2.2 FINAL USE OF THE BUFFER STORAGE BUILDINGS

All modifications to be carried out shall be those appropriate to the proposed use of each building. The use of the buildings during decommissioning is the following:

- Building 760-II.3,4,5 (Maintenance Training Centre) for buffer storage of conventional (non contaminated) large components and packaged forms.
- Building 740-VII.1A (Workshop for Machinery) for buffer storage of conventional non-hazardous waste.
- Building 760-I.3 (Workshop-abrasive plant) for storage of spare parts and tools for maintenance purposes and eventually for the operation of the cable recycling plant (provided in the frame of different BIDSF project).
- Building 760-III.1 (workshop on V1 site) for buffer storage of small quantities of oils and chemical waste.
- External area for open-air storage of soil, construction debris materials, containers and for parking of vehicles.

## 2.3 LIMITS OF SUPPLY

Equipment, tools, machines and materials are installed inside the buildings. The Employer will remove unnecessary material as a part of preparation works for further building conditioning.

Removal of all contaminated/activated equipment from the building No. 760-II.3/4/5 will be provided by the Employer before commencement of the C16.1 project implementation.

The repartition of the duties and responsibilities between the Contractor and the Employer in the course of the entire project implementation cycle is given below (Table 3). In accordance with the QA program to be developed by the Contractor and agreed upon with the Employer, the Contractor shall execute all steps of the project implementation.



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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<b>1. Project Management and Organization</b>	
<ul style="list-style-type: none"> <li>• Organization of all meetings (site kick-off meeting, monthly progress meeting, specific meetings at the request of either party) and development of the reports including development of minutes of all meetings and Hand over Certificate. Minutes of meetings shall be delivered to the Employer within 7 working days after each meeting</li> <li>• Overall project co-ordination during all project phases</li> <li>• Management of interfaces between the Contractor and Employer, through the upgraded Interface Control Manual (ICM)</li> <li>• Development of the procedures for implementation of works</li> <li>• Establishment of organization structure of the project management, description of responsibilities, authority and obligations of the key personnel of contractor, together with specification of duties, responsibilities and interfaces among all participants of the project (included in the Inception report)</li> </ul> <p><b>Organization of monthly progress meetings:</b></p> <ul style="list-style-type: none"> <li>• Discussions on the work progress. Schedule evaluation, evaluation of modifications of the original technical documentation.</li> <li>• Development of the monthly reports</li> </ul>	<ul style="list-style-type: none"> <li>• Leading role in all meetings (site kick-off meeting, monthly progress meetings, specific meetings at the request of either party)</li> <li>• Monitor and control the execution of all contractual works, as well the time schedule and manuals</li> <li>• Supply information on the status of the buildings, with details on structures, systems and components.</li> </ul>
<b>2. Kick-off meeting on-site</b>	
<ul style="list-style-type: none"> <li>• Organization of the kick-off meeting, including the visit to the site: <ul style="list-style-type: none"> <li>◦ Discussion/clarification of technical questions.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Provision of organizational support to the Contractor's experts for achieving objectives of the delegation.</li> </ul>

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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<ul style="list-style-type: none"> <li>o Discussion/clarification of project interfaces.</li> <li>o Organizational agreements, including discussion for the work permit system procedure and Health and safety requirements.</li> <li>o Arrangement of the Input Data supply.</li> <li>o Confirmation of the Detailed Time Schedule.</li> <li>o Risks management discussions.</li> <li>o Submission of the list of the Contractor's leading workers.</li> <li>o Submission of a list of employees to obtain ID cards (IK).</li> <li>o Submission of the employee list, including IK numbers, and numbers of technical means for transport of materials to obtain AB-permissions, A-permissions for individual buildings / Objects.</li> </ul>	
<b>3. Technical Documentation</b>	
<ul style="list-style-type: none"> <li>• Inception report.</li> <li>• Development of the project Quality Assurance Plan in accordance with ISO 9001.</li> <li>• Development of the Environmental Plan.</li> <li>• Development of the Waste Management Plan.</li> <li>• Health and Safety risks assessment, including the possibility of unexpected asbestos materials (Government Order No. 253/2006 Coll.)</li> <li>• Elaboration of the documentation necessary for the Notification of Building Modifications (for the reinforcement of the grass plot between building 840M:V1 and building 801:V1).</li> <li>• Elaboration of the Project Documentation</li> </ul>	<ul style="list-style-type: none"> <li>• Review and approval of the Documentation.</li> <li>• Submission of the documentation to the relevant Authorities, in particular Notification of the works to be performed to the Building Authority (UJD), to obtain positive statement.</li> <li>• Provide necessary input data.</li> <li>• Review and approval of the detailed design and of the accompanying documentation.</li> </ul>

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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<p>for the change in the functional use of building 760-III.1 (see chapter 2.8.2) in the scope of the detailed design (according to Appendix 4 of UNIKA) including the priced Bill of Quantities.</p> <ul style="list-style-type: none"> <li>• Elaboration and delivery of the Design Documentation and the Building Inspection materials pursuant to Decree No. 453/2000 Coll. [ 7 ] and JAVYS procedures (JAVYS /14/SM-RP-06, JAVYS /14/SM-RD-02, issue No. 6, appendix G).</li> <li>• Elaboration of the Health and Safety Plan in accordance with Governmental Order No. 396/2006 Coll. with procedures for risk management of the works, controlling adherence to worker protection, controlling work accidents, etc.</li> <li>• Elaboration of the Detailed Work Plan, with a detailed description of the works, definition of the work places (sequence of works according to areas or systems), necessary tools, handling devices, work teams, duration of each work activity, work permit system for work monitoring. Instruction shall be provided on the specific procedures to be followed by workers, depending on the type of job, and depending on possible risk, and updating when required.</li> <li>• If, as result of the risk assessment, some materials, containing asbestos are found unexpectedly, procedures shall be developed for these specific materials, in consideration of possible additional requirements from the point of view of Health and Safety, especially documentation needed for issuance of the permit according sec. 13 (4) letter k) of the Act No. 355/2007 Coll.</li> </ul> <p>These procedures must be developed by the Contractor also for other identified</p>	

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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<p>hazardous materials.</p> <ul style="list-style-type: none"> <li>• Submission of the Certificate on the minimization of the hazardous waste.</li> <li>• Elaboration of the Preliminary Environmental Study for Building 760-III.1:V1 for the purposes of the Ascertaining Procedure pursuant to Act No. 24/2006 Coll.</li> </ul>	
<b>4. Engineering activities</b>	
<ul style="list-style-type: none"> <li>• Assistance to the Project Manager by providing information/data and documentation for Project Risk Assessment Analysis.</li> <li>• Support the Employer in obtaining approval, permissions and decisions of Regulators, if required. In particular support about possible additional documentation to obtain the positive statement from Building Office (UJD), if required.</li> <li>• Certification of hazardous waste stabilization pursuant to § 21 Section 8 of Act No. 223/2001 Coll. on wastes.</li> <li>• Provision of the expert opinion pursuant to §14, Section 1, Letter d) of Act No. 124/2006 Coll. [ 11 ].</li> </ul>	<ul style="list-style-type: none"> <li>• Obtaining approval, permissions and decisions of Regulators.</li> <li>• Risk Management.</li> </ul>
<b>5. Scheduling</b>	
<ul style="list-style-type: none"> <li>• Development and updating of the Detailed Time Schedule.</li> </ul>	<ul style="list-style-type: none"> <li>• Review and approval of the detailed Time Schedule.</li> </ul>
<b>6. Building Conditioning (see Chapter 3)</b>	
<ul style="list-style-type: none"> <li>• Development of buildings data.</li> <li>• Arrangement of the working / storing places.</li> <li>• Transport of the dismantled materials to the location in the area of JAVYS – Jaslovské</li> </ul>	<ul style="list-style-type: none"> <li>• General Control of the Health and Safety requirements followed by the Contractor.</li> <li>• Review the buildings data.</li> <li>• Supervise the preparatory and building</li> </ul>

