

EXHIBIT A

UNCITRAL ARBITRATION

Between:

**ENTES INDUSTRIAL PLANTS CONSTRUCTION AND ERECTION
CONTRACTING CO. INC.**

Turkey

- Claimant

and

**THE MINISTRY OF TRANSPORT AND COMMUNICATIONS OF THE
KYRGYZ REPUBLIC**

Kyrgyz Republic

- Respondent

FINAL AWARD

The Arbitral Tribunal:

Professor Turgut Öz
Arbitrator

Professor Sergei Lebedev
Arbitrator

Michael E. Schneider
Presiding Arbitrator

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GLOSSARY

BQ or BoQ	Bill of Quantities, forming part of the Contract
CPA	Conditions of Particular Application, forming part of the Contract
C-Legal Grounds	Claimant's Submission on Legal Grounds, dated 31 May 2011
C-PHB	Claimant's Post Hearing Brief, dated 20 February 2012
EOT	Extension of Time
C-SoC	Claimant's Statement of Claim, dated 15 March 2010
GCC	General Conditions of Contract, forming part of the Contract
Joint Expert Report	Joint Report of the Quantum Experts (Mr Kennedy and Mr Taft), dated 19 December 2011 (also referred to as Schott Schedule)
JOC	Japan Overseas Consultants Co. Ltd, the Engineer
KCC	Kyrgyz Civil Code
Kennedy I	Expert Report by Mr William Kennedy (quantum expert), dated 9 March 2010 and produced with the SoC
Kennedy II	Rebuttal (Quantum) Report by Mr Kennedy, produced on 27 September 2011 (Kennedy Reply Report)
Kennedy IV	Final Report by Mr Kennedy, dated 18 January 2012 and produced xxx
Marshall I	Reply Expert Report by Mr John Marshall (delay expert), dated 15 August 2011 and produced by the Respondent on 24 August 2011
Marshall II	Report on Matters of Programme and Delay, comments on the Response of Mr Wiseman (Wiseman (III)), dated 10 October 2011 and produced on 11 October 2011 by email only
Marshall III	"Final Report" on matters of programme and delay by Mr Marshall, dated 29 November 2011 and produced xxxxx
Minutes of Contract Negotiations	Minutes of Contract Negotiations with ENTES Company of August 1999 and attached to the Letter of Acceptance of 6 August 1999
P&M	Plant and Machinery, referred to in particular in the context of the quantification of delay costs where reference also is made to Machinery and Equipment
R-PHB	Final Submission of the Respondent, dated 20 February 2012
R-Rejoinder	Rejoinder of the Respondent, dated 29 July 2011
Scott Schedule	see Joint Expert Report
SoC	The Claimant's Statement of Claim, 15 March 2010
SoD	Statement of Defence, 31 March 2011
Wiseman I	Expert Report by Mr Bryn G. Wiseman (delay expert), dated 10 March 2010 and produced with the SoC (Hill International)
Wiseman II	Revised Expert Report by Mr Wiseman, dated 22 June 2011 and produced by the Claimant on 1 July 2011
Wiseman III	Rebuttal Report of Mr Wiseman, dated 26 September 2011, produced by the Claimant on 27 September 2011

Wiseman IV	[forms part of the Joint Expert Report?] Supplemental Report by Mr Wiseman, dated 19 December 2011 and produced xxxx
Taft I	Reply Expert Report by Mr Georges Taft (quantum expert), dated 22 August 2011, produced by the Respondent on 24 August 2011
Taft II	Comments on the Response of Mr Kennedy (Kennedy II), dated 11 October 2011 and produced on that day by email only
Taft III	Final Quantum Report by Mr Taft, dated 19 December 2011 and produced xxxxx
Taft IV	“Addendum I – Adjustments” to Mr Taft’s report of 19 December 2011, daed 20 January 2012 and produced by the Respondent on 20 March 2012
Tr	Transcript of the Hearing in Bishkek from 18 to 21 October 2011, indicating the page number

1. INTRODUCTION

1. This arbitration arose out of a Contract concluded on 30 August 1999 between ENTES Industrial Plants Construction & Erection Contracting Co. Inc., acting as the Contractor, and Claimant in the present proceedings, on the one hand and the Ministry of Transport and Communications of the Kyrgyz Republic, acting as the Employer, and Respondent in these proceedings, on the other hand.
2. The Contract concerned the Second Road Rehabilitation Project Bishkek – Osh Road Civil works. It required that the Contractor rehabilitate two road sections of the Bishkek-Osh Road in the Kyrgyz Republic. The total Contract Price was US\$43'839'882 plus 20% VAT in the amount of US\$8'767'976.40.¹ The project was funded by a loan of the Overseas Economic Cooperation Fund of Japan.
3. The contractual Time for Completion was 1'065 days with 3 December 2002 as completion date. The works were seriously delayed and completed only on 12 October 2005, 1043 days later than provided in the Contract. During the performance of the works, the Contractor made 5 extensions of time (EOT) requests which were partially granted.
4. At the end of the Project, in the Statement at Completion, the Contractor claimed for the cost of the prolongation in an amount of US\$22'982'039.25.² In his Determination of 18 May 2006, the Engineer decided that all 1043 days were “excusable”; he found that out of these only 150 days were “compensable” and granted US\$1'161'870.19.
5. In the Statement at Completion, the Contractor also claimed additional compensation for a number of specific incidents which the Engineer granted partially.
6. The Contractor expressed dissatisfaction with the Engineer’s Determination and requested an Engineer’s Decision. This decision was issued on 16 October 2006 and confirmed the Engineer’s Determination.
7. The arbitration was commenced by a Notice of Arbitration dated 15 January 2009. The Notice of Arbitration was communicated to the arbitrators on 31 July 2009. The Respondent sent Preliminary Comments on 21 August 2009. After consultations with the Parties

¹ Priced Bill of Quantities, Grand Summary Exhibit C-1, p. 021.

² Statement of Completion, Part B.

about a draft Procedural Calendar and Outline Directions, including also financial conditions sent on 14 December 2009, the constitution of the Tribunal was completed and the directions issued on 22 December 2009.

8. The time limits set out in the procedural calendar had to be extended at several occasions, due to extensions requested by the Claimant, change in Government and suspension of powers of Counsel on the Respondent's side. Following the submission of the Statement of Claim on 15 March 2010 and the Statement of Defence on 31 March 2011, accompanied by large volumes of documentary evidence, expert reports and witness statements, the Tribunal held a Procedural Consultation by telephone on 27 April 2011 and gave further directions, concerning written submissions and an evidentiary hearing.
9. After a further Procedural Consultation by telephone on 6 September 2011, an evidentiary hearing was held from 18 to 21 October 2011 in Bishkek.
10. The Parties submitted further expert reports and Post-Hearing Briefs on 20 February 2012, followed by subsequent correspondence and claims for arbitration costs submitted in February 2015.
11. The Tribunal deliberated in person at the end of the hearing in Bishkek and by correspondence. It adopted this award unanimously.
12. The Tribunal and in particular the Presiding Arbitrator regret that, due to a number of unusual events during the course of the proceedings, the extraordinary factual complexity especially of the principal claim for Prolongation Costs and other circumstances delaying its work, this Final Award is rendered later than the Tribunal had hoped.

2. THE PARTIES AND THE ARBITRAL TRIBUNAL

2.1 The Claimant

13. The Claimant, ENTES INDUSTRIAL PLANTS CONSTRUCTION & ERECTION CONTRACTING CO. INC. (“the Claimant”, “the Contractor” or “Entes”), is a company organised under the laws of the Turkey, having its seat at Büyükdere CAD. NO: 107/5 Bengün Han Gayrettepe – Istanbul, Turkey.
14. The Claimant was represented in this arbitration by Professor Dr Ziya AKINCI of the Akinci Law Office, Bebek Mahallesi Selçuk Sok. No: 4, Bebek 34342 Istanbul, Turkey.

2.2 The Respondent

15. The Respondent is THE MINISTRY OF TRANSPORT AND COMMUNICATIONS OF THE KYRGYZ REPUBLIC (“the Respondent”, “the Employer”, “The Ministry of Transport or simply “The Ministry”).
16. In these proceedings the Respondent was represented, with interruptions due to the events in 2010, by Ms Mirgul Smanalieva of the Partner Law Firm, 25-2, Isanov Str., Bishkek, Kyrgyz Republic, 720017.
17. On 26 February 2015, Ms Smanalieva informed the Tribunal that she no longer represented the Respondent. Subsequent correspondence from the Respondent emanated from the Ministry. On 25 March 2015, upon an enquiry from the Presiding Arbitrator, the Respondent confirmed on 25 March 2015 that further correspondence had to be sent to the email addresses of mtk@mtk.gov.kg and piumotckr@gmail.com (Mr N. Jumaliev, Director of IDB IPIG, Ministry of Transport and Communication of the Kyrgyz Republic).
18. The Claimant and the Respondent are jointly referred to as “the Parties”.

2.3 The Arbitral Tribunal

19. The Arbitral Tribunal is composed of the following members:
20. At the request of the Claimant dated 29 December 2008, the Secretary General of the Permanent Court of Arbitration at The Hague designated on 9 April 2009 as Appointing Authority Mr Jan Paulsson, then Partner Freshfields Bruckhaus Deringer LLP, 2 rue Paul Cézanne, 75008 Paris.

21. Professor Turgut Öz, Kültür Üniversitesi Hukuk Fakültesi Medeni Hukuk, Anabildim Dali Sirinevler Kampüsü, E-5 üzeri, Sirinevler-Istanbul, Turkey, was appointed by the Claimant on 4 April 2009.
22. Professor Sergei Lebedev, Staroalexeevskaya 16/49, 129626 Moscow, Russia, was appointed on 11 May 2009 on behalf of the Respondent by Mr Jan Paulsson, acting as Appointing Authority.
23. Michael E. Schneider of LALIVE, rue de la Mairie 35, 1211 Geneva 6, Switzerland, chosen by the Co-arbitrators as Presiding Arbitrator and informed the Parties on 6 July 2009 that he accepted to act in this function.

3. THE FACTS OF THE DISPUTE

3.1 The Project and the Contract

24. In the beginning of the nineteen-nineties (1990's), the Government of Kyrgyzstan decided to rehabilitate the Bishkek-Osh Road (the "Project"). This road is some 620 km long and traverses the Tien Chan Mountains. It connects Bishkek and Osh, the two largest cities in the Kyrgyz Republic.
25. The funding of the Project was provided by a loan agreement between the Government of Kyrgyzstan and the Overseas Economic Cooperation Fund of Japan.
26. Proceeding by way of public tender, the Respondent awarded the implementation of the Project to the Claimant. The contract for this implementation was concluded on 30 August 1999 (the "Contract"), with the Employer acting through its Project Implementation Unit (PIU).
27. The Contract, produced as Exhibit C-1, consists of a number of documents, listed in the Form of Agreement, and of which the most important documents for the purposes of the Arbitration are:
 - (i) The Letter of Acceptance and Minutes of Contract Negotiations;
 - (ii) The bid by the Contractor;
 - (iii) Conditions of Particular Application (CPA);
 - (iv) General Conditions of Contract (GCC);
 - (v) Special Specifications;
 - (vi) General Specifications;
 - (vii) Special Requirements; and
 - (viii) The Priced Bill of Quantities.
28. The Special Specifications described the location of the Works as follows:

*"The Works are located roughly south-west of Bishkek in a mountainous area of the Tien Shan range with elevations ranging from about 1000 m to 2200 m. The terrain is mountainous and much of the road alignment is tortuous having numerous tight curves and steep gradients."*³
29. The rehabilitation and improvement work of the road included the carriageway, shoulders, slope stability, drainage system, structures

³ Special Specifications, clause 1.2.1 (Exhibit C-1, p. 664).

and road furniture as well as the construction of new alignments in some sections.⁴ This scope of work required the repair of many of the existing bridges and widening them to accommodate the full width of the road. The road rehabilitation included provision and installation of new kilometre posts and traffic signs as well as the installation of road safety features such as road markings, steel guard rails and concrete parapets.⁵ The Works also included the rehabilitation of two short tunnels.

30. The Works were divided into Section A (km 248-325) and Section B (km 361-412).⁶
31. The Contract provides that the “law is that in force in the Kyrgyz Republic”⁷ and the settlement of disputes by UNCITRAL arbitration in Bishkek.⁸
32. The GCC are a reproduction of the FIDIC Civil Engineering Conditions. Japan Overseas Consultants Co. Ltd was appointed as the Engineer,⁹ acting in the role which these conditions confer on the Engineer. The duties and authority of the Engineer and the Engineer’s Representative are defined in particular in Clause 2.1 CPA.
33. The Parties concluded four Addenda, two on 15 and 23 May 2003 respectively and two on 15 December 2003, dealing with a variety of subjects, including extensions of time and additional payments.

3.2 Difficulties during the Performance of the Works

34. During the performance of the Works a number of difficulties arose which caused delay and additional costs. The Contractor claimed for extensions of time to compensate these delays and for additional costs. Some of these claims were recognised and accepted by the Engineer and the Employer; others were not and form part of the issues in this arbitration.
35. The difficulties on which the Contractor relied in his claims concerned a wide variety of causes, ranging from design changes, additional works and late instructions, shortages of materials, in particular petroleum products, inclement weather in particular harsh winters and political unrest, in particular the “Tulip Revolution” in March - April 2005.

⁴ Ibid.

⁵ Ibid. p. 665.

⁶ Minutes of Contract Negotiations (Exhibit C-1, p. 10).

⁷ CPA, Clause 5.1 (b).

⁸ GCC Clause 67.3 and CPA Clause 67.3; for details see below Section 6.1.

⁹ CPA, Clause 1.1 (iv).

36. The principal claim in this respect is that for the costs of prolongation, discussed in detail below in chapter 8. In addition, there are a number of specific events on which the Claimant relies in this arbitration. They include the following:
37. Damage caused in the context of political unrest, specifically a claim for US\$ 39'490 for damage to the Contractor's equipment and plant, specifically a grader. Other claims concerned road and emergency taxes, VAT, disputes with sub-contractors and delayed payments. The claims relating to these issues will be considered separately under the heading of the respective claim.

3.3 The Time for Completion, Delay and Time Extensions

38. The Engineer issued the Notice to Proceed on 25 December 1999¹⁰ and work started on 3 January 2000. The work programme was submitted to the Employer and the Engineer on 19 January 2000, and was approved by the Engineer on 22 January 2000.¹¹
39. The contractual Time for Completion was 1'065 days¹² with the completion date being 3 December 2002.
40. The Project suffered delay and the Works were completed only on 12 October 2005, i.e. an overall delay of 1'043 days. The Contractor applied for altogether five extensions of the time for completion (EOT claims) and was granted some such extensions consisting overall of 637 days, bringing the completion date to 28 September 2005. They may be summarised as follows:
41. EOT 1 was requested on 25 July 2007 and concerned delays during the period between 3 January 2000 and 30 June 2002 for which the Contractor invoked Clause 44.1 GCC.¹³ On 17 September 2002, the Engineer granted the Contractor an extension of 83 days.¹⁴
42. EOT 2 was requested in early 2003¹⁵ and concerned the period between 1 July 2002 and 3 December 2002. On 28 April 2003, the Contractor terminated the Contract. This was followed by negotiations in May 2003 which led to Addendum N° 1, concluded on 15 May 2003 which, inter alia, granted an extension of the time

¹⁰ Exhibit C-3.

¹¹ Exhibit C-4.

¹² Exhibit C-1, p. 16.

¹³ Exhibit C-5, EOT Claim No.1.