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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<p>Bohunice, specified by the Employer.</p> <ul style="list-style-type: none"> <li>Building conditioning for reuse (civil, mechanical, electrical, etc. modifications).</li> </ul>	<p>conditioning works.</p> <ul style="list-style-type: none"> <li>Approval of places for the disposal of dismantled equipment and material to be used by the Contractor.</li> </ul>
<b>7. Dismantling and demolition</b>	
<ul style="list-style-type: none"> <li>Development of dismantling data.</li> <li>Dismantling and demolition of the existing civil /mechanical parts and networks (see chap. 3.2).</li> <li>Taking over of the dismantled equipment and material in the place specified by the Employer.</li> <li>The Contractor shall have the responsibility for the management of all dismantled and demolished material. The Contractor will dispose these materials in the places assigned by the Employer.</li> </ul>	<ul style="list-style-type: none"> <li>Review of the dismantling data.</li> <li>Supervision of the dismantling and disposal works.</li> <li>Specification of the place for disposal of dismantled equipment and demolished material, as specified in the Contractor Duties.</li> </ul>
<b>8. Installation and Erection Works</b>	
<ul style="list-style-type: none"> <li>Earthworks, reinforcement, steelwork, concreting.</li> <li>Civil finishing works.</li> <li>Technological equipment installation.</li> <li>Electrical and I&amp;C equipment installation.</li> <li>Cable installation and connection.</li> <li>Inspection and testing report according to Regulation No. 508/2009 Coll. (SOPOS).</li> </ul>	<ul style="list-style-type: none"> <li>Obtaining the state authority's permission for installation works (if required).</li> <li>Surveillance of the erection and installation works.</li> <li>Provision of electricity, water and compressed air with the necessary connections for the erection and installation.</li> <li>Handover of the construction site for the works.</li> <li>Review of manuals and operational procedures.</li> </ul>
<b>9. Waste</b>	
<ul style="list-style-type: none"> <li>Transportation, manipulation and delivery of all materials to be reused, recycled or disposed of from the buildings to the buffer</li> </ul>	<ul style="list-style-type: none"> <li>Supervise the waste managing as well as the correct path of the waste, waste controls and permits, etc.</li> </ul>

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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<p>storages (metallic parts) or the facilities for increasing the value of waste or its disposal (all other wastes including hazardous wastes).</p> <ul style="list-style-type: none"> <li>Waste disposal, excluding utilizable waste such as secondary raw materials, listed in Tender Documentation -Safety and Technical Conditions, point 7n.</li> <li>Certificate of the minimization of the hazardous waste required in the facilities for increasing the value of waste or its disposal.</li> </ul>	
<b>10. Procurement</b>	
<ul style="list-style-type: none"> <li>Purchase of the necessary materials.</li> <li>Quality Control (QC) Surveillance.</li> </ul>	<ul style="list-style-type: none"> <li>QC Surveillance.</li> <li>Checking of material stock.</li> </ul>
<b>11. Delivery</b>	
<ul style="list-style-type: none"> <li>Storage of the materials.</li> </ul>	<ul style="list-style-type: none"> <li>Support regarding storage at the NPP site. The individual places shall be approved by the Employer.</li> </ul>
<b>12. Training</b>	
<ul style="list-style-type: none"> <li>Documentation demonstrating that the Contractor's personnel have the specific training required by the Health and Safety requirements.</li> <li>Training to personnel who shall manipulate crane or/and hoists.</li> </ul>	<ul style="list-style-type: none"> <li>Review that the Contractor follows the training requirements on Health and Safety.</li> </ul>
<b>13. Handing over of the buildings</b>	
<ul style="list-style-type: none"> <li>Delivery of the As Built Documentation according to the requirements that were included within the scope of the rate book UNIKA Appendix 4. The Accompanying Technical Documentation divided according to the Civil Structure system (SO) stated in the Detailed Design documentation, or</li> </ul>	<ul style="list-style-type: none"> <li>Review and approval of the Documentation.</li> <li>Application development for Trial Operation.</li> <li>Submission of the House inspection proposal.</li> <li>Development of the Technical decision on</li> </ul>

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Table 3 – Repartition of Duties

Duties of the Contractor	Duties of the Employer
<p>according to the operational units (PS-Process system or DPS-Process Subsystem) in terms of requirements of JAVYS, a.s., valid to the date of taking over the works.</p> <ul style="list-style-type: none"> <li>Assistance to the Employer for the Building Inspection.</li> <li>Participation on Building Inspection.</li> <li>Development of the Final Commissioning Report.</li> <li>Development of the Final Contract Report.</li> </ul>	<p>Commissioning.</p> <ul style="list-style-type: none"> <li>Supervision of the Commissioning works.</li> <li>Notification to the Contractor if problems arise on the equipment or its interfacing with the existing systems.</li> <li>Acceptance of the Building Inspection.</li> <li>Issuance of the Taking over Certificate.</li> <li>Issuance of the Performance Certificate.</li> <li>Acceptance of the Contract Final Report.</li> </ul>
<b>14. Defect notification period</b>	
<ul style="list-style-type: none"> <li>Execution of the Contractor's activities in time of warranty period.</li> <li>Defects and damage repairs.</li> </ul>	<ul style="list-style-type: none"> <li>Notification of the defects.</li> </ul>
<b>15. Other Services</b>	
<ul style="list-style-type: none"> <li>Travelling, accommodation and boarding of Contractor's personnel on the site.</li> <li>Hand-over of utilizable waste like secondary raw material, listed in Tender Documentation, Vol. III, to the Employer.</li> </ul>	

## 2.4 SERVICES SUPPLY

In order to let the premises free for further use as buffer storage space for conventional waste, the selected buildings have to be prepared for their subsequent use.

The selected buildings shall be conditioned so that they can be used at least until 2025. The Contractor shall ensure that, after completing the conditioning of the selected buildings, no life extension works induced by the degradation phenomena (erosion, corrosion, fatigue, etc.) are required during the period up to 2025 – the Contractor shall use materials and procedures with corresponding service life.

The scope of works of the Contractor includes all the necessary tools and means for performing the works to complete Employer's satisfaction, including the assembly and disassembly of

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scaffoldings and any other necessary auxiliary structure required, as well as the equipment necessary to condition the buildings.

## 2.5 MATERIALS SUPPLY

All devices and materials (e.g. ventilation system, cables, windows, door...) shall be new, unused, of the most recent current models, and in accordance with the technical documentation provided by the Contractor and approved by the Employer.

The devices and materials supplied shall provide the highest safety level for the personnel, related to civil works, operations with electricity, and other harmful factors.

All devices shall be compatible and the Contractor shall perform connection of these with the interfacing existing equipment and systems.

## 2.6 TECHNICAL DOCUMENTATION

Design documentation for buildings conditioning shall be developed by the Contractor and submitted to Employer for approval, including all documents necessary for the application for building permit and other documentation pursuant to the Building Act.

The **Detailed Work Plan** shall describe the works to be performed and shall be developed as a document for the day by day jobs to be performed. This document shall be reviewed by the Contractor when required (function of risks or job conditions changing). The Detailed Work Plan shall include at least:

- description of the works, taking into account special features which can have risk for the workers,
- definition of the sequential schedule/order of the tasks, with definitions of routes, work places, tools to be managed for each task and other handling devices, work teams to perform jobs and/or personnel necessary, duration of each work activity,
- work requirements according to the work permit system,
- Detailed Work Plan shall refer to a more specific and detailed procedure for each detailed task, with special considerations/recommendations to be followed depending on the type of job and the risk involved, as for instance during the identification of possible equipment with hazardous waste or important fire load.

The Contractor shall study in advance the actual state of the selected buildings and describe the conditioning process already in the Tender as well as specify the equipment and materials needs.

The **Health and safety Plan** shall analyse all possible risks at work for the tasks to be developed under the scope of this specification. Special attention shall be paid to working at heights, handling heavy loads, etc. and all the specific risk related to the work to be done. The Plan will be approved by the Project Manager before starting the works.



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The Contractor shall provide training and inform the workers about the existing risks, individual and collective protection measures to be taken, etc. The Plan shall also define the detailed procedures needed. Additional measures for reducing the risks shall be implemented.

The possibility of unexpected asbestos materials (Government Order 253/2006 Coll.) shall be also taken into account; these materials shall be appropriately managed during project implementation, in compliance with the legal requirements (see section 2.8).

The **Waste Management Plan** to be provided shall describe the quantities and types of waste produced during the works, as well as how the waste shall be managed. Optimization is required for waste transportation and waste utilization or final disposal.