¹⁴ Exhibit C-6.

¹⁵ The Claimant states in C-SoC that the EOT was made on 8 April 2008, referring to Exhibit C-8; however, the correspondence produced as part of this exhibit seem to indicate that the EOT was submitted at an earlier date, possibly on 12 February 2003..

for completion by 152 days, bringing the revised completion date to 15 August 2004.¹⁶

43. EOT 3 was requested on 31 October 2003.¹⁷ It concerned the period between 1 April 2003 and 15 October 2003. The request was dealt with in Addendum N° 4, which granted the Contractor an extension of 180 days¹⁸ and brought the contractual completion date to 20 November 2004.
44. EOT 4 was requested on 8 September 2004¹⁹ and concerned the period between 15 October 2003 and 12 August 2004. On 27 December 2004, the Engineer granted 94 days, bringing the contractual completion date to 23 May 2005.²⁰
45. EOT 5 was requested on 23 June 2005.²¹ It concerned the period between 13 August 2004 and 23 May 2005. On 13 July 2005, the Engineer granted an extension of 128 days,²² bringing the contractual completion date to 28 September 2005.

3.4 Completion, Taking Over and the Statement of Completion

46. The Works were completed and taken over by the Employer in sub-sections. The Taking Over Certificates were issued as follows:
 - On 07 November 2003 for Sub-section 1;
 - On 07 November 2003 for Sub-section 2;
 - On 07 November 2003 for Sub-section 3;
 - On 07 November 2003 for Sub-section 4;
 - On 07 November 2003 for Sub-section 5;
 - On 18 December 2003 for Sub-section 6;
 - On 18 December 2003 for Sub-section 7;
 - On 23 July 2005 for Sub-section 8; and
 - On 24 October 2005 for Sub-section 9.²³
47. After the last Section had been taken over, the Contractor submitted the Statement at Completion on 17 March 2006. According to Clause 60.10 CPA, this statement must be submitted by the Contractor to the Engineer not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the Works.

¹⁶ Exhibit C-1, p. 367.

¹⁷ Exhibit C-9.

¹⁸ Exhibit C-1, p. 372.

¹⁹ Exhibit C-10.

²⁰ Exhibit C-11.

²¹ Exhibit C-12.

²² Exhibit C-13.

²³ Exhibit C-12.

The Employer had extended the time for this submission;²⁴ but the question whether the submission was timely remained controversial.

48. In the Statement at Completion, part B, the Contractor claimed compensation in the amount of US\$ 24'532'304.24; by far the largest part of this claim concerns costs for delay.
49. On 18 May 2005, the Engineer issued its Determination on Part B of the Statement at Completion and awarded US\$ 1'187'035.20.²⁵
50. On 7 June 2006, the Contractor expressed dissatisfaction with the Engineer's Determination.²⁶ The Contractor then requested on 20 June 2006 a Decision of the Engineer according to Clause 67.1 GCC.²⁷
51. The Engineer's Decision under Clause 67.1 GCC was given on 16 October 2006. On 22 December 2006, the Contractor gave notice to the Employer, with a copy to the Engineer, of his intention to commence arbitration.²⁸

²⁴ Exhibit C-2.

²⁵ Exhibit C-2.

²⁶ Exhibit C-16.

²⁷ Exhibit C-18.

²⁸ Exhibit C-24.

4. THE ARBITRATION PROCEEDINGS

52. The arbitration proceedings were initiated by the Claimant's Notice of Arbitration, sent to the Respondent on 15 January 2009. The Arbitral Tribunal was formed as described above in Section 2.3 of this Award.
53. During the course of the Tribunal's constitution, the Arbitrators received the Notice of Arbitration on 31 July 2009. They then invited the Respondent to comment. The Respondent did so in the form of Preliminary Comments to the Claimant's Notice of Arbitration submitted on 21 August 2009.
54. In consultation with the Parties, the Arbitral Tribunal established on 22 December 2009 the Procedural Calendar and Directions, providing for the following steps:
55. A Statement of Claim, scheduled for 15 February 2010 and a Statement of Defence, scheduled for 15 June 2010; each of these submissions had to be accompanied by documentary evidence, nomination of any witnesses together with a summary of the testimony on alleged facts as well as any expert reports. The Procedural Calendar provided for a procedural consultation after this first exchange of written submissions, at which the need for further written submissions and the arrangements for the evidentiary hearing would be discussed. The Tribunal reserved the possibility of appointing a secretary and a technical expert, subject to prior consultation about the person chosen and the financial conditions. In the same document, the financial conditions of the Tribunal's activity were set out (see below Section 8 the Costs of the Arbitration).
56. By letters dated 22 January 2010 and 2 February 2010, the Claimant requested a one-month extension of the time for submitting its Detailed Statement of Claim. The Tribunal granted the request and updated the Procedural Calendar and Directions on 10 February 2010. In this Update 1, the Tribunal also extended the time for the Respondent's Statement of Defence to 16 August 2010.
57. On 15 March 2010, the Claimant filed its Statement of Claim, accompanied by two folders of exhibits, an Expert Reports by Mr William Kennedy and Mr Bryn Wiseman of Hill International in 8 volumes including a large number of documents and Witness Statements of Mr Murat Ozkoseoglu, Mr Ahmet Alp and Mr Nuri Asman together with further exhibits.
58. On 14 April 2010 the Respondent's counsel wrote to the Tribunal and, referring to events in Kyrgyzstan, explained "Current events are

terrible, as practically all population suffers". After providing further details about the events in the country, she added that the Interim Government had announced a six months period during which "a new Constitution would be passed, parliamentary elections would be held and a new Government would be designated. Accordingly, the new Minister of Transport will be designated". Since the Minister who had issued the power of attorney to her law firm "was dismissed", Counsel explained that these powers are "invalid at present time" and her firm was not authorised to represent the Respondent. She requested "to postpone the proceedings for a period not less than 6 months, at least until the formation of new Government and obtaining of authorities (power of attorney) on representation of interests of the Respondent".

59. The Tribunal expressed its sympathy with the Kyrgyz people and invited further information about the Respondent's representation.
60. Respondent's counsel explained on 6 May 2010 that it had addressed itself to the acting Minister of Transport and Communications with the "request to consider the issue of confirmation of our authorities to continue representation of interests of the Respondent in the arbitration".
61. The Respondent's counsel provided further explanations by letters dated 18 and 27 May 2010, stating that their authorization had not yet been confirmed.
62. In a number of subsequent letters the Respondent's counsel informed the Arbitral Tribunal that, despite its interventions, no powers to act on behalf of the Ministry had been conferred to it.
63. On 1 July 2010, the Partner Law Firm informed the Tribunal that it had received an "interim response from the Ministry of Transport". Attached to the Letter of the Partner Law Firm was a letter that had been addressed on 28 June 2010 to the Partner Law Firm by the Secretary of State of the Ministry of Transport and Communications of the Kyrgyz Republic. Based on this letter, the Partner Law Firm informed the Tribunal that its "authorization is still in process of the coordination". It announced that the question of its authorization will be "decided after the formation of the Government KR, i.e. not earlier than October 2010".
64. On 22 October 2010, the Tribunal wrote to the Partner Law Firm, summarised the correspondence concerning the Respondent's representation and continued:

"October has come, the elections have taken place and no further information from the Respondent or the Partner Law Firm has been received by the Arbitral Tribunal.

From earlier communications the Arbitral Tribunal concludes that the Claimant wishes to proceed with the arbitration.

*The Arbitral Tribunal now invites the Partner Law Firm to inform it by **Monday 1st November 2010***

- (i) whether its power of attorney to act for the Kyrgyz Republic in the present arbitration has been restored; or*
- (ii) if this has not been the case, whether, apart from or in place of the Secretary of State in the Ministry of Transport and Communications, there is any other authority acting on behalf of the Kyrgyz Republic in the present arbitration.*

Upon receipt of this response or if no response is received by the 1st November 2010 the Claimant is invited to inform the Tribunal how it wishes to proceed further in the arbitration.”

65. On 28 October 2010 the Partner Law Firm informed the Arbitral Tribunal that its powers had not been restored. It explained that the election results had not been declared yet and no new government had been formed. It added: the Ministry “can not independently solve the issue on hiring of ‘Partner’ Law Firm for representation of its interest in arbitration ...”.
66. The Tribunal invited the Claimant to state how it wished to proceed. After further correspondence, the Claimant communicated to the Tribunal the Ministry’s precise address for communication. On 20 December 2010 the Claimant informed the Tribunal that Mr Erkin Isakov who had been Head of the Project Implementation Unit remained Minister of Transportation and Communication.
67. The Tribunal then addressed itself on 23 December 2010 to the Parties, including Mr Erkin Isakov, Minister of Transport and Communication of the Kyrgyz Republic, summarising the procedure in the arbitration and granted the Respondent a last extension until 31 January 2011 for filing the Statement of Defence as set out in the Procedural Calendar and Directions. The Tribunal also consulted the Parties about dates for a procedural consultation after the filing of the Statement of Defence.
68. In response the Partner Law Firm informed the Tribunal on 30 December 2010 that its powers to represent the Ministry in this arbitration had been restored. In the same letter, the Respondent’s counsel requested an extension of time for the submission of the Statement of Defence until 28 April 2011.
69. The Claimant objected to the requested extension. After further correspondence, the Arbitral Tribunal extended the time limit for the

submission of the Respondent's Statement of Defence until 31 March 2011.

70. On 31 March 2011, the Respondent filed its Statement of Defence, together with one folder of documentary evidence. It named Mr Zhumaliev Nurbek Omurbekovich as witness, without further indication about the subject matter of its testimony.
71. The Tribunal then convened a Procedural Consultation by telephone on 27 April 2011 in order "to provide the Parties and the Tribunal with an opportunity, after the first exchange of written pleadings, to consider the scope of the dispute and to focus further on proceedings". In addition to the members of the Tribunal, the following persons participated in this consultation: On the Claimant's side as Counsel: Professor Ziya Akinci, Dr Cemille Demir Gokyayla, Ms Fatma Huseyin and Mr Sercan Kulaksizogullari and from Entes: Mr Ahmet Alp, Mr Murat Ozkoseoglu and Mr Nuri Asman; on the Respondent's side as Counsel: Ms Mirgul Smanalieva, Ms Begaim Kaibyldaeva and Mr Vitaliy Khabarov.
72. In preparation of the consultation, the Arbitral Tribunal had prepared a note with Observations and Questions for Consideration. In that note, the Tribunal had identified issues and questions which arose from a preliminary examination of the case, as it presented itself after the first exchange of written submissions.
73. At the Procedural Consultation it was agreed that the Claimant would be authorised to make Submissions on Legal Grounds and the Respondent a Complementary Submission. It was also agreed that the Claimant would present the documents attached to the expert report of Hill International in a form that can be referenced and consulted. The Respondent was invited to present a witness statement by Mr Omurbekovich and was given the opportunity of a response to the expert report presented by the Claimant.
74. The Tribunal also discussed with the Parties their availability for an evidentiary hearing. Since the Respondent was not available before September 2011 and the Claimant not before October 2011, the hearing was fixed for the time from 18 to 21 October 2011. Differences arose with respect to the venue of the hearing, in particular relating to concerns about the attendance of the Claimant's witnesses. The decision on the venue was reserved.
75. The Tribunal submitted to the Parties Summary Minutes of the Procedural Consultation in draft form on 4 May 2011. After having received and considered the Parties' comments on this draft, the Tribunal sent the final version signed by the Presiding Arbitrator with its letter of 6 July 2011.

76. As agreed at the Procedural Consultation, the Respondent sent on 3 May 2011 the Kyrgyz Civil Code in Russian and in an “unofficial” English translation to the Claimant and the members of the Tribunal. The Claimant contested the accuracy of this English translation on 17 May 2011, stating that the “English versions of the Civil Code (both part 1 and part 2) are not effective and do not contain all the amendments”; attached to this letter were a number of articles from the Civil Code in Russian and the contested version of the Respondent’s translation. The Claimant requested that the Parties be informed of the Articles of the Code “which may be examined/referred, so that the applicable version and correct translation is presented”. The Respondent replied on 24 May 2011, explaining that it had highlighted in the English translation those passages of the Civil Code on which it had relied in its Statement of Defence. The passages where the Claimant found the translation incorrect concerned other provisions of the Code.
77. On 31 May 2011, the Claimant submitted its Submission on Legal Grounds as well as the documents attached to the Expert Report of Hill International. The latter consisted of four files (volumes 3 to 6) replacing the corresponding files of the previous submission.
78. On 15 June 2011, the Respondent requested an extension of time until 25 August 2011 to submit its response to the Claimant’s Expert Report. The Claimant objected to this request.
79. On 29 June 2011, the Respondent submitted the written statement of Mr. Nurbek Omurbekovich Zhumaliev.
80. On 30 June 2011, the Respondent requested the Arbitral Tribunal to grant an extension until 30 July 2011 to produce its Complementary Submission.
81. On 1 July 2011, the Claimant made an unsolicited submission, including a revised expert report by Mr Wiseman and a letter by him, dated 28 June 2011 addressing certain aspects of his report of 10 March 2010 that had been filed with the Statement of Claim. The submission also included a “Supplementary Evidence Pack Cover”.
82. The Arbitral Tribunal granted the Respondent’s requests for time extension on 11 July 2011 and fixed the time for the Respondent’s Complementary Submission at 30 July 2011 and for the Reply Expert Opinion at 25 August 2011.
83. In its letter of 11 July 2011, the Tribunal proposed to appoint Mr Dimitri Iafaev as a Secretary to the Tribunal. It provided information about the qualification of Mr Iafaev and a biographical note. The Tribunal stated that Mr Iafaev’s work would be billed at

the rate of CHF 300 per hour. The Parties replied by letters of 20 and 29 July 2011, informing the Tribunal that they had no objection to this appointment. On 29 July 2011, the Tribunal informed the Parties that it had appointed Mr Iafaev as Secretary to the Tribunal.

84. On 29 July 2011, the Respondent filed its Complementary Submission, described as “Rejoinder of the Respondent”, together with further exhibits.
85. On 24 August 2011, the Respondent submitted the Reply Expert Opinion of Mr John Marshall (delay expert) and the Reply Expert Opinion of Mr George Taft (quantum expert).
86. The Arbitral Tribunal and the Parties held a further Procedural Consultation by telephone on 6 September 2011 in order to determine steps that remained to be taken in preparation of the hearing and to consider the organisation of the hearing. In addition to the full Tribunal, the following persons attended the consultation: On the Claimant’s side Professor Ziya Akinci, Dr Cemile Demir Gökyayla, Ms Fatma Husseyin and Mr Mete Sonbahar, as counsel; on the Respondent’s side, Mr Nurbek Zumaliev, Ms Mirgul Smanalieva, Ms Begaim Kaiblydaeva and Mr Vitaliy Khabarov as counsel.
87. At the Procedural Consultation, it was agreed that the Parties may submit further expert reports, but that these had to be limited to points that arose from prior opposing reports. The Parties also were invited:

“...to make arrangements for consultations between their experts with the objective of clarifying the experts’ respective positions and the assumptions made in their reports, for providing information which the opponent expert identified as missing, for eliminating contradictions and, to the extent possible, for reducing differences in opinion.”
88. Further points addressed at the Procedural Consultation concerned the organisation of the hearing. The Parties explained that they wished to hear all witnesses which their opponent had named. The Tribunal explained that it intended to take the lead in questioning the witnesses and experts but that the Parties also would be given an opportunity to question the witnesses and experts.
89. Draft Summary Minutes of the Procedural Consultation were sent to the Parties on 10 September 2011 for comments. The corrected final version was sent on 26 September 2011.
90. On 27 September 2011, the Claimant submitted written rebuttal report by Mr William Kennedy and Mr Bryn G. Wiseman.

91. Considering the concerns raised by the Claimant about its witnesses travelling to Bishkek, the Tribunal invited the Parties on 1 October 2011 to examine jointly possible arrangements which could be taken to ensure the presence of the Claimant's witnesses at the hearing. The Parties informed the Tribunal on 5 and 6 October 2011 that they could not agree on any such arrangement. Thereupon the Tribunal informed the Parties on 10 October 2011, that the hearing would take place in Bishkek and that the Claimant's witnesses would be heard by video-conferencing.
92. In the letter of 10 October 2011, the Tribunal communicated the proposed agenda for the hearing.
93. The Tribunal also informed the Parties that, as anticipated in the Procedural Calendar and Directions, it wished to have at the hearing the assistance of a technical expert. It informed the Parties that it had retained Mr Alexander Hamann in this function and had invited him to examine the file and attend the hearing. For any further work beyond his presence at the hearing, it would consult the Parties.
94. On 11 October 2011, the Respondent submitted the comments made by Mr John J. Marshall and Mr George Taft on points arising from the rebuttal report of the Claimant's experts.
95. The Hearing was held from 18 to 21 October 2011 at the hotel Hyatt Regency in Bishkek. It was attended by the full Tribunal, together with its Secretary and Mr Alexander Hamann, the Tribunal's expert. On the Claimant's side, attended Professor Ziya Akinci, Dr Cemille Demir Gokyayla, Mr Metehan Çağlar Sonbahar, as counsel, Mr Bryn Wiseman, Mr Ekrem Kaya, Mr William Kennedy, Mr Nurbek Sabirov and Mr Magomed Saaduev, as experts and Mr Nurjan Jumagulera, as interpreter; on the Respondent's side attended Mr Kulanychbek Mamaev, as Party Representative, Ms Mirgul Smanalieva, Ms Nina Vilкова, Mr Vitaliy Khabarov and Ms Natalia Pak, as counsel, Mr Georges Taft and Mr John Marshall as experts, Mr Nurbek Jumaliev, as witness, Ms Aigerim Bershiaeva, Ms Begaim Kaibyldaeva and Ms Guliaim Kolbaeva, as interpreters.
96. The Claimant's witnesses, Mr Ahmet Alp, Mr Nuri Asman and Mr Murat Ozkoseoglu, were connected from Istanbul by video-link.
97. The hearing was recorded by Ms Gail Mallaghan of Briault Reporting. The verbatim transcript of this recording was sent to the Tribunal and the Parties on 7 November 2011.
98. The Parties were given the opportunity to address the Tribunal in Opening Statements. Thereafter, the Tribunal examined with the

Parties their respective positions with respect to the issues which have to be decided and the evidence to be considered.

99. The Claimant clarified that its claim had to be considered in the context of the Engineer's Decision pursuant to Clause 67.1, issued on 16 October 2006²⁹ and the Notice of Intent to Commence Arbitration, dated 22 December 2006. The Engineer's Decision had been based on the Engineer's Determination on the Statement at Completion – Part B, dated 18 May 2006, including in particular Table 2 setting out the Engineer's Determination concerning the delay related claims.
100. On 20 and 21 October 2011, while the Tribunal examined other issues with the Parties, the Parties' experts and the Tribunal's expert, at the invitation of the Tribunal and with the agreement of the Parties, withdrew from the Hearing and examined jointly the issues raised by the time-related claim, in particular the questions of:
- (i) how the decision of the Engineer in Table 2 had to be understood with respect to each of the claims for which he granted an extension of time but no compensation or less compensation than claimed, in particular what was the cause for which the Engineer awarded an extension of time;
 - (ii) which of the decisions for which the Engineer granted an extension of time also should lead to compensation for the Contractor's costs caused by the delay; and
 - (iii) what compensation should be awarded for these compensable delays.
101. At the end of this joint expert examination, the Tribunal's Expert reported to the Tribunal the conclusions reached by the experts and the points on which they disagreed. This report was summarised in a table (based on Table 2 attached to the Engineer's Determination), prepared by the Tribunal's expert and distributed to the Parties. The Parties and their experts were given the opportunity to comment on these explanations and to provide additional explanations and testimony.
102. During the course of the Hearings the Parties produced new documents, numbered HC 1 to HR 6. The table prepared by the Tribunal's expert was numbered HT 7.
103. With respect to further proceedings after the hearing, the Parties were given the opportunity to present by 30 November 2011 Additional Expert Reports on the identification of the delays (as

²⁹ Exhibit C-22.

compensable or not) and on quantum.³⁰ To this effect, the Parties' experts were invited, to the extent the position of their opponent may require clarification, to contact each other prior to the submission of their reports and to cooperate so that each expert could address the relevant issues with a full understanding of the case. In this respect the Parties' quantum experts had already established contact immediately after the Hearing, agreeing on a meeting at which the Claimant's expert would provide access to the data and documentation on which he relied in preparing his quantification. The Tribunal clarified that these contacts did not preclude the Respondent and its expert from concluding that the evidence produced is insufficient to support the claim made by the Claimant.

104. It was also agreed that, if their reports require the submission of new documents, these documents would be disclosed beforehand to the other expert and then submitted in the arbitration jointly by the experts.
105. As the final step in the arbitration it was agreed at the hearing that, following the submission of the expert reports, Final Written Statements, closing the submissions of the Parties, would be submitted by 31 January 2012.
106. The Tribunal announced that, following these submissions, it would complete its deliberations. During these deliberations it may receive the assistance of its expert.³¹ However, the Tribunal stated that it did not intend to request a written report from its expert and intended to decide the case on the basis of the argument and evidence provided by the Parties. If the Tribunal, contrary to that expectation, would conclude that a written report from its expert were necessary, it would make such a report available to the Parties for comment.
107. During the course of the hearing, the Respondent drew the attention of the Tribunal to Article 29 of the Kyrgyz Arbitration Act. The Tribunal invited the Respondent to inform the Tribunal and the Claimant whether the award which the Tribunal would issue may be delivered to the Parties by courier or equivalent means or whether it has to be announced orally at a hearing. If oral announcement is required, the Tribunal requested to be informed whether this announcement can be made by video-conference.
108. At the end of the Hearing, the Tribunal enquired with the Parties whether there were any points of complaint which the Tribunal could address. The Parties stated that this was not the case and

³⁰ Tr 757.

³¹ Tr 686.

expressed their satisfaction with the manner in which the Hearing had been conducted.

109. A draft of the Summary Minutes of the Hearing was sent to the Parties on 27 October 2011. Following proposed modifications from the Parties, the final version of the Summary Minutes was sent to the Parties on 23 December 2011.
110. At the request of the Respondent the Tribunal extended until 19 December 2011 the time for the submission of Additional Expert Reports on the identification of the delays (as compensable or not) and on quantum.
111. The Additional Expert Reports on delay and on quantum were indeed submitted by each of the Parties on 19 December 2011 together with a Joint Expert Report by the Respondent's and the Claimant's quantum experts.³²
112. On 21 December 2011, the Claimant wrote to the Tribunal stating (a) that it had noted reference to new documents in the submissions of the Respondent's delay and quantum experts, (b) that Mr Marshall, the Respondent's delay expert, had submitted a totally new analysis and (c) that Mr Taft, the Respondent's quantum expert, had submitted a separate report in addition to the joint report. The Claimant requested the Tribunal:
 - to remove the documents submitted by the Respondent's Delay and Quantum Experts from the record;
 - to remove from the record and disregard the new analysis of Mr Marshall;
 - to disregard Mr Taft's Quantum Report submitted on 19 December 2011; and
 - to confirm that the Parties are not allowed to submit any further documents with the final submission.
113. The Tribunal invited both Parties on 23 December 2011 to identify by 28 December 2011 which new documents were produced with the expert reports. It invited the Respondent to specify by that date for which of their conclusions Mr Marshall and Mr Taft relied on such new documents.
114. Both Parties replied on 28 December 2011. The Claimant submitted a list of the new documents presented by the Respondent's expert, Mr Marshall, and the documents submitted by Mr Wiseman in response to them. The Respondent replied that the conclusions of

³² Wiseman IV by the Claimant; Marshall III and Taft III by the Respondent; Mr Kennedy's new report took the form of his entries in the Joint Expert Report.

its experts, Mr Marshall and Mr Taft, did not directly rely on the “new documents”.

115. In its letter of 23 December 2011, the Tribunal reminded the Parties of its request for information concerning the requirement of Article 29 of the Kyrgyz Arbitration Act concerning oral announcement of the award. On 28 December 2011, the Respondent stated that, in the interest of saving costs, it had no objection against the announcement of the award via video conference with the subsequent delivery of the award via courier. The Claimant wrote on 2 January 2012 that the announcement of the award by video conference with the subsequent delivery of the award by courier was acceptable under Kyrgyz law.
116. By email of 18 January 2012 the Claimant communicated to the Tribunal a written declaration from its quantum expert Mr Kennedy, stating that he had noted errors in his part of the Joint Report of 19 December 2011. He joined a “Final Report” in which these corrections were marked. The Respondent objected to this submission on 21 January 2012 considering it as “inadmissible”. The Claimant replied on 23 January 2012 indicating that Mr Kennedy’s “Final Report” was only a “correction of Mr Kennedy’s part in the Joint Report dated 19 December 2011”.
117. In its letter of 21 January 2012 the Claimant reiterated the conclusions in its letter of 21 December 2011 and requested an extension of the time for the Post-Hearing Submissions.
118. On 25 January 2012, the Tribunal decided on the pending applications as follows:
 1. *The new documents produced together with the Respondent’s expert reports, as well as Appendix 2 of Mr Marshall’s report of 29 November 2011 and Mr Taft’s Quantum Report submitted on 19 December 2011 are admitted in the proceedings. The Tribunal reserves its decision concerning their relevance for the outcome of the dispute.*
 2. *No further documents may be produced without the Arbitral Tribunal’s express prior written authorisation.*
 3. *The time for the submission of the Post-Hearing Briefs is extended to 20 February 2012.*
119. The Parties filed simultaneous Post-Hearing Briefs on 20 February 2012.
120. These submissions by the Tribunal closed the proceedings.
121. Without prior authorisation or request, the Respondent wrote on 20 March 2012, presenting “general comments to the Final Submission

of the Claimant”. It argued that the Claimant had disregarded the directions of the Tribunal and had presented a new argument. The Respondent then went on to discuss parts of the Claimant’s Post-Hearing Submission, with the objective of refuting the position presented in this submission.

122. Attached to the Respondent’s letter was a document dated 20/01/2012 and entitled “Addendum 1 – Adjustments to G Taft report dated 19/12/2011”; part of this Addendum is a “Table of Adjustments”. The Respondent explained that this Addendum had been sent to its Counsel on 20 January 2012 but did not state whether it had been communicated to the Claimant and its experts prior to 20 March 2012.
123. The Respondent’s letter of 20 March 2012 concluded by stating:

“We believe that Arbitrators should render the award on the basis of those arguments and materials which were presented by the parties at the hearing and in addition to that on the basis of expert conclusions and opinions admitted by the Arbitral Tribunal. At this stage the parties have not been granted the right to offer new considerations in respect of expert opinions of the other party and to specify the position set forth at the hearing (including specification of calculations, etc.). The whole matter is confined to the hearing and summarised position of the parties in their submissions.”
124. The Claimant protested on 29 March 2012 against this submission and requested that it be disregarded. Nevertheless, the Claimant discussed some of the points that the Respondent had raised on 20 March 2010.
125. No further communications on the substance of the dispute were made by any of the Parties.
126. The Tribunal had made it clear at the October 2011 hearing and confirmed in the Summary Minutes that the Final Written Statements were “closing the submissions of the Parties”. The Tribunal also had organised a procedure by which the Parties’ experts met, prepared a joint report on 19 December 2011. By its decision of 25 January 2012, the Tribunal allowed subsequent corrections and additional documents. The Parties had sufficient time to take these reports and documents into consideration when preparing their Final Written Statements, filed on 20 February 2012. As stated clearly at the hearing, this final submission was not

limited to legal argument; it extended to the facts and to the presentations of the experts.³³

127. In these circumstances the submissions, both of the Respondent on 20 March and of the Claimant on 29 March 2012, were made without authorisation after the proceedings had been closed. As such they are inadmissible. However, the Tribunal has considered them in order to determine whether any of the statements made in them would have changed its conclusion if they had been admitted. It assured itself that such consideration did not impair the Parties' right to be heard.
128. The submissions on the costs of the arbitration and the Parties' quantification of their claims in this respect were submitted on 3 and 6 February 2015. Each Party was given an opportunity to comment on its opponent's cost claim and did so on 20 February 2015.
129. The Tribunal has examined the Parties' argument and evidence. It has deliberated at various stages of the proceedings in person and by correspondence and thus reached the unanimous decisions in the present award. It did not seek any further advice from its expert
130. At the end of the proceedings the Tribunal rendered account of the costs of the proceedings by a Procedural Order on Costs, delivered on 26 September 2015.
131. The Tribunal invited the Parties to consider the arrangements required for announcing this award by video-conference. The Claimant's counsel proposed to make the necessary arrangements. In the absence of any objections from the Respondent, the Tribunal accepted this proposal and convened the meeting by video-conference for 29 September 2015. All participants confirmed that they would make arrangements ensuring their participation.

³³ Transcript, Day 4, pp. 751 to 753.

5. THE RELIEF SOUGHT BY THE PARTIES

5.1 Relief sought by the Claimant

132. In its Statement of Claim, the Claimant sought the following relief:

1. An award of additional payment in the amount of US\$ 22'639'037.81 corresponding to 808 days Extension of Time or such other amount corresponding to the Extension of Time that the Tribunal considers is reasonably and properly due to the Claimant in respect of that portion of the delay in completion for which the Tribunal considers the Respondent is culpable;

2. An award of additional payment in the amount of US\$ 2'635'800 corresponding to 150 days Extension of Time due to the joint responsibility of the Claimant and the Respondent;

3. An award of payment in the amount of US\$ 240'808.90 corresponding to the interest on late payments;

4. An award of payment in the amount of US\$ 57'801.20 corresponding to the payment for end terminals/sloping sections of guardrails;

5. An award of payment in the amount of US\$ 185'748.62 corresponding to the payment for the Value Added Tax;

6. An award of payment in the amount of US\$ 39'969.47 corresponding to the payment for the Road and Emergency Tax;

7. An award of payment in the amount of US\$ 39'490.00 corresponding to the damage to the Claimant's equipment during the political unrest;

8. An award of payment in the amount of US\$ 123'936.54 corresponding to the grader case during the political unrest;

9. An award of payment in the amount of US\$ 379'519.65 corresponding to the damages arising out of the sub-contract with Interakt;

10. An award of payment in the amount of US\$ 40'639.23 corresponding to the payment for the debts of the Nominated Subcontractor JASU;

11. An award from the Tribunal for the payment of interest by the Respondent to the Claimant in the amount representing the interest for the period between the outstanding date and the date of the payment by applying the legal interest rate under Kyrgyz Law to the amounts claimed and fine; and

12. An award from the Tribunal ordering the Respondent to pay: (i) the full costs of the arbitration (that is to say all monies paid to the Tribunal in respect of the Tribunal's fees and other costs); and (ii) all of the Claimant's costs reasonably and properly incurred in the arbitration.