The Contractor shall analyse all possible environmental impacts and provide measures for prevent or minimize them. Possible impacts are between others:

- mud / dust during works,
- noise,
- liquid/solid waste disposal,
- air pollution,
- contamination from oils / petroleum used in the works.

The Contractor shall have certified system of Environmental Management according to ISO 14001:2004.

## 2.7 QUALITY ASSURANCE

The purpose of this section is to define the requirements for the Contractor's Quality Assurance Plan, as well as to establish the responsibilities, interfaces and other aspects related with the execution of all phases of the C16.1 project.

### 2.7.1 Quality Assurance Plan

The Contractor shall establish and submit to the Employer for approval within 1 (one) month after the time of contract award and in any case before actual start of the contractual activities, a Quality Assurance Plan (QAP) which determines the policies, procedures and instructions for implementing the works under the scope of the project.

The **QAP** shall provide a detailed description of the following chapters:

- Introduction: to describe the purpose, object and contain of the Quality Assurance Plan;
- Range of project: to describe the range of the BIDSF project and if the scope of the contract is procurement of works and goods is necessary to describe also impact of the project to

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nuclear safety, radiation protection, impact to the environment, job security, fire-fighting protection, metrology, specific requirements for the equipment, etc.;

- Responsibilities and competences: to describe responsibilities and competences of the several members in the project from the side of Contractor including the organization structure and communication channels between individual members of the Contractor and Employer, who are the responsible persons for the particular deliverables including their contact information (telephone numbers, e-mail addresses);
- Requirements on the quality system of the Contractor:
  - i. general requirements – in compliance with ISO 9001:2008, if appropriate ISO 14001:2004 and OHSAS 18001:2007 if the Contractor have these systems incorporated and certified (include copies of certificates in the appendix)
  - ii. documentation requirements
  - iii. quality manual
  - iv. control of documents
  - v. control of records
- Other chapters in compliance with ISO 9001:2008 depending on the character of the BIDSF project: briefly define how is in the project managed the resource management, realization of the product, design and development (if is applicable) purchasing, production and service provision, control of monitoring and measuring devices, measurement, analysis and improvement (customer satisfaction, internal audit, monitoring and measurement of process and products), control of nonconforming product, analysis of data, improvement (continual improvement, corrective and preventive action) – define those parts that are applicable to the project;
- Source documentation;
- Referring documentation;
- Appendices.

Detailed requirements for the content of the project Quality Assurance Plan will be defined and submitted to the Contractor during the project Kick-off meeting.

Any change affecting the documents comprised in the **Quality Assurance Plan** shall be submitted to the Employer for its approval.

The Contractor shall ensure that each subcontractor either keeps and adequate in-house QAP or conforms to the applicable section of the Contractor's Quality Plan. The Contractor shall identify all the applicable QA requirements in the purchasing documents to its sub-contractor so as to assure compliance with the Contractor's Quality Assurance commitments. This shall include audits which the Employer will have a right to attend.

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## 2.8 REQUIRED AUTHORIZATIONS AND LICENSING

### 2.8.1 Licensing process according to Act No. 541/2004 Coll.

As the buildings to be conditioned do not serve for any activity which has an impact on nuclear safety and after conditioning they will serve only for storage of conventional waste, the change shall be notified to the NRA SR pursuant to Atomic act §2 v). It is not expected that the modifications and activities would negatively affect any other buildings or systems related to nuclear safety and therefore no further safety documentation will be needed in the scope of C16.1 project.

### 2.8.2 Licensing process according to the Building Act

Based on the scope of the project, a building permit (change in the functional use of the building) shall be issued only for building 760-III.1:V1, where the use of the building will change significantly. For this purpose, the Contractor shall elaborate all the documentation necessary for the issuance of a building permit pursuant to § 54 of the Building Act.

After finishing the construction works, the Contractor shall develop all documentation necessary for the Building Inspection. The administrative procedure for the issuance of the Building Inspection license shall proceed in accordance with §§ 83-84 of the Building Act. Thus, on the basis of the above Act, the Contractor shall develop or modify all documentation which shall be necessary to obtain a permission for the operation in connection with § 76 of the Building Act. Specific requirements for the content of the necessary documentation are specified in the subordinated regulation No. 453/2000 Coll. to the Building Act. Moreover, as the respective buildings shall be used for a new purpose —within the administrative procedure for issuance of the building permit and the Building Inspection license — the Contractor shall take into account also the necessity of the permit for change in the use of the building pursuant to § 85 of the Building Act and elaborate the respective documentation in a way enabling the use of this buildings for this new intended purpose.

Moreover, the Contractor shall develop all the documentation required for the Notification of Building Modifications necessary for the reinforcement of the grass plot between buildings 840M:V1 and 801:V1.

As the modifications of the other buildings are considered as maintenance works pursuant to Article 139b, section 15 of the Building Act, no permit is required from the state authorities for their implementation. These works and the related detailed schedule will only be subject to the approval of the Employer.

### 2.8.3 Licensing process according to Act No. 24/2006 Coll.

According to Appendix 8, part 9, point 9 of Act No. 24/2006 Coll. on the Environmental Impact Assessment and on alternations of, and amendments to, some acts, as amended (EIA Act),

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building No. 760-III.1:V1 will be intended for buffer storage of hazardous waste. This area is an area/building for the management of hazardous waste that has to undergo an ascertaining procedure according to Act No. 24/2006 Coll. For the purposes of the ascertaining procedure the Contractor shall elaborate the Preliminary Environmental Report pursuant to the aforementioned act. The findings of the ascertaining procedure will form the bases for the licensing authority (issuance of the building permit for the modification of building 760-III.1:V1) – NRA SR. The conditions set out in the decision of the competent state authority shall be incorporated into the design documentation.

As the other buildings to be conditioned do not serve for any activity which has impact on nuclear safety (e.g. radioactive waste management) and after conditioning they will serve for storage of conventional waste belonging to the “other waste” category, the buildings modification will not be authorised pursuant to Atomic act 541/2004 Coll. and as far as these building are concerned no procedure pursuant to the above-mentioned provisions of the Act No. 24/2006 Coll. will be required.

#### **2.8.4 Licensing process according to Act No. 355/2007 Coll.**

Considering the scope of the project, Act No. 355/2007 Coll. on the Protection, Support and Development of Public Health and on alternations of, and amendments to some acts, does not provide for any licensing requirements in relation to radiation protection, as the scope of the project does not include works with contaminated materials.

Considering that it is not excluded that asbestos may appear during the dismantling works, the Contractor shall have the authorization for manipulation with asbestos in line with sec. 41 of the Act No. 355/2007 Coll. on Protection, Support and Development of Public Health and on Change and Supplement of Certain Acts, as amended. Furthermore, if asbestos is found, the Contractor shall obtain, before continuing with the works in this area where asbestos is found, a positive standpoint from the Public Health Office in accordance with sec. 41 (7) and sec. 13 (4) letter k) of the Act No. 355/2007 Coll. on Protection, Support and Development of Public Health and on Change and Supplement of Certain Acts, as amended.

#### **2.8.5 Other requirements for licensing process**

Within the licensing process the Contractor shall cover the expenses for an expert opinion of an authorised legal entity on the PD pursuant to Act No. 124/2006 Coll.

Besides the above mentioned licensing requirements, the Contractor shall execute all works under this Contract in line with relevant Slovak legislation, international standards and in line with the directives and procedures of the Employer.

### **2.9 ESTABLISHMENT OF WORK PLACES**

In accordance with the technical documentation, several work places (areas) shall be established during project execution. They will allow temporary placement of adequate means of transportation

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and handling (cranes, carriages) if needed, fragmentation (shears, grinders), ventilation, filtration and collection (containers, compactors, etc.). The Contractor shall provide this equipment for the limited period of project implementation. The work places will enable basic pre-treatment of waste such as fragmentation and sorting to different categories. The pre-treatment will facilitate the subsequent material disposal or recycling.

Requirements for the work places shall be proposed by the Contractor to the Employer for approval; following the approval, the Contractor shall arrange the work places. The Detailed Work Plan shall describe the work places according to the tasks to be developed (see section 4.4).

During execution of the works, the Contractor shall prevent dust spreading to the site. The use of scaffolding is expected but other cost effective means could be also used (platforms, ladders). Measurements of air pollution are expected; to ensure levels of particulates (dust and fibres) are below the limits of Governmental Orders No. 355/2006 Coll., No. 356/2006 Coll. and No. 253/2006 Coll.

Following the existing building equipment dismantling, sorting and separation of hazardous materials (e.g. insulation contaminated by oil) will be performed.

A crane is available for use by the Contractor in building 760-II.3/4/5:V1. To use this crane, Contractor operators shall have the corresponding training and certification, and the previous acceptance of JAVYS. If the crane is used, the Contractor shall refund the rental of the crane and energy expenses to the Employer (see utility expenses in schedule A5 of the Contract). Data on the 25-tonne crane in the 760-II.3/4/5:V1 building is provided in Appendix 4.

## 2.10 WASTE MANAGEMENT

The Contractor shall include requirements specified in this chapter in a separate document titled Waste Management Plan. This document shall address also all secondary wastes resulting from the use of Contractor-owned equipment.

The waste (especially constructional) produced within this project shall be treated by the Contractor in accordance with the Act. No. 223/2001 Coll. on Wastes and on Change and Alteration of certain acts, as amended.

The waste volume shall be minimized to facilitate waste streams and a fluent project implementation. Contractor shall remove the waste from the site as soon as possible. The Contractor shall propose areas within the dealt with buildings and adjacent areas for the management of the produced waste.

Requirements for the areas where the waste shall be managed (mainly buffer storage in containers and consequent transportation) shall be proposed by the Contractor to the Employer. JAVYS will approve these requirements and the Contractor will arrange the selected areas. After the waste is removed, the work places shall be eliminated, and completely cleaned.

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Hazardous waste is defined as waste, which contains at least one dangerous property and is categorized as dangerous by its originator, pursuant to Regulation No. 284/2001 Coll. - Waste Catalogue.

It is expected that insulation containing oil could be discovered. The Contractor shall remove, dismantle and appropriately manage all hazardous materials and substances. Waste with hazardous impurities will be gathered at the hazardous material management work place, processed and transported to the adequate facilities for increasing the value of (hazardous) waste or its disposal.

It is expected that the thermal insulation in the selected buildings does not contain asbestos materials. In the case of an unexpected asbestos finding in the insulation, work shall be suspended in the area and all further activities shall be executed in accordance with the approved procedure and international standards, including Slovak standards (Main requirements regarding asbestos dismantling are the Governmental Order No. 253/2006 Coll. and Act. No. 355/2007 Coll.

If the Contractor suspects the presence of asbestos in the materials, the Contractor is obliged - for safety reasons - to perform a test of that material. The following procedure applies in such a case:

- The Contractor and Employer will agree on which laboratory will perform the testing,
- The Employer must be notified of all the test samples prior to perform the test. The origin and system of the sample will be recorded,
- The Contractor shall bear the cost of the test.

In case of positive results, the Contractor shall submit to the Employer the Testing protocol. In this case, a plan will be developed by the Contractor for the removal of the asbestos containing material (at the cost of Employer).

The following documents must be submitted upon arrival at the facilities for increasing the value of waste or its disposal:

- Analysis of the hazardous waste to be disposed of,
- Accompanying hazardous waste letter,
- Certificate of hazardous waste stabilization (this applies to those kinds of waste that require stabilization prior to their disposal at a dump, pursuant to § 21 Section 8 of Act No. 223/2001 Coll. on wastes, as amended),
- Identification sheet of the hazardous waste being brought in.

The fundamental Slovak legal norm in this field is Act No. 223/2001 Coll. on wastes, as amended through which the EU directives have been transposed into the Slovak law system. Subsequent subordinated regulations are the regulations of the Ministry of Environment of the Slovak Republic No. 283/2001 Coll. and 284/2001 Coll. For the transport of hazardous items, the requirements of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) must be met. Requirements for classification, labelling, package of chemical substances and mixtures are established by the Act No. 67/2010 Coll. on conditions applicable to the placing on the market of chemical substances and chemical mixtures, amending certain acts (Chemical Act) and related legal regulations (decree of the Ministry of Economy No. 3/2010, regulation of the European Community No. 1272/2008 (CLP), No. 1907/2006 (REACH)).



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The companies to perform such activities shall be entitled for handling hazardous materials including asbestos, either with direct authorization or by means of authorized subcontractors.

Equipment containing chemical substances and mixtures and the rooms where the equipment will be located shall meet the requirements of Act No. 364/2004 Coll. on Waters and on alternations of the Act of the Slovak National Council No. 372/1990 Coll. on Offences as amended (the Water Act) e.g. leak tests of tanks and distribution pipes, collection baths under the tanks, etc.

### 3. TECHNICAL REQUIREMENTS

#### 3.1 GENERAL REQUIREMENTS

During the implementation of project activities, the Contractor shall take into account the following aspects while works are being carried out:

- The techniques used should respect the environment and should not cause damage to it,
- The methods chosen to perform the tasks and the means (material and human) in the execution thereof, shall at all times comply with the applicable law,
- Safety, accessibility and operability of equipment, buildings, facilities and structures are in the scope of this specification,
- The safety measures taken for the completion of each task (means of individual protection, collective prevention measures, etc.).

In the following sections, technical requirements are established for the supply of the equipment, civil works and services, included in the scope of this specification.

All the premises with electric devices are to be equipped with protective and working measures following Slovak technical standards.

All techniques and works shall meet the appropriate Slovak industrial standards, or the Contractor's alternative equivalent standard of choice.

#### 3.2 EQUIPMENT DISMANTLING AND CIVIL WORKS

The scope of supply shall include the civil, architectural, mechanical and electrical works for complete building conditioning, so as that selected buildings can be further used for the specified purpose. After an on-site inspection of the buildings, the Contractor shall define in detail all the works required for the before mentioned objective.

Any technical equipment (e.g. effected electro-installation, blasting cell) has to be tag out first by the Employer.

The Contactor shall elaborate the design documentation. The Employer will approve the documentation and then apply for a building permit.

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The Contractor shall guarantee that the building 760-III.1:V1 reconditioning permits maintaining a healthy indoor air quality by natural ventilation, in consideration of the nature of substances to be stored (i.e. chemicals and oils).

The Contractor shall ensure the conditioning of the building SO 760-III.1:V1 pursuant to standards and requirements for storage and handling such dangerous substances to be stored in the building.

The Contractor shall have an “Approval for handling the hazardous waste” pursuant to the Act No. 223/2001 Coll., section 7 or corresponding contract with the sub-contractors.

When conditioning the building SO 760-III.1:V1 specified for the temporary storage of oils and chemical waste, the following must be observed:

- Regulation No. 532/2002 Coll. of the Ministry of Environment of the Slovak Republic, which stipulates the details of general technical requirements for the construction of, and general technical requirements for buildings used by people with reduced mobility and orientation;
- Act No. 223/2001 on wastes and on alternation of and amendments to some acts;
- Regulation No. 284/2001 Coll. on waste catalogue;
- Act No. 314/2001 Coll. on protection against fire;
- Act No. 364/2004 Coll. On waters and on amendment of the Act of the Slovak National Council No. 372/1990 Coll. on offences as amended (Water Act);
- Act No. 67/2010 Coll. on conditions applicable to the placing on the market of chemical substances and chemical mixtures, amending certain acts (Chemical Act).

The Contractor is obliged to verify the data provided in this Technical Specification before the Tender has been submitted.

### **3.2.1 Maintenance training centre (760-II.3/4/5:V1)**

The following activities shall be performed to condition this building:

- Repair of walls damaged by water leaking in from the outside, i.e. removal of damaged plasters and their repair including final painting (about 200 m<sup>2</sup>);
- Painting of the side metallic gate (about 4x4 m), painting of the metallic portal of the front gate (about 11x9 m) and metallic elements around the back gate (about 20 m<sup>2</sup>) including the protective plate above the gate on both sides;
- Cleaning of all roof downcomers (about 342 m) and replacement of damaged roof downcomers (about 40 m);
- Replacement of damaged downcomers (6 pcs, a length of about 13 m);
- The electrical installation system is fully functional, however its functionality needs to be checked prior to the project implementation, as at the time of the project implementation it may slightly differ from the present state and it will be necessary to replace out of order parts, mainly damaged lighting fixtures and bulbs (30 pcs);
- Verification of the functionality of the crane and crane track, cleaning and possible replacement of most worn out simple components within the scope of standard operational maintenance;



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- Ensuring the functioning of all the systems (see 3.3.1 – 3.3.6) of the building also after its conditioning and confirming it with a protocol.