133. The claims remained essentially unchanged during the course of the proceedings, except that the claims in (i) and (ii) were combined into one claim. In its Post-Hearing Submission dated 20 February 2012, the Claimant seeks the following relief:

1. An award from the Tribunal of additional payment in the amount of US\$ 24'195'975.18 or such other amount corresponding to the Extension of Time that the Tribunal considers is reasonably and properly due to the Claimant;

2. An award from the Tribunal that the Respondent pays an amount of US\$ 151'889.38 corresponding to the interest on late payments;

3. An award from the Tribunal that the Respondent pays an amount of US\$ 202'304.20 for the claim corresponding to guardrails and the end terminals/sloping sections of guardrails;

4. An award from the Tribunal that the Respondent pays an amount of US\$ 185'748.62 corresponding to the claim for the Value Added Tax;

5. An award from the Tribunal that the Respondent pays an amount of US\$ 39'969.47 corresponding to the claim for the Road and Emergency Tax;

6. An award from the Tribunal that the Respondent pays an amount of US\$ 39'490.00 corresponding to the claim for damages to the Claimant's equipment during the political unrest;

7. An award from the Tribunal that the Respondent pays an amount of US\$ 123'936.54 corresponding to the claim for the Road Grader Case;

8. *An award from the Tribunal that the Respondent pays an amount of US\$ 379'519.65 corresponding to the claim for damages arising out of the sub-contract with Interakt;*

9. *An award from the Tribunal that the Respondent pays an amount of US\$ 40'639.23 corresponding to the claim for the debts of the Nominated Subcontractor JASU;*

10. *An award from the Tribunal that the Respondent pays to the Claimant such other relief as the Arbitral Tribunal deems appropriate under the circumstances, or such other amount that the Tribunal considers is reasonably and properly due to the Claimant;*

11. *An award from the Tribunal that the Respondent pays interest to the Claimant in the amount representing the interest for the period between the outstanding date and the date of the payment to the amounts claimed, and a fine; and*

12. *An award from the Tribunal ordering the Respondent to pay: (i) the full costs of the arbitration (that is to say all monies paid to the Tribunal in respect of the Tribunal's fees and other costs); and (ii) all of the Claimant's costs reasonably and properly incurred in the arbitration.*

134. In the cost claim, the Claimant sought US\$ 1'335'068.37, as further explained below in Chapter 18.

5.2 Relief sought by the Respondent

135. The Respondent did not present a formal prayer for relief in its Statement of Defence.

136. However, the Respondent made the following declaration:

“In this Statement of Defence the Respondent declares that it completely disagrees with the claims raised against it by the Claimant in the Statement of Claim. The Respondent holds that the Claimant's claims set forth in the Statement of Claim are unfounded and should be dismissed on the grounds listed below in this Statement of Defence.”³⁴

137. In its Final Submission, the Respondent requested that the Claimant's claims be dismissed and that the Respondent be awarded *“the arbitration costs, legal and other costs incurred in the course of the present arbitral proceedings, including also the following expenses of the Respondent:*

³⁴ Statement of Defence, p. 5.

“

- 1) \$ 225'000.00 USD *Arbitration costs;*
- 2) \$ 130'000.00 USD *services of the representative of the Respondent Law Firm “Partner”;*
- 3) \$ 357'150.00 USD *payment for the services of the experts for preparation of the expert reports;*
- 4) \$ 2'358.00 USD *other expenses of the Respondent such as courier, interpreter and etc;*
- 5) *and other expenses connected with this Arbitration”.*

138. In the cost claim the Respondent sought US\$ 487'238, as further particularised below in Chapter 18.

6. ISSUES OF JURISDICTION

6.1 The Arbitration Agreement

139. The agreement to arbitrate is contained in Clause 67.3 GCC which reads as follows:

“Any dispute in respect of which:

- (a) the decision, if any, of the Engineer has not become final and binding pursuant to Sub-clause 67.1, and*
- (b) amicable settlement has not been reached within the period stated in Sub-clause 67.2,*

shall be finally settled, unless otherwise specified in the Contract, under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed under such Rules. The said arbitrator/s shall have full power to open up, review and revise any decision, opinion, instruction, determination, certification or valuation of the Engineer related to the dispute.

Neither party shall be limited in the proceedings before such arbitrator/s to the evidence or arguments put before the Engineer for the purpose of obtaining his said decision pursuant to Sub-Clause 67.1. No such decision 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.

Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works.”

140. Clause 67.3 CPA modified this provision by replacing the reference to “the Rules of Conciliation and Arbitration of the International Chamber of Commerce” by the “UNCITRAL arbitration rules” and adding that the “arbitration shall take place in Bishkek”.
141. There is no dispute between the Parties that this arbitration agreement is valid and binding and applicable in the present case.
142. The Contract was concluded in 1999. Therefore it is the 1976 version of the UNCITRAL Arbitration Rules, in force at the time of the conclusion of the Contract, which is applicable in the present arbitration.

6.2 Issues concerning the Composition of the Arbitral Tribunal

143. In the Statement of Defence the Respondent also complained about the composition of the Arbitral Tribunal, in particular to the nationality of the arbitrators. It referred to a letter it had addressed to the PCA in the context of the designation of the Appointing Authority and the nomination of an arbitrator on behalf of the Respondent. In its letter of 21 April 2009 the Respondent wrote:

*“Besides we feel that the arbitrator on the part of the Claimant and the arbitrator on the part of the Respondent should not be selected from the citizens of Turkey or Kyrgyzstan.”*³⁵

144. The UNCITRAL Rules provide that, when making its appointment, the Appointing Authority

“... shall have regard to such considerations as are likely to secure the appointment of an independent and impartial arbitrator and shall take into account as well the advisability of appointing an arbitrator of a nationality other than the nationalities of the parties”.

145. The provision does not apply to the choice of an arbitrator by the Parties. This provision has been respected by the Appointing Authority when appointing the arbitrator on behalf of the Respondent. The Respondent has not pointed to any rule in the law of Kyrgyzstan, governing the arbitration, or the UNCITRAL Rules which contains a nationality requirement with respect to the arbitrators appointed by the parties.
146. It must be noted that later in the arbitration, the Respondent has not further pursued its criticism of the composition of the Tribunal.
147. The Tribunal concludes that its composition is in full conformity with the applicable arbitration law and the UNCITRAL Rules.

6.3 The scope of the arbitration agreement and its application to certain claims

148. The principal difference between the Parties with respect to jurisdiction concerns the question whether the arbitration agreement applies to three of the claims brought by the Claimant. In this respect, the Respondent argues that the claims concerning
- (i) the damage caused to the Grader;
 - (ii) the debts of the Nominated Subcontractor JASU;
- and

³⁵ Exhibit R4.

(iii) damages arising out of the sub-contract with the Interakt company

are not covered by the arbitration clause.

149. Article 21 (3) of the UNCITRAL Rules requires that a “*plea that the arbitral tribunal does not have jurisdiction shall be raised not later than in the statement of defence ...*”. The Respondent’s objection to jurisdiction has been raised in the Statement of Defence, at paragraphs 99, 109 and 111. Therefore, it has been made timely and is admissible according to the UNCITRAL Rules.
150. In support of its objection to jurisdiction with respect to the named claims the Respondent argues that the claims concern “relations arising between the Claimant and third parties which are not a party to the Contract”.³⁶
151. The Respondent’s argument was developed at the hearing in the Respondent’s opening statement³⁷ and was discussed at that occasion.³⁸ The matter was also addressed in the Respondent’s Final Submission.
152. The Claimant argues that the claims are not directed against third parties but concern the liability of the Respondent for events involving third parties. Indeed, as it was considered at the hearing, the manner in which the claims are presented does not concern the question whether the third parties are liable to the Contractor, but whether the Contractor is entitled to claim from the Respondent under the Contract.³⁹
153. This is a matter which must be determined with respect to each of the three claims. The Tribunal will therefore address the matter separately when considering each of these claims.

6.4 Limits resulting from the procedure prescribed in Clause 67 CC

154. In addition to the limits to the Tribunal’s jurisdiction resulting from the arbitration agreement, the Tribunal must also consider those limits which result from the procedures prescribed by the arbitration agreement itself: as stated above, the present dispute is brought under Clause 67 of the Conditions of Contract, as modified by Clause 67.3 CPA. The former clause provides for a series of steps which must be followed before an arbitration may commence and

³⁶ Statement of Defence, paragraph 99; similarly in paragraphs 109 and 111.

³⁷ Transcript Day 1, p. 30 et seq.

³⁸ Transcript Day 1, p. 59 et seq.

³⁹ Transcript Day 1, p. 65.

which limit the recourse to arbitration to disputes that have progressed through these steps in a timely manner.

155. In particular these clauses require that any “matter in dispute shall, in the first place, be referred in writing to the Engineer”. Clause 67.1 continues by providing in the relevant parts the following:

“If either the Employer or the Contractor be dissatisfied with any decision of the Engineer, or if the Engineer fails to give notice of his decision [in time] then either the Employer or the Contractor may [within the specified time] give notice to the other party, [...] of his intention to commence arbitration. [...] no arbitration in respect thereof may be commenced unless such notice is given.

If the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor on or before the seventieth day after the day on which the parties received notice as to such decision from the Engineer, the said decision shall become final and binding upon the Employer and the Contractor.”

156. Clause 67.3 makes it clear that arbitration is available only for disputes in respect of which the decision of the Engineer has not become final and binding.
157. Before considering any claim made in this arbitration, the Tribunal must therefore examine whether the claim has been brought before the Engineer for a decision under Clause 67 and, if the Engineer has given his decision, whether the Employer or the Contractor has expressed his dissatisfaction and gave notice of his intention to commence arbitration.
158. During the course of the performance of the works, the Contractor announced its intention to claim on a number of occasions. In the Statement at Completion of 17 March 2006, the Contractor claimed a total of US\$25’054’966.78,⁴⁰ including, in part B of the statement, 8 claims for the total amount of US\$24’532’304.24.⁴¹ The Engineer considered these claims and issued on 18 May 2006 his Determination,⁴² stating that “he determines and certifies a sum of US\$1’187’035.20 as the entitlement of the Contractor under Part B of the Statement at Completion”.
159. The Contractor wrote to the Engineer on 7 June 2006, contesting some of the explanations in the Engineer’s Determination and

⁴⁰ Bundle of Documents Hill International, volume 7, Tab 1.

⁴¹ Bundle of Documents Hill International, volume 7, Tab 17, 19 et seq.

⁴² Exhibit C-2.

requesting reconsideration of the Determination.⁴³ The Engineer replied on 15 June 2006, provided additional explanations for its Determination but did not modify it.⁴⁴

160. Thereupon, the Contractor requested an Engineer's decision pursuant to Clause 67.1 on 20 June 2006;⁴⁵ in a letter of 16 August 2006, the Contractor provided additional details and raised a number of questions.⁴⁶ The Engineer responded to the Contractor's letter of 20 June 2006 by stating on 12 September 2006 that he believed "that the Engineer's Representative's Determination and Certification is accurate, reasonable and impartial".⁴⁷
161. The Engineer's decision was then issued on 16 October 2006.⁴⁸ To the question whether the Contractor was entitled to the sum claimed in the Statement at Completion, the Engineer replied: "The Contractor is payable the amount certified by the Engineer". In other words, the Engineer refused to revise the Determination and rejected the Contractor's request to this effect.
162. On 22 December 2006, the Contractor wrote to the Employer with copy to the Engineer a letter showing as its subject: "Notice of Intention to Commence Arbitration under Clause 67.1 of the Conditions of Contract". In the text of the letter, the Contractor stated:

"Please refer to the Clause 67.1 Engineer's Decision dated 12 September 2006 and its details dated 16 October 2006 on the Statement at Completion.

*The Contractor is dissatisfied with the Engineer's Decision under Clause 67.1 of the Conditions of Contract and hereby notifies the Employer of his intention to commence Arbitration pursuant to Clause 67.1 of the Conditions of Contract."*⁴⁹

163. On 15 January 2009, the Claimant addressed its Notice of Arbitration to the Respondent. The Notice started as follows:

"Reference is made to our Notice of Intent to Commence Arbitration dated 22-12-2006. As the Claimant, we have decided to take the following disputes/claims to International Arbitration according to Clause 67 of the Conditions of Contract".

⁴³ Exhibit C-16.

⁴⁴ Exhibit C-17.

⁴⁵ Exhibit C-18.

⁴⁶ Exhibit C-19.

⁴⁷ Exhibit C-21.

⁴⁸ Exhibit C-22.

⁴⁹ Exhibit C-24.

164. This was followed by the brief description of six claims with a total of US\$18'521'845 plus a claim for interest up to 31 December 2008 for US\$3'219'466.90. The six claims described in the Notice of Arbitration included some but not all of the claims which the Contractor had presented in part B of the Statement at Completion and which were dealt with in the Engineer's Determination. The Notice ended by the Claimant stating that it "reserves the right to amend the claims during the course of the arbitration".
165. In the Statement of Claim of 15 March 2010, the Claimant developed its position concerning the claims included in the Notice of Arbitration; in addition to these claims, further claims were added from part B of the Statement at Completion. The Claimant confirmed that the "subject matter of this arbitration is the Engineer's Determination-Part B of the Statement at Completion dated May 18, 2006".⁵⁰
166. The scope of the arbitration was further clarified by the Claimant at the Hearing and recorded in the Summary Minutes as follows:
- "5. The Claimant clarified that its claim had to be considered in the context of the Clause 67.1 Engineer's Decision on the Statement at Completion, issued on 16 October 2006 and the Notice of Intent to Commence Arbitration, dated 22 December 2006. The Engineer's Decision had been based on the Engineer's Determination on the Statement at Completion – Part B, dated 18 May 2006, including in particular Table 2 setting out the Engineer's Determination concerning the delay related claims."*
167. The scope of this arbitration, therefore, is clearly circumscribed: it concerns those parts of the Engineer's Determination of 18 May 2006 which were contested by the Contractor. The Tribunal examined for each of the claims made in this arbitration whether it falls within this scope. In particular, it examined, on a claim by claim basis, whether each claim was properly pursued following the procedure of Clause 67 of the Conditions of Contract.

⁵⁰ Statement of Claim, paragraph 76.

7. TIME BAR AND TIMELY NOTICE

168. The Respondent argues that the claims made in this arbitration are time-barred under the applicable law and that, in any event, the Claimant having failed to give timely notice, is precluded from pursuing the claims.

7.1 Time bar under the law of the Kyrgyz Republic

169. The Respondent relies on Articles 212 and 216 (2) CC and concludes that the claims made by the Claimant in this arbitration are time barred.⁵¹

170. The Parties are not in complete agreement with respect to the accuracy of the English translation of the Code⁵² and with the applicability of these provisions since a modification occurred in August 2009. The disagreement is not material in relation to the dispute here.

171. Both Parties agree that the applicable period is three years.⁵³

172. In defence against the Respondent's time bar argument, the Claimant invoked Article 215 CC which provides in its paragraphs (3) and (4) exceptions.⁵⁴ The Respondent argues that these provisions are applicable only in cases where extraordinary circumstances have prevented a claimant to act within the period of limitation. This does indeed seem to be the correct interpretation of the quoted article. It appears doubtful that, in the present case, the Claimant may rely on such extraordinary circumstances.

173. However, before considering whether the Claimant may be excused for having failed to meet the three year period of limitation, it must be determined when, in the present case, this period started to run and whether, by the time the arbitration commenced, the period had expired.