### 3.2.2 Workshop on V1 site (760-III.1:V1)

The Contractor shall elaborate the documentation for the conditioning of the building based on the proposed modifications:

- Provision of transitions in lateral walls (about 3x3 m) so as to provide transitions from room to room and a sufficient space for safe and uninterrupted handling of the stored materials and related repair and conditioning of surfaces (walls, floors);
- Establishment (reservation) of one closed area (min. 30 m<sup>2</sup>) with an independent entrance which will be used for storage of material containing asbestos (this area shall meet legislative requirements applicable to asbestos storage);
- Repair of floors and providing all the storage area (about 540 m<sup>2</sup>) with protective coating resistant to wear and aggressive substances;
- Painting of metal gates (2 pcs – 4.5x4 m) and door (1 pc – 2x0.8 m), maintenance of locks and hinges;
- Sealing of cracks and painting of internal walls (up to the height of 2 m – about 220 m<sup>2</sup>) with a protective paint resistant to aggressive substances;
- Replacement of the corroded part of the sheet metal roof (about 280 m<sup>2</sup>);
- Adding the cover sheet metal on the ridge of the sheet metal roof (about 45 m<sup>2</sup>);
- Cleaning of all roof downcomers (about 90 m);
- Repair of anchoring of the existing lightning conductor on the roof ridge (approximately 5 m);
- Reinforcement of the building according to the structural analysis of the building (in locations with cracks) that will be part of the documentation submitted by the Contractor;
- Painting of window frames and all window grates (5 pcs 1.5x2 m, 8 pcs 3x1 m, 6 pcs 0.5x0.5 m) and glazing of 1 window 1.5x2 m;
- The electrical installation is fully functional, however its functionality needs to be checked prior to the implementation, as at the time of the project implementation it may slightly differ from the present state; replacement of out of order parts, mainly damaged lighting fixtures and bulbs (about 10 pcs);
- Cleaning and painting of toilet rooms (3 pcs – about 54 m<sup>2</sup>);
- Establishment (reservation) of closed area (min. 20 m<sup>2</sup>) within the building that will meet legislative requirements applicable to storage of chemical substances and acids (with appropriate finishing of surfaces and technical equipment;
- Possible leakage of hazardous substances (and related permits of protection against the leakage of oil or chemical substances) can be prevented by the provision of watertight collection pits (their quantity in accordance with the design documentation on the reconstruction of the concerned building to be provided by the Contractor), located in the floor of the building and resistant against chemical substances, plus related equipment (filters...) – the Contractor shall propose also the method of waste handling in accordance with the regulations for storage and handling of various types of dangerous wastes;

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- Relaying/Closure of those services (e.g. electrical cables) that will be affected by the planned demolition and construction works, the new-built premises shall be connected to services in a standard way;
- Ensuring the functioning of all the systems of the building and/or addition of new ones (in accordance with applicable legislation).

### 3.2.3 Workshop for machinery (740-VII.1A:V1)

The following activities shall be performed to condition this building:

- Securing all windows with window grates and painting of window frames with a protective paint (18 pcs 5x2 m, 4 pcs 2x2 m, 1 pc 9x2 m);
- Painting of metallic window sills (23 pcs), roof sheeting and steel load-bearing columns (26 pcs, about 5 m high) protruding from the building façade with anti-corrosion paint, or possible repair of corroded parts;
- Provision of transitions in lateral walls (min. 3x3 m) so as to provide sufficient space for safe and uninterrupted handling of the stored conventional materials;
- Cleaning and minor repairs of the existing floors (about 540 m<sup>2</sup>);
- Painting of 3 pieces of gates (about 3x3 m), replacement of metal fittings and cylinder locks;
- Application of washable paints to internal walls up to the height of 2 m (about 240 m<sup>2</sup>);
- Cleaning of all roof downcomers (about 90 m) and replacement of damaged downcomers (about 40 m);
- The electrical installation is fully functional, however its functionality needs to be checked prior to the implementation, as at the time of the implementation it may slightly differ from the present state; replacement of out-of-order parts, mainly damaged lighting fixtures and bulbs (about 40 pcs);
- Cleaning and painting of the toilet rooms (3 pcs – about 54 m<sup>2</sup>);
- Relaying/Closure of those services (e.g. electrical cables) that will be affected by the planned demolition works;
- Ensuring the functioning of all the systems of the building also after its conditioning and confirming it with a protocol.

### 3.2.4 Workshop – abrasive plant (760-1.3:V1)

The following activities shall be performed to condition this building:

- Complex repair of the façade of the side wing – about 75 m<sup>2</sup> (repair of the enclosure wall including application of plasters and surface finishing);
- Dismantling of the blasting cell (about 5x3.5x3.5 m) and the area in the left front part (about 4x5x4 m);
- Painting of whole gates with anti-corrosion paint (3 pcs about 3.5x3.5 m);
- Repair of the most damaged internal walls (about 50 m<sup>2</sup>, application of a washable paint up to the height of 2 m – about 230 m<sup>2</sup>);

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- Conditioning of the roof on the main part of the building and the side wing (about 730 m<sup>2</sup>) by replacing the entire asphalt roofing and related parts, extension of the durability of the roof to at least 15 years;
- Replacement of all downcomers (10 pieces, length of about 5 m) and roof downcomers (about 110 m);
- Painting the window frames (28 pcs 2.5x2 m), replacement of windows in the side wing (9 pcs about 2x1.5 m);
- Bricking up the door in the side wing (1 pc, about 2x0.8 m);
- The wiring system is fully functional, however its functionality needs to be checked prior to the implementation, as at the time of the implementation it may slightly differ from the present state; repair of out-of-order parts, mainly damaged lighting fixtures and bulbs (about 50 pcs);
- Removal/Closure of the unconnected electrical cables;
- Relaying/Closure of those services (e.g. electrical cables) that will be affected by the planned demolition works;
- Ensuring the functioning of all the systems of the building also after its conditioning and confirming it with a protocol.

Colours of all paints are subject to approval by the Employer. In the process of implementation, the Contractor shall be obliged to solve all minor deviations from this Specification at Contractor's own expense.

### 3.2.5 External area between buildings 840M: V1 and 801:V1

Reinforcement shall be performed on this entire area by reinforced concrete slabs for temporary storage of conventional waste, containers and parking of construction mechanisms (vehicles). The slabs of adequate carrying capacity and thickness 15 cm shall be used.

There are woody plants on the external grassed area, therefore the Employer will submit an application for their cutting. The Contractor shall remove the woody plants and cover the substitute outplanting or corresponding fees for the social value of the plants removal in relation to the decision of the state administration authority for nature and landscape protection. It concerns the following plants:

- 1 x *Acer platanoides* (Maple), trunk periphery in height of 1.3m – 42 cm,
- 1 x *Fraxinus excelsior* (Ash), trunk periphery in height of 1.3m – 116 cm,
- 1 x *Aesculus hippocastanum* (Chesnut), trunk periphery in height of 1.3m – 79 cm,
- 1 x *Thuja* sp., the area of 15 m<sup>2</sup>.

Near the grassed area, there is a double fence and electric switchyard of the NPP security system. Therefore, during the modification and use of the area it will be necessary to comply with the regulations of the Slovak legislation (regulation of the Nuclear Regulatory Authority of the Slovak Republic No. 51/2006 Coll., article 5, section 13/a) and procedure of JAVYS/14/SM-FO-01 regarding the distance of any objects from the security systems.

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### 3.3 AUXILIARY SYSTEMS

The Contractor shall be responsible for engineering, design and installation of all systems in the building (see 3.3.1 – 3.3.6), in accordance with this technical specification. The Contractor could propose any alternative, which is a subject to the Employer's approval.

Auxiliary systems must meet the requirements for the technical equipment of constructions in accordance with the Regulation No. 532/2002 Coll. of the Ministry of Environment of the Slovak Republic, which stipulates the details of general technical requirements for the construction of, and general technical requirements for buildings used by people with reduced mobility and orientation.