174. The Parties agree that the start of the period is determined by Article 216 (2) KCC which reads in translation:

"The duration of the term of statute of limitation starts from the date when the person learns or should have learned of the

⁵¹ R-SoD, paragraph 39 and R-PHB, Section 2.

⁵² See above paragraph 82.

⁵³ C-Legal Grounds, paragraph 123; R-SoD, paragraph 39.

⁵⁴ See C-Legal Grounds, p. 44.

violation of his right. The Code and other laws may establish exceptions to this rule.”

175. The question therefore is which are the rights invoked by the Claimant in this arbitration and when the Claimant learned or should have learned that these rights had been violated.
176. The Claimant seeks compensation for a number of losses or additional costs, i.e. those resulting from the prolongation of the works and the losses caused by the events forming the basis of the other claims. In order to receive such compensation, the Contractor must apply to the Engineer who must render a determination. This determination must be a fair decision, respecting the rights of the Contractor and the Employer in a balanced manner.⁵⁵
177. Under the terms of the present contract claims for additional payments such as those which are submitted in this arbitration, are determined by the Engineer. Clause 53.1 GCC, which will be considered in further details below, states quite clearly that a “condition precedent to any entitlement to additional costs” is the “submission of the proper notices and detailed particulars” under that clause. If the Engineer makes a determination as requested by the Contractor, the Contractor is made whole and suffers no damage, provided the Employer complies with the Engineer’s Decision. It is therefore the failure of the Engineer to grant the requested additional payment and to make the requested determination, if it is wrongful, which causes the violation of the Contractor’s rights.
178. As the Claimant clarified at the hearing, it is this determination which it attacks in this arbitration. Its complaint is that the Engineer wrongly denied the requested compensation.
179. The Tribunal concludes that violation of the Contractor’s rights of which the Claimant complains occurred in the form of the Engineer’s Determination. This Determination was notified to the Contractor on 18 May 2006. The Notice of Arbitration was filed on 15 January 2009 and thus before the expiration of the period of limitation. The claims included in the Notice of Arbitration are not time barred under the Kyrgyz Civil Code.

7.2 Time bar under the Contract – Notice Requirements

180. The Respondent also argues that the claims must be dismissed because the Contractor failed to give timely notice and therefore lost the right to make the claims under the Contract.

⁵⁵ See in particular Clause 2.6 GCC.

181. Clause 53.1 GCC, on which the Respondent relies in this respect, provides as follows:

“Notwithstanding any other provision of the Contract, if the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer, with a copy of the Employer, within 28 days after the event giving rise to the claim has first arisen.

Submission of the proper notices and detailed particulars within the time limits specified in this sub-clause and elsewhere in these conditions shall be a condition precedent to any entitlement to additional costs or to an extension of time under the Contract.”

182. It is undisputed that the claim for compensation of the prolongation cost (and of some other losses) was made not at the time when the cause for the prolongation arose and the Contractor claimed for the five EOTs. This claim was made only in the Statement at Completion of 17 March 2003, more than 28 days after the events causing the delay had occurred and after the works had been completed.

183. The Respondent concludes that, because of this failure of the Contractor to comply in due time with this notice requirement, the Contractor is deprived of “the opportunity to claim”.⁵⁶

184. The Claimant relies on Clause 53.4 GCC which provides:

“If the Contractor fails to comply with any of the provisions of this Clause in respect to any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 67 assessing the claim considers to be verified by contemporary records (whether or not such record were brought to the Engineer’s notices as required by Sub-Clauses 53.2 and 53.3).”

185. This clause clearly addresses the situation in which the Contractor, as in the present case, failed to comply with notice provision in clause 53. It makes it quite clear that claims filed after the expiration of the 28 days’ notice period are not excluded. They are simply subject to a restriction with respect to the evidence on which the Contractor may rely in order to support its claim: the claim must be established on the basis of contemporary records.

⁵⁶ Final Statement, p. 13 paragraph 20.

186. The Tribunal concludes that, despite the Contractor's failure to give notice of its claims within the 28 days period and then to substantiate the claimed losses, the Claimant may seek compensation for the events to which the claims relate. However, the claims may be awarded only to the extent to which they are established on the basis of contemporary records.

8. THE CLAIM FOR PROLONGATION COSTS

8.1 The claim and its history

187. The Claimant seeks an award for the costs resulting from the prolongation of the works. The amounts claimed and the manner in which they were calculated have varied over time. In its latest submission, the Post-Hearing Brief, the Claimant quantifies this claim at US\$24'195'975.18; it presents two alternative quantifications of US\$22'334'204.28 and US\$20'549.536.88. The claim makes allowance for US\$1'161'870.19 certified by the Engineer and paid by the Employer. In all three quantifications, this amount is deducted already.
188. The Respondent denies the claim, arguing that it was late, insufficiently substantiated and unfounded.⁵⁷ It also points out that the Engineer considered the claim for prolongation costs and assessed these costs. The costs so assessed were paid by the Respondent.⁵⁸ According to the Respondent, the Contractor is not entitled to any additional payments.
189. The Claim is presented by reference to five requests for extension of time (EOT requests) which the Contractor had presented during the course of the Project. In these EOT requests, the Contractor identified the duration of the extension requested; it also stated its intention to claim prolongation costs, but did not quantify these costs.⁵⁹ The EOT requests were granted in part: the Engineer issued decisions with respect to EOT 1, 4 and 5; with respect to EOT 2 and 3, the Parties agreed on extensions by Addenda 1 and 4 to the Contract. In this manner the Contract Period was extended by 637 days.⁶⁰
190. In the Statement at Completion of 17 March 2006 the Contractor claimed for the costs incurred from the original completion date of 3 December 2002 to the effective completion on 12 December 2005, a total of 1'043 days. He counted the costs on a month by month basis for "Personnel Costs", "General Expenditures", "Machinery Costs" and "Financial Costs", producing a total of US\$22'928'039.25. These costs were further broken down and partly evidenced by Summaries of Personnel Cost Records for Turkish and for Local Personnel, Overhead Costs, lists of Machinery

⁵⁷ SoD, paragraphs 5 to 27 and R-PHB, pp. 5 to 10.

⁵⁸ SoD, paragraph 30. For a table of all payments made by the Respondent see R-PHB, p. 2.

⁵⁹ Each of the EOT requests, as they will be discussed in further detail below, contain the passage: "The Contractor hereby also reserves his rights to submit financial claims related to the delays caused to the completion of the project due to reasons beyond his control." see for EOT 1 at Exhibit C-5; for EOT 2 at Exhibit C-8; for EOT 3 at Exhibit C-9; for EOT 4, at Exhibit C-10; for EOT 5 at Exhibit C-13.

⁶⁰ Exhibit C-2, p. 4; see also SoC, paragraphs 41 to 62.

on Site and their monthly costs together with machinery rental documents.⁶¹

191. The Engineer adopted a different approach: In his Determination of 18 May 2006 the Engineer determined the “excusable” delay, i.e. the period for which the Contractor was granted an extension of time. Within the overall period of excusable delay, the Engineer distinguished between “compensable” and “non-compensable”. Prolongation costs were granted only for the “compensable” delay.
192. When examining the days of delay, the Engineer proceeded by reference to each EOT request and determined the delay that had been claimed for the periods covered by these requests. The Engineer granted 1043 days as excusable, the number of delay days suffered by the Project and claimed by the Contractor. The increase of the number of days for which an extension of time was granted (i.e. days of the excusable delay) was due primarily to the fact that the Engineer took into account 318 days of “Winter Break” and some “Lost Days”, as they shall be discussed below.
193. Within the total of 1043 days of excusable delay, the Engineer identified only 153 days as compensable delay, while 890 days were excusable but non-compensable.⁶² For the quantification of these 153 days of compensable delay, the Engineer considered the different heads of cost which the Contractor had quantified in the EOT requests but proceeded in a different manner, as shall be discussed in further details below. The Engineer arrived at US\$131’511.84 for personnel costs and US\$1’030’358.35 for “Machinery Costs” and a total of US\$1’161’870.19.⁶³
194. In the correspondence following the Engineer’s Determination the Contractor⁶⁴ questioned the Determination and, when the Engineer did not change his opinion requested an Engineer’s Decision according to Clause 67.1 CC.⁶⁵ After further correspondence in which the Contractor provided additional information,⁶⁶ the Engineer replied on 12 September 2006⁶⁷ and gave his Decision on 16 October 2006.⁶⁸
195. In the Notice of Arbitration of 15 January 2009 the Claimant referred to the extension of the completion date and the five EOTs; it mentioned the financial costs related to the delays in the project

⁶¹ Bundle of Documents, Hill International, Folder 7, Tab 19 and 20.

⁶² Exhibit C-2, p. 5 and Table 2.

⁶³ Exhibit C-2, p. 8, p. 9, 9. 12 of the Explanatory Note and p. 2 of the Determination.

⁶⁴ Letters of 7 and 15 June 2006. Exhibits C-16 and C-17.

⁶⁵ Exhibit C-18.

⁶⁶ In particular the letter of 16 August 2006, Exhibit C-19.

⁶⁷ Exhibit C- 21.

⁶⁸ Exhibit C-22.

completion as quantified in the Statement at Completion and complained that “the Engineer did not certify the costs related to the approved EOT’s”.⁶⁹ The claimed amount for this item was US\$17’777’607.36.

196. In the Statement of Claim the Claimant referred to the extensions of time that had been granted and stated that it “does not claim any additional extension of time” but “claims for the additional payment”.⁷⁰ It presented the additional payments by reference to the EOT requests, described as “Interim Claims” for a total of 672 days and added claims for the delay due to the Winter Suspension Period of 136 days and an additional 150 days Winter Suspension Period attributed to the Joint Responsibility of the Employer and the Contractor.⁷¹
197. At the hearing in Bishkek the Claimant confirmed that its claim for Prolongation Costs had to be considered by reference to the Engineer’s Decision of 16 October 2006 and the Engineer’s Determination of 18 May 2006. The Claimant clarified at the Hearing that it accepted the duration of the time extension which the Engineer had granted/confirmed in the Determination so that there was no longer a need for the delay analysis of Mr Wiseman, the Claimant’s delay expert.⁷² The dispute therefore was reduced (i) to the compensability of certain delays, i.e. the question whether some or all of the delays which the Engineer had classified as non-compensable in reality were compensable, and (ii) the quantification of the costs caused by all those delays which the Engineer or the Tribunal had determined as compensable.
198. Following the October 2011 hearing the Parties’ delay experts updated their reports and the Parties’ quantum experts consulted with each other, as it had been agreed at the hearing and recorded in the Summary Minutes. Mr Kennedy, quantum expert for the Claimant, and Mr Taft, quantum expert for the Respondent met on 7 and 8 December 2011 and then prepared a Joint Report, dated 19 December 2011, in the format of a Scott Schedule in which they set out their respective positions on the relevant issues of quantification.
199. Mr Kennedy, the Claimant’s quantum expert submitted a final report on 18 January 2012, in which he complemented and corrected some of the positions expressed in the Joint Expert Report and some of the numbers used in the quantification. An Addendum 1 to Mr Taft’s report of 19 December 2011 was produced by the

⁶⁹ Notice of Arbitration, item 1.

⁷⁰ SoC, paragraph 92.

⁷¹ SoC, paragraph 97.

⁷² Tr 204 et seq.

Respondent only on 20 March 2012. This submission has been addressed above at the end of Section 4.

200. Concerning the position which the Claimant expressed at the hearing about the Engineer's Determination of the duration of the excusable delay, the Respondent argued that, by expressing this position, the Claimant "abandoned its claims for payment of the extension of time under the Contract in the amount of 808 days".⁷³ The Claimant responded by stating that it merely "clarified" its position.⁷⁴
201. The Tribunal has considered the position of the Claimant as expressed at the hearing. It noted that, with respect to the duration of excusable delay, the Claimant now relies solely on the Determination by the Engineer. This constitutes a clarification which simplifies the proceedings for both Parties and for the Tribunal. The Claimant continues to claim for the costs of compensable delay. The substance of the claim remained the same.
202. In any event, even if one were to consider the modification in the Claimant's position as an amendment to its claim, it was a useful amendment which simplified the proceedings. Such amendments are admissible under Article 20 of the UNCITRAL Arbitration Rules. The Respondent had the possibility at the hearing and in its post hearing submission several months after the hearing to comment the Claimant's position and the Respondent's experts had ample opportunity to comment this position as clarified at the hearing. To the extent this were required, the Tribunal accepts the amendment.
203. The Respondent also raised objections based on time bar and notice requirements. These have been considered above in Section 7 and need not be repeated here. To the extent to which notice issues arise specifically concerning certain aspects of claim for prolongation costs, they shall be addressed in their respective context.

8.2 Compensable delay

8.2.1 The principle of compensability

204. In the Statement at Completion the claim for prolongation costs was based on the assumption that the Contractor was entitled to the full costs of the extended contract period. The Engineer contested this assumption. He accepted that 1'043 days delay in the completion of the works were "excusable", i.e. the Contractor was not responsible for the delay and was granted an extension of the Time for

⁷³ R-PHB, paragraph 3.1.3.

⁷⁴ C-PHB, paragraph 3.

Completion according to Clause 44.1 GCC. To the extent to which such an extension is granted, the Contractor's failure to complete within the stipulated time is not subject to the sanction according to Clause 47.1 GCC and the Employer may not claim liquidated damages.

205. However, the extension of the Time for Completion, in and of itself, does not justify any other claim. In particular, it does not oblige the Employer to make any additional payments to the Contractor. The Engineer has pointed this out clearly to the Contractor;⁷⁵ and the Respondent has insisted on this principle in the arbitration.⁷⁶
206. This principle is stated clearly in a provision which in the CPA was added to Clause 44.1:

"The granting of an extension of time for completion shall not entitle the Contractor to any additional payment. Where, in the opinion of the Contractor, additional costs have been incurred in connection with or in consequence of the cause or the event for which extension of time for completion has been granted, such costs shall be documented and claimed separately, in accordance with the provision of Clause 53."

207. In other words, claims for additional payments must be related to the "cause or event for which extension of time for completion has been granted". If such a cause entitles the Contractor to compensation, the additional costs "incurred in connection with or in consequence of" this cause also may be claimed. But the Contractor has to demonstrate such a causal relationship with the events that entitle the Contractor to compensation.

208. The Engineer used the concept of "compensable delay". He distinguished among the days of excusable delay those which were "compensable" and those which were "non-compensable"; only for the former category the Engineer accepted that the Contractor could claim for the costs of the delay. The latter were defined by him as follows:

"... delays for which neither party is at fault: act of God, epidemics, etc. as set forth in the delay clause. Time extension is the only remedy for such delays."⁷⁷

209. The Claimant also accepts that, in order for the delay to be compensable, there must be a "legal ground either under the Contract or the local law, i.e. Kyrgyz law".⁷⁸

⁷⁵ See for instance his letter of 15 June 2006, Exhibit R-11.

⁷⁶ SOD, p. 10.

⁷⁷ Note 2 at Table 2 of the Engineer's Determination (Exhibit C-2), p. 28.

210. In the Tribunal's opinion this distinction is necessary: the Respondent can be required to make additional payments for excusable delay only if the Claimant shows a legal basis which justifies such a claim for additional payment.
211. The distinction between compensable and non-compensable delay is now uncontested in this arbitration. The Claimant accepts that, in order to claim costs for a given period of delay, it must demonstrate not only that the delay was "excusable" but also that it is "compensable"; and it sets out to demonstrate the legal basis for such compensation.⁷⁹
212. The question concerning "excusable" delay and its duration has been resolved and needs no longer be addressed: the Engineer has fixed the number of days of excusable delay in the Determination.⁸⁰ The Employer has not contested this determination and has not required that it be submitted to arbitration. The Contractor has accepted at the hearing that his claim be assessed by reference to the number of excusable delay days fixed by the Engineer in Table 2 of the Determination. The issue of compensability therefore is reduced to the question whether, beyond the 153 days of compensable delay certified by the Engineer, any other days of excusable delay are compensable.
213. Two basic grounds to justify compensation of delay or prolongation costs have been identified: the Contract and the law of Kyrgyzstan. The scope and limits of these grounds must be examined one by one.

8.2.2 Delay in issuing drawings and instructions – Clause 6.4
GCC

214. The Contract contains a number of provisions which entitle the Contractor to additional payment and which are relevant for the claims made in this arbitration. The first of these provisions concerns delay in the Engineer's issuing of drawings or instructions necessary for the Contractor's work. It is contained in Clause 6.4 on which the Claimant relied expressly.⁸¹ The clause reads as follows:

"If, by reason of any failure or inability of the Engineer to issue, within a time reasonable in all the circumstances, any drawings

⁷⁸ C-PHB, paragraph 23. The Claimant also raises the question of a "lack of concurrent critical delay on the part of the Contractor", a question which shall be considered below in the context of the Winter Breaks.

⁷⁹ See in particular Claimant's Submission on Legal Grounds, p. 5 et seq.

⁸⁰ Exhibit C-2, Table 2.

⁸¹ Claimant's Submission on Legal Grounds, p. 6 et seq.

or instructions for which notice has been given by the Contractor in accordance with Sub-Clause 63, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

(a) any extension of time to which the Contractor is entitled under Clause 44, and

(b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.”

215. This clause applies in all those cases in which the Engineer has accepted delay in issuing drawings or instructions and granted extensions of time. Clause 6.3,⁸² to which Clause 6.4 refers, requires that the Contractor give notice to the Engineer about the risk of delay or disruption if drawings or instructions are not issued in time. In cases where the Engineer has extended the time under Clause 6.4 GCC, it may be assumed that such notice has been given, unless the Engineer has expressly stated that this was not the case.

216. Since Clause 6.4 applies to both extension of time and additional costs, an uncontested extension of time has as the necessary consequence that, as a matter of principle, any additional cost must also be compensated – provided, of course, that they have been properly substantiated and the causal link with the grounds for entitlement has been established.

217. The Tribunal therefore accepts that, in all those cases where the Engineer has accepted that the late drawings or instructions have caused excusable delay, the related prolongation costs are compensable. This is indeed the manner in which the Engineer has proceeded: “design delays” or similarly described excusable delays in Table 2 of the Engineer’s Determination were all included in the category of “compensable delay”.

8.2.3 Special Risks – Clause 65 GCC

218. Another contractual provision which entitles the Contractor to additional payments is Clause 65 GCC, concerning Special Risks, as defined in Clause 20.4 CPA. The relevant parts of Clause 65.5 GCC provide compensation in the following terms:

⁸² Clause 6.4 makes reference to « Sub-Clause 63 ». This must be a typographical error: Clause 63 deals with termination. The notice requirement is set out in Clause 6.3. The Tribunal therefore reads the reference to “Sub-Clause 63” as referring to Sub-Clause 6.3.

“Save to the extent that the Contractor is entitled to payment under any other provision of the Contract, the Employer shall repay to the Contractor any costs of the execution of the Works (...) which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, ... but the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof. The Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor’s costs in respect thereof which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer.”

219. The special risks are defined in Clause 65.2 GCC which refers to Clause 20.4 GCC. This latter provision has been replaced by Clause 20.4 CPA. The relevant passage is 20.4 (a) (ii) CPA which identifies “rebellion, revolution, insurrection, or military or usurped power, or civil war”, Clause 65.2 (b) clarifying that these events must “relate to the country in which the Works are to be executed”.
220. At the hearing the Respondent argued that the costs for which the Contractor may claim compensation under Clause 65.5 GCC are “any costs but not for prolongation or delay, for delay of their works”.⁸³ The Tribunal sees no basis for excluding prolongation costs from those which must be reimbursed to the Contractor under Clause 65.5 GCC. This clause defines the costs in the broadest possible manner: “which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks”. The Tribunal accepts that this definition of compensable costs includes those caused by the prolongation of the works.
221. The question whether a specific event qualifies as “special risk” in the sense of Clause 20.4 CPA and 65.5 GCC and whether the notice provision specific to Clause 65.5 GCC has been respected must be considered in the context of the specific claim in which these provisions are invoked.

8.2.4 Additional works

222. Under the Contract the Contractor is paid for the work performed in the agreed manner and the agreed time. If the Contractor is required to perform additional work, he also must be paid for this additional work. Since the Contractor is paid at unit rates set out in the Bill of Quantities (BOQ), such additional work does not cause any difficulty insofar as it is paid through the BOQ rates and prices.

⁸³ Tr 392.

Details are set out in Clause 51 GCC under the heading “Alterations, Additions and Omissions”. All of this is uncontested.

223. The controversy in the present case arises from the Contractor’s claim for prolongation costs caused by the additional works. The Engineer denied the Contractor’s claims for prolongation costs on this basis and justified the denial on the following grounds:

“... where an increased amount of work justifies an extension of time, the Engineer has to consider whether the increased amount has rendered the Contract rate inapplicable. The nature of the work does not have to change, but if the overheads during the extended period exceed the overheads covered by the additional volume of work, the rate for the work is no longer applicable and should be adjusted.

The Contractor did not take the above stated actions [notice according to Clause 52.2 GCC concerning the fixing of “a suitable rate or price”], therefore no additional cost for extended period due to additional works was approved.”⁸⁴

224. In other words, the Engineer accepted, as a matter of principle, that costs caused by delay resulting from additional works had to be compensated; but he was of the opinion that this had to be done through the adjustment of the contractual rates and prices and that the Contractor had failed to observe the notice periods for requesting such adjustments. For the Engineer, it is therefore not a question of whether prolongation costs caused by additional works are compensable but only a question of the method in which this is done. This question of method will be discussed below in the context of the quantification of the prolongation costs.⁸⁵

225. The experts of both sides, too, are of the view that prolongation costs caused by additional works are compensable. At the hearing, Mr Hamann reported that the experts agreed that additional works were compensable;⁸⁶ the Experts Consultation Table also showed additional works as being compensable. Mr Marshall confirmed this in his Final Report:

“I would expect that additional works would usually be considered ‘compensable’ in that clause 52.2 of the Conditions allows the contractor to claim extra payment or a varied rate in specified circumstances provide notice had been given.”⁸⁷

⁸⁴ Engineer’s Determination, Exhibit C-2, p. 7.

⁸⁵ See below, chapter 8.4.10.

⁸⁶ Tr 584.

⁸⁷ Marshall III, paragraph 2.1.24.

226. The Respondent does not question that, as a matter of principle, additional works and prolongation costs resulting from them are compensable; it merely supports the Engineer's position, according to whom, these costs must be quantified according to Clause 52.2 GC.
227. The Tribunal concludes that under the Contract, additional works must be paid. Normally, additional works or variations are paid through the rates and the prices of the BOQ; where necessary these rates and prices may be adjusted according to Clauses 52.1 and 52.2 GCC. If, as the result of additional work, the Contractor has incurred additional costs which cannot be priced adequately in this manner, they may be claimed under the additional Clause 44.1 CPA. The method of compensation shall be considered and determined below.

8.2.5 Grounds for the compensation of prolongation costs under the law of Kyrgyzstan

228. The Claimant also relies on the law of Kyrgyzstan in support of its claims. In particular, it invokes two provisions of the Kyrgyz Civil Code (KCC). One of these provisions, Article 368, is taken from Chapter 20 of the Code which deals with Liability for Breach of Obligations in general; the other, Article 638, is contained in Chapter 30 which concerns specifically the Work Contract.

“Article 368 Obligor’s Delay

1. *The obligor who delayed performance, shall be liable to the obligee for losses caused by the delay as well as for the incidental impossibility of performance occurred during the delay.*

2. ...

Article 638 Customer’s Assistance

1. *The customer shall render assistance to the contractor during the performance of the work in cases, volume and procedure provided by the work contract.*

In case of non-fulfilment of this obligation by the customer the contractor may demand the indemnification of losses inflicted, including additional expenses, caused by the idleness of shifting of terms of the performance of work or by the increase of the price indicated in the contract.

2. ...⁸⁸

⁸⁸ English translation provided by the Claimant, uncontested in substance by the Respondent.

229. These provisions confirm the conclusions that result from the above analysis of the obligations under the Contract: where the Employer has undertaken to perform, directly or through the Engineer, certain functions, for instance delivering drawings or instructions, he is liable for any damage resulting from delay in performing these functions.
230. The Engineer had the same understanding of the Employer's liability when defining "compensable delays" in the following manner:

*"...[delays] due to some act or omission of the Employer, for example lack of site access. In such cases the Contractor is entitled to damages for extra cost incurred unless there is a valid contract clause barring such recovery."*⁸⁹

231. In his Determination, the Engineer applied these principles by granting prolongation costs to the Contractor where he determined "adequate cause for awarding compensation to the Contractor" and identified such cause as "failures of the Employer in fulfilling his contractual obligations". He included in causes which entitle the Contractor to compensation

*"delays caused by late approval of designs, untimely relocation of Utilities and late issuance of commencement order";*⁹⁰

232. The Claimant followed a similar understanding of compensability and sought to demonstrate for each period for which it sought compensation a legal basis for the Respondent's liability.⁹¹
233. The Respondent does not deny in principle the obligations flowing from the quoted provisions of the KCC. It does, however, contest specific obligations, such as those relating to design.⁹² These will have to be considered in the context of the specific claims to which they relate.

8.3 Principles of Quantification of the Prolongation Costs

234. The quantification of the compensable delay costs, as it was argued in this arbitration, gives rise to a number of questions of principle, resulting from different positions taken by the Parties and, in particular, by their respective experts. These positions developed and crystallised as the proceedings progressed, through successive

⁸⁹ Note 1 at Table 2 of the Engineer's Determination (Exhibit C-2), p. 28.

⁹⁰ Exhibit C-2, p. 5.

⁹¹ Claimant's Submission on Legal Grounds, p. 9 et seq.

⁹² E.g. Rejoinder, p. 4 et seq.

expert reports, the discussions at the hearing and the updated reports thereafter, in particular the Joint Expert Report.

235. Before examining the specific claims made in the five EOT requests on which the Claimant relies in this arbitration, the Tribunal will, therefore, have to consider these issues of principle. The issues were discussed primarily in the reports of the Parties' experts and by these experts at the hearing. In their Post Hearing Submissions, the Parties primarily relied on these explanations and discussions by their experts. The Tribunal, therefore, refers largely to the explanations of the experts as reflecting also the position of the Parties having appointed them, unless the Parties have taken a different position.

8.3.1 The records

236. When considering the timeliness of the claims, the Tribunal found that the Contractor had failed to give notice for its intention to claim for prolongation costs. As a result, Clause 53.4 of the GCC applies and the claim must "be verified by contemporary records".
237. During the performance of the work, detailed records were kept by the Contractor. Much of the information from these records was included in the Monthly Reports submitted by the Contractor.⁹³ These reports and the material attached to them were made available to the Engineer and the Employer. Therefore, the reports are the principal element of the contemporary records.
238. The material contained in these Monthly Reports also served the Engineer to keep his own records. It became apparent at the Hearing that the Engineer was well documented and had «very precise figures». These enabled him to identify the value of all those items of Plant & Machinery for which he did not use Daywork rates.⁹⁴ He also had precise information about the personnel: "he has very precise figures, he can tell us there were 173 foremen and 30 draggers, he knows exactly how many things were at site".⁹⁵ Indeed, on the basis of the "record kept in [the Engineer's] file which is base material for the monthly Progress Report", the Engineer was able to quantify the compensable costs for personnel and for machinery.⁹⁶
239. An additional source of contemporary records is the Contractor's accounts. These accounts were subsequently audited and formed the basis of the Contractor's audited accounts from which the

⁹³ For a discussion of these reports and their use by the experts see Tr 700 seq.

⁹⁴ See below section 8.3.3.

⁹⁵ Mr Hamann's summary of the discussions between the experts, Tr 589.

⁹⁶ Engineer's Determination, Exhibit C-2, p. 7.

Contractor took the data on which much of the claim calculation is based. The Claimant provided with its submission and with the reports of its experts documents from these records and tables summarising their content. At the hearing the Claimant provided additional information, “including a hard copy of a printout of Entes’ project accounts showing general expenditures costs. These data were very voluminous. It was therefore agreed at the hearing that the information would be made available to the Respondent in electronic form on a memory stick. The communication of data and records occurred at the hearing and continued after the hearing, in particular in the meetings of the experts and their work on the Joint Expert Report.”⁹⁷

240. This exchange of information based on the contemporaneous data and records and the analysis of this data absorbed much of the time of the Respondent’s expert time after the hearing and enabled him to produce “large and complex spreadsheets”, which aimed at “providing the Tribunal as much information as possible”.⁹⁸ Mr Taft, too, speaks of the “significant amount of information and assessment that has been undertaken since receipt of the progress records and the hard copy of project accounting records at the Hearing.”⁹⁹
241. The Tribunal is satisfied that the information and records thus provided to the experts and used by them in their evaluation of the claims qualifies as “contemporary records” in the sense of Clause 53.4 GCC. This information and these records provided a solid basis for the analysis of the claims, in particular the quantification of the prolongation costs. The Tribunal has borne in mind that any deficiency in these records had to be construed against the Claimant and that the claims were admissible only to the extent to which they could be based on contemporary records.

8.3.2 Methods of quantification

242. The prolongation costs were first quantified in the Contractor’s Statement at Completion. In this quantification the Contractor assumed that he was entitled to the compensation for the total of his prolongation costs, without distinguishing between compensable and non-compensable costs. The claim consisted in the addition of the costs which the Contractor claimed to have incurred during the period after the contractual completion date. The summary sheet of the claim showed, on a month by month basis, (i) personnel costs, (ii) general expenditures, (iii) machinery costs and (iii) financial costs. This summary sheet is backed up by detail on the costs in

⁹⁷ See e.g. Taft III, section 1.3

⁹⁸ Comments of Mr Kennedy on the information received from Mr Taft; Joint Expert Report, p. 1, Introduction.

⁹⁹ Joint Expert Report, p. 9, Introduction.

each of these categories. The total adds up to US\$22'928'039.25, the amount claimed for prolongation costs.¹⁰⁰

243. The Engineer introduced the distinction between compensable and non-compensable. He identified the number of days which he considered as compensable by reference to each of the five EOT. However, he did not determine the compensation per month, year or EOT separately but collectively for the total of 153 days of compensable delay, relying on the contractual Daywork rates and the cost information which the Contractor had provided. The total compensation for these 153 days was US\$1'187 million. It is therefore not possible to know how much the Engineer awarded per day of compensable delay at the different stages of the project; only the average daily compensation, in the order of US\$8'000, is known.^{101 102}
244. The Parties' experts recognised that the costs of the delay vary during the course of the performance of the work, depending in particular on the resources engaged in the relevant activities. They agree that the delay costs should be quantified not by considering the compensable delay as a whole but separately for the periods to which each of the five EOT claims applies and, within these periods, separately for each of the periods during which the specific compensable delay occurred. The experts quantify the delay costs for each of these separate delay periods.
245. The Tribunal agrees with this approach and therefore considers the delay costs separately for each period within an EOT for which compensable delay has been identified.
246. Apart from the agreement on this basic element and with respect to the use of Daywork rates, which shall be discussed next, the experts disagree on most other elements of their quantification. The disagreement concerns in particular the approach to be used in identifying the relevant costs, as it shall be discussed thereafter, i.e. the question whether all of the project costs are to be considered during the relevant period or, as proposed by Mr Taft's "bottom up approach", only the sections of the work and the resources which can be shown to have been specifically affected by the delay at the time when the delay occurred.