In the Tender, the Contractor shall identify the standards applied for the design, manufacture and testing of the systems. Similarly, the Contractor shall prepare and submit specific testing procedures for each of the systems to the Employer for an approval as a part of the project documentation for the building permit.

#### 3.3.1 Fire protection system

The building 760-II.3/4/5:V1 is not equipped by the fire protection system because its current and future use is not linked with the substantial fire risk. The Contractor shall elaborate the assessment of the fire protection system of all buildings for use as storages. Modifications of existing fire protection system are not expected. Within the demolition of the walls, the Contractor must carry out the adequate relocation of cabling, which is located in the walls.

The fire protection system (FPS) of the buildings shall include:

- Fire extinguishers (at least 24 pcs. for all buildings).
- Fire control and alarm system, including:
  - a) Electronic Fire Signalization system (EPS)
  - b) Alarm and fire control system, including:
    - Fire detection / indication (compatible with the present system)
    - Manual fire alarm buttons
    - Alarm devices
- Safety signs signalling the position of fire protection systems.

Construction materials shall meet the definition of non-combustible or limited combustible in accordance with NFPA, except roof coverings. For roof coverings, the use of material that does not meet the definition of non-combustible or limited combustible, such as translucent reinforced plastic panels, is permitted in limited applications.

Cellular or foamed plastic materials (as defined in Annex A of NFPA 101, Life Safety Code) shall not be used as interior finish. Interior finish of all affected buildings shall be Class A.

#### 3.3.2 Lighting

The lighting system shall provide appropriate illumination for building storage operations under normal conditions and emergency lighting. Lighting receptacles will be provided throughout the indoor areas of the buildings and outdoor areas adjacent to individual conditioned buildings (760-

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In outdoor areas adjacent to the individual conditioned buildings, fluorescent lamps and high-pressure sodium lamps will be used (according to the type of the existing lamps). In wall units of the emergency lighting described below, the incandescent lamps will be used. A total of 15 incandescent lamps for all units of the emergency lighting in affected buildings shall be used.

The manual lighting units will be fed from ANGr01 and ANGr02 distribution boards. The emergency lighting units will be fed from the ATJrou1 distribution board.

In addition, the emergency lighting units will be equipped with self-contained batteries rated for 60 minutes.

Emergency lighting is provided in selected indoor areas to allow safe egress of personnel. Emergency lighting is provided via wall-mounted battery pack units.

Indoor lighting systems shall be selected in accordance with common industry practices. Normal maintained average lighting levels will be as listed below.

- General areas: 200 lux
- Corridors: 100 lux
- Outdoor lighting in building entrance 20 lux

### 3.3.3 Power plugs and sockets

Grids of power plugs shall be provided in the buildings for operating and maintenance purposes.

All following power plugs shall be distributed assuring that the maximum distance of the below mentioned types from any location to the nearest plug is not higher than 10 m. The type of power plugs to be installed will be:

- 32A, 400V, 3 phase, 5 pin, 3PH+N+PE.
- 63A, 400V, 3 phase, 5 pin, 3PH+N+PE
- 10A, 230V, 1-phase, 3 output, 1PH+N+PE

### 3.3.4 Grounding

Metal structures shall be connected to the grounding network. Equipment and components shall be connected to the grounding network by means of pressure clamps. Structures shall be connected by means of alumino-thermic welds adapted to each type of connection.

Bare copper cable of the following cross-sections shall be used for grounding:

- Steel structures: 35 mm<sup>2</sup>

### 3.3.5 Other services

Accesses and outdoor lighting shall be installed outside the selected buildings.

In all affected buildings (760-II.3/4/5:V1 Maintenance training centre, 760-III.1:V1 Workshop on V1 site, 740-VII.1A:V1 Workshop for machinery, 760-1.3:V1 Workshop – abrasive plant), the lighting of entrances as well as lighting of the handling areas shall be installed.

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### 3.3.6 Other external services

Accesses and outdoor lighting shall be installed outside the selected buildings.

In all affected buildings (760-II.3/4/5:V1 Maintenance training centre, 760-III.1:V1 Workshop on V1 site, 740-VII.1A:V1 Workshop for machinery, 760-1.3:V1 Workshop – abrasive plant), the lighting of entrances as well as lighting of the handling areas shall be installed.

## 4. PROJECT IMPLEMENTATION

### 4.1 GENERAL ARRANGEMENTS

The Contractor shall provide effective management of the project which shall be based on a stable project management team. This team shall be led by a project manager of adequate experience and status to provide effective management of the Contractor responsibilities. In the Tender, the Contractor shall provide and update details of his organization to the extent that it is involved in the management of this project. This information shall indicate the staff directly assigned to the project management and their respective relationships.

The Employer will monitor the project execution on the basis of the monthly progress meetings, reports and site inspections, including up-dated time schedules and a list of open items. The details will be agreed upon during the kick-off meeting.

If needed, the Employer may convene project meetings; the Contractor shall participate in such meetings in order to report on the problems encountered and agree on the solutions to be adopted.

Before works are started in each working area, all components/systems to remain functional will be identified by JAVYS, both on site and in drawings. The work permit system will be implemented under control of JAVYS and according to the applicable procedures.

The works shall be performed in accordance with the time schedule elaborated by the Contractor and approved by the Employer. The Contractor shall be responsible for the scheduling, control and monitoring of all activities required to meet his responsibilities under the project and shall submit to the Employer schedules for reviewing project activities, as stated in the section 4.4 of this specification.

The elaboration of the documentation, procedures, erection of scaffolding, waste separation and transportation shall be in accordance with this specification and project acceptance shall be in compliance with the approved schedule.

The Contractor shall be responsible for shipping of the equipment to the JAVYS site. All costs related to the shipping shall be at the Contractor's expenses. The delivered equipment will be stored on the place specified by the Employer.



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#### 4.1.1 Surveillance and control on site

Bohunice V1 Nuclear Power Plant has a building protection system based on perimeter control systems, controls of access to the plant, and other components that regulate access to the site. These controls are applicable to personnel, vehicles, machinery, materials, etc., both when entering and leaving the site, therefore the Contractor is obliged to always respect all the rules and provisions (see Contract, H5 – Safety and technical conditions) established to improve or increase monitoring and control, and does not have the right to present any financial claims based on the practice of these rules.

#### 4.1.2 Health and safety

The Contractor shall be responsible for conducting operations so as to avoid risk of harm to health and safety of persons and property, in accordance with Government decision No. 396/2006 Coll..

According the Health and Safety Plan, the Contractor shall supply all the safety equipment required to safely complete the works (overall clothes, safety glasses, gloves, safety boots, screens, masks, respirators, etc.), require the use of such safety equipment, and provide safety instructions to its employees.

The Contractor shall define a procedure for controlling the normal use of the required workers protections.

The Employer can verify in any moment that the Contractor and its Sub-contractors, are in compliance with all Health and Safety requirements (Contract, part D and F, chapter 4.8).

During the implementation works, it is required that the Contractor take special attention on the procedures to be followed, when electric cables pass in close vicinity, (e.g. el. lighting cables, I&C cables...), or other interfaces with the existing installations. The Contractor shall be responsible for on the training and informing the workers and shall require to the workers to pay increased attention to the handlings.

### 4.2 OPERATIONAL CONSTRAINTS

All the works to be performed by the Contractor shall be developed according to the operational instructions for works at V1 NPP. The Contractor shall organize the works in accordance with the JAVYS internal procedures and rules (mainly with ordinance SM-PR-04 – Organization of safe work) and general Slovak standards concerning industrial safety. The Contractor JAVYS site procedures will be provided to the Contractor during the kick-off meeting.

All works involving the installation of new containers, work and storage areas must not disturb the normal operation of the plant. All of these activities will be closely coordinated and planned with the Employer in accordance with the operating modes of the plant facilities, in order to avoid idle transitions, personnel accidents, and to optimize the dismantling schedule.

### 4.3 INTERFACE MANAGEMENT

The Contractor shall be responsible for management of the project interfaces. In particular, the Contractor shall as a minimum:

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- Identify all technical, operational and organizational interfaces necessary for successful project development.
- Establish a proper interface scheme with clear definition of the interface purpose and responsibility for it.