¹⁰⁰ Bundle of Documents, Hill International, Folder 7, Tab 20.

¹⁰¹ See the calculation of Mr Taft at Tr 591 ; the number was used generally in the discussion at the hearing. The precise number would be US\$7'758.

¹⁰² Confirmed by Mr Taft at Tr 594.

8.3.3 The use of rates

247. In the Determination, the Engineer adopted a method for quantifying the costs of compensable delay that differed from that used by the Contractor in the Statement at Completion. He did so not on the basis of the Contractor's costs but used the contractual Daywork Rates.¹⁰³ These are contained in the Bill of Quantities of the Contract and specifically in Bill 13 for "Dayworks: 1 Labor" and "Dayworks: 3 Constructional Plant".
248. The Engineer applied these Daywork rates for quantifying the delay costs of personnel and to all cases where he "managed to find a rate for a particular item of plant".¹⁰⁴ For those items where he did not find a rate, he used the Contractor's list of "Monthly cost of Machinery and Equipment on Site" together with Statement at Completion" and applied the values from this list to the items on the "List of Machinery on Site according to Monthly Reports".¹⁰⁵
249. With respect to overheads, the Engineer explained that "Daywork rates include the overheads"; where monthly rates did not, the Engineer adjusted these rates to make allowance for overheads.¹⁰⁶ For this reason, the Engineer did not allow overheads as a separate item in his quantification of the claim.
250. The Contractor did not accept this approach and in the arbitration the Claimant and its experts continued to quantify the claim on the basis of the Contractor's costs and not by reference to Daywork rates.
251. Mr Taft, the Respondent's quantum expert, took the same position. He explained in his Final Report:
- "... in my opinion, the use of the rates and prices set out in the Contract should be reserved for those delays that have been caused by works instructed under a Variation ...".*¹⁰⁷
252. The Tribunal notes that the Daywork rates in the contract are part of the Contractor's pricing. Therefore, they are applicable when the Contractor is paid for work not otherwise priced in the Contract. They are not applicable in those cases where the costs must be determined. Therefore, the Tribunal agrees that Daywork rates are not the correct manner of quantifying the costs of delay. The actual costs must be used. The question concerning the quantification of

¹⁰³ Engineer's Determination (Exhibit C-2), pp. 7 and 8.

¹⁰⁴ Explanation by Mr Taft, in Taft III, paragraph 2.5.2.

¹⁰⁵ Determination, p. 8 and 9.

¹⁰⁶ Ibid. p. 9.

¹⁰⁷ Taft Final Report, paragraph 3.4.2.

delay costs caused by variations has been discussed separately above.¹⁰⁸

253. When calculating the costs of delay, the Claimant's experts followed an approach which determined the delay costs on a monthly and daily basis. They applied the daily costs so determined to the relevant number of days of compensable delay and referred to the daily costs so determined as "rates". However, the rates so determined are different from the Daywork rates in the Contract. They are calculated by reference to the Contractor's costs during a certain period. This approach to quantification, the development of the rate, was summarized as follows:

*"... the rate at which [the Claimant's expert] calculated on the basis of [information available to him] is for most of the project [US\$] 30'000 per day, in some periods it goes up to 35'000, towards the end it goes down to 13'000."*¹⁰⁹

254. Mr Taft, the Respondent's expert, adopting the "bottom-up" approach, does not proceed by calculating a daily rate for the Contractor's costs but a total of the costs attributable to given compensable delay. Nevertheless, in order to provide a comparison with the Claimant's expert, Mr Taft also shows daily rates.
255. Having accepted the approach by which the costs of delay during a period are applied to the number of days of compensable delay, the Tribunal also refers to these daily costs in terms of "rates". It points out, however, that the rates so determined are derived from the Contractor's costs and are different from the contractual Daywork rates.

8.3.4 The "Bottom-up" method: restricting the claim to directly impacted resources

256. The most important difference between the Parties and their experts concerns the question whether, during a period of critical compensable delay, the costs of all the Contractor's resources on site must be considered or only those which can be shown to have been impacted by the cause of delay on which the entitlement to compensation is based. Mr Taft, who insisted that this latter approach should be applied, described it as "bottom-up approach", distinguishing it from the "top-down approach", the expression by which he described the method of quantification used by the Claimant's experts.¹¹⁰

¹⁰⁸ See section 8.2.4.

¹⁰⁹ Tr 593, confirmed as correct by Mr Kennedy.

¹¹⁰ Taft III, paragraphs 2.1.2 and 2.2.1.

257. Mr Kennedy, the Claimant's expert, explained his approach in the following manner: he determined, on a month by month basis, the personnel costs, general expenditures and machinery costs. For each claim which Mr Wiseman, the Claimant's delay expert, had identified as compensable, he took

*"... the entire period in which the delay occurred and derived the total cost thereof [... and then] divided the above total by the number of months and then by the number of days per month (30 ½) to ascertain an average daily figure."*¹¹¹

258. He applied this average daily figure, sometimes also referred to daily rate, to the number of compensable days of delay for that claim. This approach continued to be applied by Mr Kennedy, with some refinements, throughout the arbitration until his Final Report. This approach is based on the assumption that the agreed critical delay affected all resources on site.

259. Mr Taft explained his "bottom-up" approach as follows:

*"... is the only way by which individual delays at specific locations can be properly assessed because one has to (in my opinion) start with the each [sic] specific delay event and establish what resources were impacted by it."*¹¹²

260. He also explained that

*"... it is important to consider whether Entes' time-related costs that form part of its claim are Project-wide time-related costs, or whether they attach to a particular part or section of the Project. It is clear that many of the delay issues impact a specific part of the Project, and even if such delays affect the Project critical path, if any individual delay impacts only a particular section or subsection of the Project then any P&M resources that are dedicated to another section or subsection of the Project will not be impacted by that specific delay; why would they be? I have therefore tried to apportion the P&M costs into the sub-sections of the Project so that a realistic assessment can be made of the impact of individual delays on the P&M resources."*¹¹³

261. Mr Kennedy replied to these explanations as follows:

"I do not agree with Mr Taft's logic on this issue. All of the awarded 1043 days are for the project as a whole [...] The extensions of time do not relate to sections or parts of the works

¹¹¹ Mr Kennedy's First Report, paragraphs 28.1 to 28.5

¹¹² Final Quantum Report by Mr Taft, paragraph 2.2.1.

¹¹³ Joint Expert Report, note 5, Taft; he applied the same method with respect to personnel, see note 8.

but to the whole project and therefore in my view those entire time-related costs should be applied to all of the works in the periods in which they occur. To treat this time-related portion of the P&M costs any other way would be to deny they are in fact time-related and not section related."¹¹⁴

262. On this basis, Mr Kennedy calculated monthly and daily rates which he applied to the periods of compensable delay. The rate, as applied in his Final Report, varied between US\$32'763.48 per day for EOT 1 and US\$13'697.94 for one of the periods in EOT 5. He multiplied that rate with the number of days of compensable delay during the period considered. Mr Taft's method does not lead directly to daily rates for a given period, since he differentiates between sub-sections affected. Nevertheless, starting from the total amount assessed as delay costs for a particular cause in one of the EOT periods, he calculated what the daily rates would be. These vary between US\$8'631.71 in EOT 1 to a daily rate between US\$1'520.13 and US\$3'904.22 in EOT 5.¹¹⁵
263. The Tribunal considered that the delay which the Engineer identified is delay that affected the Project as a whole and delayed the completion date and thus is critical delay. Some of this critical delay was identified by the Engineer as compensable. In this arbitration, the Claimant contests the Engineer's decision to treat some of the critical delay as non-compensable; but again, only critical delay is in issue.
264. As a result of such critical delay, the resources engaged on the Project are required for a longer period. Due to the delay, the Contractor performs over a longer period the work for which he planned (and priced) 1'065 days. The Engineer accepted 1'043 days of critical delay. As a result, the Contractor's resources were required for almost twice as long. It is the costs of these additional days, to the extent to which they are compensable, that have to be quantified and not just those which were directly impacted at a specific moment.
265. It may be that, when a critical delay affects a particular section only, the other sections continue working or resources engaged on a delayed section may be shifted to other activities. Indeed, the issue was discussed from this perspective at the hearing in the context of the claim concerning Additional Works during the EOT 5 period. Mr Taft refers to this discussion and relies on it in support of his position.¹¹⁶ That work was performed at the end of the project on a section that had been completed and was already "under traffic" and

¹¹⁴ Joint Expert Report, note 5, Kennedy; confirmed with respect to personnel in note 8.

¹¹⁵ Joint Expert Report, Taft column.

¹¹⁶ Joint Expert Report, Note 1.

some of the equipment was shifted for performing the additional work.¹¹⁷ In such a situation, it may well be that only specific sections which remain to be completed will have to be considered. Indeed, as will be seen when the quantification of compensable delay in EOT 5 is discussed, the daily rate applied is much lower than during earlier periods.

266. In all these cases the delay requires that the Contractor remains longer on site. Its resources are therefore engaged for a longer period. Even if during the specific delay on the critical activities some activities continue to be performed, sooner or later the other sections also will be affected (during their performance or at their end); otherwise the delay would not be critical. In this manner all of the resources on the site are affected by delays to the completion date of the Project.
267. The Tribunal concludes that during a given period of delay, the resources engaged on all activities or sections of the work must be considered when calculating the prolongation costs and not just those on the activities immediately affected by the delay.

8.3.5 Allocation in time

268. For the reasons explained above, the duration of each of the periods of delay has been determined by the Engineer and is not in issue any longer. What remains to be determined is the precise period during which each of the delays occurred.
269. As pointed out above, the Contractor's costs varied over time. In order to determine correctly the costs affected, it is important to identify the relevant period to which a given period of compensable delay must be allocated.
270. The periods during which the delay occurred have been quantified on the Claimant's side by Mr Wiseman, to whom Mr Kennedy refers, and on the Respondent's side by Mr Marshall to which Mr Taft refers. The experts do not always agree on the duration of that period nor do they always agree on the position of the delay period on the time line of the project, i.e. when exactly the delay period occurred.
271. The Respondent's experts, due to the "bottom-up approach" applied by them, seek to identify the specific activities affected by the identified cause and the duration for which they were affected. On occasions, they conclude that the delay is shorter than what the Engineer had determined. The conclusion cannot be admitted since the Engineer's determination of the excusable delay has not been

¹¹⁷ Testimony Asman, Tr 369.

brought to arbitration by the Employer and the Contractor accepted during the arbitration the durations of delay determined by the Engineer.

272. In each EOT the Contractor specified the relevant period for the EOT request as a whole and, with respect to some delays, a specific period during which individual delay events were effective. When the Engineer, in his response to an EOT or in his Determination, fixed the period of critical delay allocated to a specific cause, he often also gave indications with respect to the period during which the delay occurred.
273. In each case in which it had to quantify prolongation costs resulting from critical delay, the Tribunal considered the relevant periods identified by the experts of both sides. Given the difference in method and the Tribunal's decision, in favour of that adopted by the Claimant's expert, the Tribunal's allocation of delay to a specific period generally coincides with that of Mr Wiseman and Mr Kennedy.
274. In a number of occasions the period identified by the Contractor or the Engineer is longer than the period of critical delay awarded by the Engineer. In these circumstances, the Claimant's experts refer to the relevant period and determine the average daily cost during this period. This average daily cost is then applied, like a rate, to the number of compensable days in question.
275. The Tribunal adopted the same method.

8.4 Cost categories

276. In the Statement at Completion, the Contractor quantified the delay costs on the basis of four cost categories, viz. (i) Personnel Costs (subdivided in "Turkish Personnel" and "Local Personnel"), (ii) General Expenditures, (iii) Machinery Costs and (iv) Financial Costs. The Engineer started with the same categories but, because of his method of quantifying the claim, reduced the categories of quantified costs to costs for personnel and machinery. In the arbitration, the Claimant, through the report of Mr Kennedy, presented the claim again on the basis of these four categories, the costs being taken from the Claimant's audited accounts.¹¹⁸
277. In subsequent submissions and at the hearing, the Parties' experts dealt with the quantification of the delay claims by reference to these categories, except that "Financial Costs" were no longer considered in the context of the delay costs. The terminology used

¹¹⁸ Kennedy I, paragraph 24 et seq.

for some of these costs, in particular that for the General Expenditures, varied occasionally. The Tribunal will examine the claim for prolongation costs by reference to these categories.

8.4.1 Personnel Costs

278. In the Statement at Completion the Contractor presented tables showing for the time after the contractual completion date of 3 December 2002, on a month by month basis, the summary of its personnel cost records and based the personnel cost component of the claim on this summary.¹¹⁹ The Engineer stated in his Determination that he requested “returns of labors” but did not obtain them. Therefore he decided to quantify these costs on the basis of his own records. He “used his record kept in his file which is base material for the monthly Progress Report and applied Daywork rate submitted in the bid to the working days of each category of personnel”.¹²⁰ The Claimant objected to this method of quantification. The Tribunal has accepted that records of actual costs are to be preferred over rates such as the Daywork rates used by the Engineer.
279. In the arbitration, the Claimant’s experts presented the local and Turkish personnel costs on the basis of the Contractor’s audited accounts. Attachments to Mr Kennedy’s first report contain tables with a month by month breakdown of these personnel costs.¹²¹ The numbers in these tables are used in the final quantification of the delay costs as contained in Mr Kennedy’s Final Report.¹²²
280. The Respondent and its experts were provided with the data backing up these tables, in the form of very voluminous files of the Contractor’s Monthly Reports of personnel and machinery, in the form of “a memory stick with 600Mb of information” consisting of these reports.¹²³ The Respondent’s quantum expert confirmed that this “has enabled us to review the Turkish and Local personnel on the site on a month-by-month basis”.
281. Mr Taft states that “timesheets, payroll information etc have not been provided so I have not been able to check the monthly costs claimed by Entes/assessed by Mr Kennedy”.¹²⁴ However, the monthly records, as explained above, were taken from the Contractor’s audited accounts. Mr Taft does not give any indication which would raise doubts that the records are correct.

¹¹⁹ Bundle of Documents, Hill International, Folder 7, Tab 20, pages 1 and 2.

¹²⁰ Exhibit C-2, p.7.

¹²¹ Kennedy I, tabs A 1/16 (a) Turkish Personnel and A 1/16 (b) Local Personnel.

¹²² Kennedy IV, Appendix A.

¹²³ Taft III, paragraph 3.3.1.

¹²⁴ Taft III, Appendix B, p. 3.

282. Mr Taft used the monthly personnel accounts to apportion the personnel costs between “site wide, sectional or non-prelim”. On the basis of this allocation, Mr Taft then proceeded “to split Mr Kennedy’s monthly costs into Section A, Section B, Site Wide and Non-prelims for Turkish and Local staff”.¹²⁵ He used this allocation for the purpose of his “bottom-up” method. The Tribunal has found that this method is not adequate for the quantification of the Project-wide delay which entitles the Contract to compensation of its additional costs.
283. The Tribunal therefore accepts that the Contractor’s personnel costs have been properly documented and must be assessed on the basis of the records in the Monthly Reports. It uses the numbers in Appendix A to Mr Kennedy’s Final Report.