The interface manual shall be drafted by the Contractor and submitted to the Employer for approval. The Contractor shall be responsible for completion of this manual and its continuous update.

The completion and modifications of the interface manual shall be subject to the Employer's approval. The Employer is responsible for interactions with the external organizations (mainly NRA, UVZ, MZP SR). However, the Contractor shall support such interactions.

The building modifications to be implemented by the Contractor shall not affect the integrity or disturb the functioning of any site infrastructure and broadcasting services (including, telecommunication lines, JAVYS LAN, unified time clock lines, etc.)

The Contractor shall appropriately manage the interfaces with others BIDSF projects according to the Employer's instructions.

#### 4.4 TIME SCHEDULE AND PROJECT MILESTONES

The Contractor shall comply with the following general requirements for project scheduling:

- As a minimum, the schedule shall indicate the following tasks/activities:
  - Development of the Documentation,
  - Acceptance of the Documentation,
  - Applying for permissions,
  - Mobilization,
  - Approval for starting the works,
  - Dismantling of existing equipment by level and areas,
  - Transportation of the waste to the work places,
  - Waste separation,
  - Waste transportation to final destination,
  - Building conditioning by level and areas,
  - Final Contract Report.
- The schedule shall furthermore indicate the time period necessary for the required tasks/services, all transitions between different tasks, interfaces, as well as relevant project milestones.
- The schedule shall also include actions required by the Employer, the State and the Certification Authority; further details will be defined during the kick-off meeting.
- The schedule shall indicate:
  - project activities,



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- responsible group/organization/person,
  - duration of the activity and relation to other activities,
  - planned date of completion.
- The time schedule will be used to monitor the project execution and to evidence the project progress to the Employer. The Employer shall be notified about deviations from the original plan and provided the relevant justification.
  - The Contractor shall provide first drafts of the time schedules in accordance with the Tender Documents, Vol. I.ii, para.10.1 (h), Attachment 8, and submit these with its Tender. The original schedule and potential changes shall be approved by the Employer.

The Contractor should progress along the milestones specified in the table 4 below:

Table 4 - Project Milestones and assumed date for completion

<b>C16.1 PROJECT MILESTONES</b>	
<b><i>Milestones</i></b>	<b><i>Assumed date of completion</i></b>
1. Inception report, Quality Assurance Plan, Detailed Time Schedule.	CD + 2.5 months
2. Preliminary Environmental Study for building 760-III.1:V1 for the purposes of the ascertaining procedure pursuant to Act No. 24/2006 Coll.	CD + 4 months
3. Health and Safety Plan, Waste Management Plan, Environmental Plan.	CD + 4 months
4. a. Design documentation for the building permit (change in the functional use of the building) (see chapter 2.8.2) for building 760-III.1:V1 b. Documentation for the Notification of Building Modifications for the reinforcement of the grass plot between buildings 840M:V1 and 801:V1	CD + 4 months
5. Dismantling Procedures, Detailed Programme of Works within the building conditioning.	CD + 4 months
6. Mobilization and establishment of workplaces.	CD + 4 months
7. Obtaining the building permit (pursuant to the Act No. 50/1976 Coll.) for buildings 760-III.1:V1.	CD + 6.5 months

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C16.1 PROJECT MILESTONES	
<i>Milestones</i>	<i>Assumed date of completion</i>
8. Completion of works in the building 760-II.3/4/5:V1, 740-VII.1A:V1, 760-1.3:V1, free grass area.	CD + 14 months
9. Completion of works in the building 760-III.1:V1.	CD + 20 months
10. Documentation for the House Inspection License (see chapter 2.8.2) – as-built documentation, accompanying technical documentation, Report of expert inspection, and expert testing according to Regulation No. 508/2009 Coll. (SOPOS).	CD + 22 months
11. Applying for Taking-over Certificate.	CD + 23 months
12. Approval of the Final Contract Completion Report.	CD + 24 months

CD – awarding Contract Date

## 4.5 REPORTING

The Contractor shall develop and deliver to Employer the following reports:

**Inception Report**, in which the Contractor shall indicate all main activities during the project execution which shall cover, as a minimum, the following parts:

- The organizational structure of project management, description of responsibilities and functions, obligations of the Contractor's key persons.
- Definition of tasks, responsibilities and interfaces among all the project participants.
- Quality assurance plan – a set of directives, working procedures and manuals for activities within the project such as management, planning, project monitoring, coordination and management of interfaces, engineering, procurement, project implementation, risk management, quality audits, technical documentation, identification system and elaboration of reports on the project status.
- Detailed Time Schedule of works.

The Inception Report shall be submitted to Employer within one month from the Commencement Date.

Note: Information on the preliminary project organizational structure shall be submitted by the Contractor in his Proposal according to the Tender Documents, Vol. I.ii, para 10.1 (h), Attachment 6.

The detail requirements for the purpose of the Inception report will be provided to the Contractor on the Kick-off meeting.

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**Monthly Progress Reports** (including Hand over Certificate) for monitoring of the project execution. Each such report shall contain an updated time schedule and a list of open items. The reports shall be prepared and submitted by the Contractor as hard copy, as well as in an electronic format, within the first five (5) days after the reporting month. Details will be agreed upon during the kick-off meeting.

**Final Contract Completion Report** shall summarize all important issues arisen during the duration of the project. The goal of this report is to provide complete information about the project development and the necessary data for future improvement of both the Contractor's and Employer's performance.

**Specific Report** If a special problem arises (substantial unexpected failure to perform), the Contractor shall prepare a Specific Report to document, at least, the causes of failure, actions taken and/or recommendations. The Employer may convene on site project meetings. The Contractor shall participate at such meetings in order to report on encountered problems and agree on the solutions to be adopted.

#### 4.6 TECHNICAL DOCUMENTATION SUBMISSION

The Contractor shall submit to the Employer programs, plans, schedules, procedures, reports and other documents, as listed in Table 5 below. The table also indicates the submission schedule, the language of the documents and the number of copies required.

The documentation shall be elaborated in both English and Slovak and will be submitted to the Employer both printed and in electronic form on a CD ROM (no less than two CD ROM copies) in the following formats:

- documents in MS OFFICE 2000 (minimum) (doc, xls, ppt formats),
- figures in jpg, bmp formats,
- drawings in AutoCAD (dwg format),
- time schedules in MS Project Standard 2003 (mpp format).

In case of discrepancies between the printed and electronic forms, the printed one will prevail. In case of discrepancies between the English and Slovak versions, the English version will prevail. Detailed specification of required formats will be set forth at the Kick-off meeting.

Table 5 defines the most important documentation to be delivered to the Employer with date of submission and number of copies to be delivered.

The Employer will review and approve all the documentation prepared by the Contractor and will provide comments and suggestions, when appropriate. The Contractor shall incorporate these comments and suggestions to the documentation. The same duty applies for comments and suggestions arising during the approval process of the documentation by the regulatory authorities. The usual period for review, comments, incorporation of comments and approval will be 10 working days for each of the stated activities. In case of comments to the building permit documentation and its approval a period of 2 months is expected.

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Table 5 -Technical documentation to be delivered by the Contractor

Document name	Date of submission	Number of printed copies (Engl./Slov.)
Inception Report	CD + 1 month	4/4
Quality Assurance Plan/Detailed Time Schedule	CD + 1 month	4/4
Preliminary Environmental Study for the ascertaining procedure for building 760-III.1:V1	CD + 2 months	4/20
Project documentation for the building permit for building 760-III.1:V1 Documentation for the Notification of Building Modifications for the reinforcement of the grass plot between buildings 840M:V1 and 801:V1	CD + 3 months	4/4
Health and safety Plan, Waste Management Plan, Environmental Plan	CD + 3 months	4/4

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Procedures for existing equipment dismantling; other preparation works	CD + 3 months	4/4
Procedures for hazardous materials management	CD + 3 months	4/4
Detailed Work Plan	CD + 3 months	4/4
Report of expert inspection and expert testing according to the Regulation No. 508/2009 Coll. (SOPOS)	CD + 21 months	1/1
Documentation for Building Inspection (see chapter 2.8.2) As-built documentation, Accompanying technical documentation	CD + 21 months	4/15
Monthly Progress Reports	Monthly before 5 <sup>th</sup> day of the following month	2/2
Minutes of all meetings (monthly, special meetings etc.) including Hand over Certificate	7 working days after each meeting	2/2
Request for the Taking- Over Certificate Issuance	CD + 23 months	4/4
Final Contract Completion Report	CD + 24 months	4/4

## 4.7 ACCEPTANCE CRITERIA

The work will be considered finalized by the Employer when the Employer agrees that:

- Waste materials have been released to places for increasing the value of waste and its disposal (submission of the waste taking over protocols),
- All building conditioning works have been completed,

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- The selected buildings are completely clean and conditioned for the specified purposes, in accordance with the requirements of this specification,
- Dust particulates in the buildings are within the lawful limits,
- All works must be executed in accordance with the design documentation verified in the building permit procedure and approved by the Employer.

After finalizing these operations, the Contractor shall prepare the Final Contract Report and submit it to the Employer for approval.

## 5. CODES AND STANDARDS

### 5.1 CODES AND STANDARDS

The works shall be carried out in accordance with Slovak legislative documents, standards and codes. European standards/codes shall apply where no Slovak specific standards exist. Should international standards/codes be applied, the Contractor shall demonstrate that the requirements defined in this document are equivalent or more stringent than those in the applicable Slovak documents.

The Contractor shall draw the Employer's attention to any conflicts between the requirements of this Specification and the Slovak legal requirements and current technical standards. Should there be any difference of opinion with regard to the interpretation of requirements, the Employer shall be the judge of the requirements and its interpretation shall rule.

For the purpose of this project, some principal applicable Slovak Technical Standards are presented in Appendix 3.

## 6. ACCEPTANCE

### 6.1 GENERAL REQUIREMENTS

The Contractor shall demonstrate that the services comply with the requirements of the Technical specification. The acceptance shall be in accordance with JAVYS procedures (acceptance provided by the Committee for Taking-over).

Correct operation of the new systems shall be as much as possible demonstrated at all atmospheric conditions, to verify if they meet technical requirements. The checking of these systems (mainly ventilation system in the building 760-III.1 which shall be conditioned for the storage of hazardous waste) shall be within the defect notification period.

The Commissioning documentation shall be provided according to the time frame provided in table 4 in section 4.4. The commissioning program has to be approved by the Employer.

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## 6.2 TAKING-OVER

Acceptance shall be in accordance with part D and F, chapter 10 of the Contract. 14 days before termination of the work the Contractor may ask the Employer to issue the Taking-over Certificate. To the request for issuance of Taking-over Certificate, the Contractor shall as well submit:

- As-Built documentation,
- Other documentation necessary for the purposes of permission for the operation pursuant to the articles 17 to 20 of the Regulation No. 453/2000 Coll., which implements some provisions of the Building Act.

## 7. LIST OF APPENDICES

The following Appendices are included in this technical specification:

- Appendix 1: BUILDINGS LOCATION ON V1 NPP SITE
- Appendix 2: BUILDING DRAWINGS
- Appendix 3: CODES AND STANDARDS
- Appendix 4: Data of crane in building 760-II.3/4/5:V1
- Appendix 5: Assumed main types of hazardous waste from NPP V1 decommissioning – Stage I

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## APPENDIX 3: CODES AND STANDARDS

- [ 1 ] Resolution of Government of SR No. 801/1999 and 974/2000 about Proposal of progress of V1 NPP final shut-down
- [ 2 ] Act No. 541/2004 Coll. on Peaceful use of Nuclear Energy and on Change and Amendment of Certain Acts, as amended ("Atomic Act"). National Council of the Slovak Republic. September 9, 2004
- [ 3 ] [Act No. 355/2007 Coll. on Protection, Supporting and Development of Public Health and on Change and Amendment of Certain Acts, as amended
- [ 4 ] Act No 50/1976 Coll. on Land-use Planning and Building Order (the Building Act), as amended
- [ 5 ] Act. No. 24/2006 Coll. on Environmental Impact Assessment and on Change and Amendment of Certain Acts, as amended
- [ 6 ] Governmental Order No. 396/2006 Coll. on the Minimum Safety and Health Requirements of Construction Sites
- [ 7 ] MZP SR Regulation No. 453/2000 Coll. on Execution of Some Provisions of the Building Act
- [ 8 ] MZP SR Regulation No. 55/2001 Coll. on Territorial Planning Basis and Territorial Planning Documentation
- [ 9 ] UJD SR Regulation No. 51/2006 Coll. which lays down Details on Requirements for Provision of Physical Protection
- [ 10 ] UJD SR Regulation No. 55/2006 Coll. which lays down the Details in an Emergency Planning for the Event of an Incident or an Accident
- [ 11 ] Act No. 124/2006 Coll. on Health and Safety at Work and on Changes and Amendments to Certain Acts, as amended
- [ 12 ] Act No. 125/2006 Coll. On Labour Inspection and on changes and Amendment of the Act No. 82/2005 Coll. on Illegal work and Illegal Employing and on Change and Amendment of Certain Acts, as amended
- [ 13 ] Regulation No. 508/2009 Coll. which lay downs the Details on Assurance of Health and Protection During Works with Pressurized, Lifting, Electrical and Gaseous Technical Equipment and by which are established Technical Equipment, which are employed as Selected Technical Equipment
- [ 14 ] MZP SR Regulation No 284/2001 Coll., establishing the Wastes Catalogue
- [ 15 ] Regulation No. 59/1982 Coll. specifying Basic Requirements for Labour Safety and Safety of Technical Installations (as amended by Decrees No. 374/1990 Coll. and No. 484/1990 Coll.)
- [ 16 ] Act No. 223/2001 Coll. on Wastes and on Alteration and Amendments to Some Acts, as amended
- [ 17 ] Act No. 142/2000 Coll. on Metrology and on Alterations and Amendment to Some other Acts, as amended
- [ 18 ] Act No. 311/2001 Coll. Labour Code, as amended
- [ 19 ] Act No. 364/2004 Coll. on Waters and on Amendment Supplement to the Act No. 372/1990 Coll. on Offences as amended
- [ 20 ] Act No. 314/2001 Coll. on Fire Protection, as amended



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- [ 21 ] Ministry of Interior of the Slovak Republic Regulation No. 121/2002 Coll. on Fire Prevention, as amended
- [ 22 ] Act No. 42/1994 Coll. on Civil Protection of Population, as amended
- [ 23 ] Final Statement No: 8935/06 -3.5/hp issued by Ministry of Environment of Slovak Republic according to Act No. 127/1994 Coll. on Environment Impact Assessment as amended for proposed „V1 NPP Decommissioning in Bohunice site”, 07.03.2007
- [ 24 ] Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste
- [ 25 ] Council Decision 2003/33/EC of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC
- [ 26 ] Council Directive 91/689/EEC of 12 December 1991 on hazardous waste
- [ 27 ] European Bank for Reconstruction and Development (EBRD) Environmental and Social Policy, May 2008
- [ 28 ] European Bank for Reconstruction and Development (EBRD) Public Information Policy, May 2008
- [ 29 ] Rate book for quoting proposal prices of design works and engineering activities, UNIKA 2010
- [ 30 ] Convention of International Labour Organization No. 162 on safe use of asbestos, 1986
- [ 31 ] Governmental Order No. 253/2006 Coll. on Protection of Employees Against Risks Connected with Exposure of Asbestos at Work
- [ 32 ] Governmental Order No 356/2006 on Health Protection of Workers from Risks Related to Exposure of Carcinogenic and Mutagenic Agents During Work
- [ 33 ] Governmental Order No. 395/2006 Coll. on Minimum Requirements on Providing and Usage of Personal Protective Work Equipment
- [ 34 ] Act No. 314/2001 Coll. on Fire Protection, as amended
- [ 35 ] Governmental Regulation No. 345/2006 Coll., Basic Safety Requirements on Protection of Health of Workers and Public against Ionizing radiation
- [ 36 ] Act No. 513/2009 Coll. on railroads and on alternations of and amendments to some acts, as amended
- [ 37 ] Regulation No. 532/2002 Coll. of the Ministry of Environment of the Slovak Republic, which stipulates the details of general technical requirements for the construction of, and general technical requirements for buildings used by people with reduced mobility and orientation.