8.4.2 Plant and Machinery Costs

284. The Statement at Completion also contained a “List of Machinery on Site According to Monthly Reports”, showing for each month from December 2002 to October 2005 the number of each item of machinery. Another table showed the monthly costs of the machinery in the list and further documents supported the value shown in the table for the principle items of machinery.¹²⁶ On this basis, the Contractor calculated the monthly machinery costs for this period, reaching a total of US\$16’635’952.50.¹²⁷
285. The Engineer examined the monthly costs of machinery which the Contractor had indicated and compared them to “the Contractor’s submitted rates quoted from other countries”; he found that only a few items of such other rates were lower than those indicated by the Contractor in the table with the monthly machinery costs. Nevertheless, the Engineer did not use these monthly machinery costs but relied on the Daywork rates in the Contract. Only where no Daywork rates were available, did the Engineer use the monthly costs in the Contractor’s table, increasing them by 27.5% “to absorb overheads (General Expenditures and Financial Costs) ...”. The resulting rates were applied by the Engineer to a number of compensable days of delay and the Engineer’s estimate of the “number of days/machine that worked each month”.
286. Table 3, attached to the Engineer’s Determination, shows for the claimed items of machinery the “Entes SaC Rate \$/month”, i.e. the monthly costs identified in the aforementioned table in the

¹²⁵ Taft III, Appendix B, p. 3.

¹²⁶ Bundle of Documents, Hill International, Folder 7, Tab 20, pages 7 – 12 and Tab 21.

¹²⁷ Ibid. Tab 20, p. 1.

Statement at Completion and an “Adjusted SaC (Entes Rate)”, i.e. the corresponding cost based daily rate with the 27.5% mark-up. For those items of machinery for which the Engineer had identified a Daywork rate, that rate also was identified in Table 3. In nearly all cases, the Daywork rates are below the rates based on the Contractor’s cost based rates. In most cases, the difference is substantial. For instance, for the Caterpillars D9N and D9R the Daywork rates are US\$40 while the cost based rates are US\$510; similarly the relationship between the rates for the Caterpillar D8N is 40 to 425, the Dynapac F14 is 40 to 340, the Mercedes Jeep is 8 to 63, the Tractor 8 to 63. While the difference is less striking with respect to some other items (e.g. the Komatsu bulldozer is 40 to 255, the Komazsu loader is 40 to 212 and the Dynapac CC42 DD 40 to 76; and for some of the items identified as “Russian” the Daywork rate comes close to the Contractor’s cost based rate), it is evident from Table 3 that the Daywork rates used by the Engineer for quantifying the Contractor’s machinery costs are far from reflecting the costs identified by the Contractor and verified by the Engineer.

287. The Tribunal has accepted that for the quantification of the claim for prolongation costs, the Daywork rates are not a suitable basis. This is all the more the case when the Daywork rates are far from expressing the costs for which the Contractor is entitled to be compensated.
288. In the arbitration, the Mr Kennedy presented in his first report tables showing, on a monthly basis over the period from January 2000 to October 2005, the items of machinery present on site and, on that basis, the machinery rates for each month during this period.¹²⁸ He explained that these rates had been calculated by the Contractor from actual rates charged by equipment lessors, the Employer, the Road and Maintenance Department, the Employer, Subcontractors as well as actual rates “that the Contractor has paid in other countries since he could not timely remove his own equipment from Kyrgyzstan” and the “value of similar equipment” calculated “proportionately”.¹²⁹
289. Mr Kennedy concluded that the rates in these tables “were the rates in common use in Kyrgyzstan between all the relevant players in the market and were the costs the Contractor was actually charged for hired P&M or which he received for his own P&M”.¹³⁰
290. Prompted by comments in Mr Taft’s report, Mr Kennedy made corrections in the monthly machinery costs.¹³¹ The revised

¹²⁸ Kennedy I, Tab 18.

¹²⁹ Kennedy I, Tab 18, note at the table for

¹³⁰ Joint Expert Report, Note 3, p. 2.

¹³¹ Kennedy II, paragraph 2.41, with a table of the corrected monthly costs.

numbers were used by Mr Kennedy in his final quantification of the prolongation costs.¹³²

291. Mr Taft questioned the Contractor's and Mr Kennedy's quantification of the machinery costs on a number of grounds. One of these grounds concerns the "bottom-up" approach of Mr Taft who takes the position that "compensability must start with the actual individual delays (number of days in individual situations/locations) and what resources were specifically caused to be on the Project longer. If any P&M was forced to be standing idle waiting for work it could become a time-related resource and a valid part of this claim."¹³³ According to this position "P&M is only valid as part of a prolongation claim if it is shown to be time-related and impacted by the specific delay forming the subject of this claim".¹³⁴
292. The Tribunal has rejected this position. For the reason explained, the Tribunal is of the view that all of the P&M on site during the delay period must be considered, whether at that particular point in time a particular item of equipment, is idle in the workshop or working.
293. Mr Taft also took a different approach to the quantification of the machinery cost: Mr Taft accepts the rates in the tables used by Mr Kennedy; but he describes them as "market rates". In order to extract the actual costs of the Contractor, Mr Taft makes a number of deductions. He concludes that, in his opinion, "the likely costs will be between 40% and 90% of the 'market rates' so I have allowed an average of 65% of the rates allowed in Entes' claim for non-winter periods".¹³⁵
294. Mr Taft's reductions in part are based on the statement that in his experience "the actual costs of plant owned by a contractor are less than the equivalent costs of hiring such plant from external suppliers".¹³⁶ He disagrees with Mr Kennedy's assumption that "external equipment hire rates are appropriate for plant owned by the Contractor". He points out in particular that hire rates must be expected to include an element of profit and concludes that, using hire rates as the basis for quantifying the Contractor's costs and applying them even to the Contractor's own P&M would mean that compensation would include a profit element. Referring to Clause 1.1(g) (i) GC Mr Taft points out that such a profit element may not be included in calculations based on cost. Indeed, this provision defines costs as follows:

¹³² Kennedy IV, Appendix.

¹³³ Joint Expert Report, Note 1, p. 9

¹³⁴ Joint Expert Report, Note 2, p. 9.

¹³⁵ Joint Expert Report, Note 3, p. 10 and Final Report Taft, para.3.1.5.

¹³⁶ First Report, para. 3.2.60 and Scott Schedule, Note 3.

“cost’ means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead and other charges properly allocable thereto but does not include any allowance for profit.”

295. The Tribunal noted that the Engineer accepted the valuation of the Contractor’s P&M cost and used the resulting rates in all cases for which no Daywork rates were available.¹³⁷ Indeed, the Engineer was best placed to verify the Contractor’s statement that these rates reflected the market conditions in Kyrgyzstan. The Tribunal has considered Mr Taft’s objections to the use of these rates, in particular his opinion that the Contractor’s “likely cost will be between 40% and 90% of the ‘market rates’”. This opinion has not been substantiated by any evidence. In any event, even if Mr Taft’s opinion were correct and the Contractor’s costs would be so much cheaper than the market rates, he would suffer a substantial loss from having to keep his P&M on site rather than renting it out. The Tribunal therefore accepts the rates used by the Contractor and the Claimant’s experts. However, it must make one exception.
296. Mr Taft rightly points out that the rates used by the Contractor, being market rates, must include an element of overheads and profit. With respect to the profit element, Mr Taft referred to Clause 1.1(g) (i) GC which excludes profit from the definition of cost. Insofar as the Contractor used rented equipment, the overheads and profit of the lessor included in the rent are part of the Contractor’s costs and must be compensated. The situation is different with respect to the Contractor’s own P&M. Using market rates for compensating the Contractor for his P&M costs would allow the contractor to recover the overhead and profit element in these rates. The Tribunal therefore decides that, to the extent the Contractor used his own P&M, a deduction must be made to exclude any profit margin which may be included in the leased or market rates.
297. Concerning the overhead element in the market rates, the Claimant seeks, as a separate item in the quantification of the prolongation costs, compensation for general overheads. The Tribunal has considered this item of the claim and found it admissible; it awards it in a separate quantification.¹³⁸ To the extent to which leased or market rates also include an item for general overheads, this item too, must be excluded when quantifying the Contractor’s own P&M so as to avoid double compensation.

¹³⁷ Engineer’s Determination, Exhibit C-2, p. 9.

¹³⁸ See below Chapter 8.4.9.

298. The Tribunal, therefore, must determine the relative value of the P&M owned by the Contractor and the allowance for overheads and profit included in the leased or market rates.
299. Concerning the Contractor's own P&M, the evidence produced shows that some of the P&M on which the quantification is based was owned by the Contractor and some was leased. This is evidenced by a large number of contracts and other documents attached to the Statement at Completion showing the rental and other details of the P&M on site.¹³⁹ The Engineer had at his disposal a "List of Machinery on Site according to Monthly Reports" and a "Schedule (II) Major Items of Construction Plan submitted with Bid wherein year of manufacture, new or leased, owned or leased, and estimated CIF value are included".¹⁴⁰ On the basis of the available documentation, the Engineer produced Table 3 of his Determination, which indicates for some items but by far not all, either "owned" or "leased".¹⁴¹ Mr Kennedy's first report contains tables showing on a monthly basis the items of machinery on site, identifying these items by type, value, number of items per type and distinguishing between "Entes" and Rental".¹⁴² There is therefore contemporary evidence which would have allowed the Parties and their experts to identify the proportion of leased and owned P&M.
300. Mr Taft, as mentioned above, insists on the difference between "externally hired plant" and "plant owned by the Contractor".¹⁴³ He opines that the market and external hire rates include a margin for overheads and profit for the plant hire company in the "region of 10%".¹⁴⁴ Mr Taft then states:

*"Given the 10% for profit that I consider should be excluded from 'market rates', without further details from Entes, in my opinion the likely costs will be between 40% and 90% of the 'market rates' so I have allowed an average of 65% (i.e. a deduction of 35%) of the rates allowed in Entes' claim for non-winter periods".*¹⁴⁵

301. The evidence produced would have allowed Mr Taft to identify the items of P&M owned by the Contractor, to which the exclusion of 10% had to be applied. The detailed tables produced by Mr Kennedy would have permitted to identify these items one by one and calculate their value.¹⁴⁶ He has not done so. The percentages

¹³⁹ Hill International, Folder 7, Tab 21.

¹⁴⁰ Exhibit 2, pp. 8 and 9.

¹⁴¹ Exhibit C-2, pp. 29 to 31. There is a large number of items for which it is not indicated whether they were « owned » or « leased »; however, most of them are of medium or lower value.

¹⁴² Kennedy I, A/18.

¹⁴³ Taft II, paragraph 2.45.4 and Taft III, paragraph 3.1.4.

¹⁴⁴ Taft III, paragraph 3.1.4.

¹⁴⁵ Taft III, paragraph 3.1.5.

¹⁴⁶ Kennedy I, A/18.

of “the likely costs” are unsubstantiated and obviously lead to a deduction exceeding that for overheads and profit.

302. In the absence of any other information provided by Mr Taft, the Parties and the other experts, the Tribunal must fix the proportion of the Contractor’s owned P&M. It does so on the basis of Mr Kennedy’s corrected “List of Machinery on Site according to Monthly Reports”, attached to his last report. This List shows over the period from January 2000 to April 2004 a total of items/month of 15’784 of which 13’368 are identified as “Entes” and 2’419 as “Rental”. The proportion of owned items of Machinery is therefore 84.7%. The Tribunal accepts that this proportion, calculated on the basis of items of equipment, also represents the proportion in the value of the equipment.
303. It follows that 84.7% of the P&M for which the Contractor claims prolongations costs were owned by the Contractor; their valuation at market or rental rates includes overheads and profit which must be excluded.
304. Mr Taft estimated the margin for “overhead and profit for the plant hire company” was “in the region of 10”.¹⁴⁷ This estimate remained uncontested. In particular Mr Kennedy defends the use of rates applied by the Contractor by opining that they are “in common use in Kyrgyzstan”;¹⁴⁸ but he does not respond to Mr Taft’s argument that market rates include a profit element which is excluded under the Contract.
305. The total value of P&M in the Contractor’s claim, as quantified in Mr Kennedy’s latest table, is US\$ 37’527’009.¹⁴⁹ According to the above determination 84.7% thereof are the Contractor’s own P&M, i.e. US\$31’785’377; this amount contains US\$3’178’538 for overhead and profit, corresponding over the total of the 2’108 days on average to US\$1’508 per day.
306. In quantifying the P&M component of the prolongation costs, the Tribunal therefore relied on the P&M rates in the Statement at Completion, as corrected by Mr Kennedy and applied by him in his Final Report and deducted from these rates US\$1’508 per day.

8.4.3 General Expenditures/Preliminaries

307. The Contractor’s claim for delay costs, as presented in the Statement at Completion, included an item described as “General

¹⁴⁷ Taft III, paragraph 3.1.4.

¹⁴⁸ Joint Expert Report, p. 2.

¹⁴⁹ Kennedy IV

Expenditures” in a total amount of US\$ 4’499’851.03 and “Financial Costs” in a total of US\$449’959.04. The Engineer used a different approach in his Determination to the quantification of these costs. He quantified compensable delays on the basis of Daywork rates and stated that General Expenditures and Financial Costs were “included as overheads in Daywork Rate”.¹⁵⁰

308. In support of the claim in the Statement of Claim, Mr Kennedy dealt with these cost items under the heading of General Expenditures, but also used the term Preliminaries. He produced tables¹⁵¹ in which the “Kyrgyzstan Site General Expenditures” were presented on a monthly basis from January 2000 to December 2005, distinguishing between:

- Toktogul Site Direct General Expenditures;
- Toktogul Site Indirect General Expenditures;
- Karakul Site Indirect General Expenditures; and
- Bishkek Office Direct General Expenditures.

309. He explained that the costs in these tables were taken from the Contractor’s audited accounts.¹⁵²

310. Mr Taft objected that he had not been able to verify whether the claimed costs had actually been incurred.¹⁵³ He questioned Mr Kennedy’s terminology in particular with respect to the distinction between “site direct” and “site indirect”.¹⁵⁴ Mr Taft also required that the claimed preliminaries had to be allocated to sections of the Project affected by the compensable event;¹⁵⁵ and that the costs were properly allocated to the different cost categories.¹⁵⁶

311. Concerning the evidence for the costs, print outs of the supporting documents were provided to Mr Taft as he confirmed in his final report:

“With regards to general expenditure, I received a copy of a printout of Entes’ Project Accounts at the Hearing and I have had the headings translated from Turkish to English so that I could check the monthly totals for “indirect” and “Direct” expenses. I am now in a position to confirm that the monthly totals in Mr Kennedy’s Report for General Expenditures (his Appendix A1/ 17) are the correct totals from Entes’ Accounts printout.”¹⁵⁷

¹⁵⁰ Exhibit C-2, p. 8.

¹⁵¹ Kennedy I, Attachment A1/17.

¹⁵² Kennedy I, paragraph 24.

¹⁵³ Taft I, paragraph 3.2.24.

¹⁵⁴ Taft I, paragraph 3.2.29.

¹⁵⁵ Taft I, paragraph 4.2.6.

¹⁵⁶ Taft I, paragraph 4.2.5 and 4.2.8.

¹⁵⁷ Taft III, paragraph 3.2.1.

312. Mr Taft did, however, raise doubts as to the allocation of cost to different categories. In particular, he pointed out that he was not able “to see ‘behind’ these accounts to determine what is precisely included and how the currency has been converted”.¹⁵⁸ He confirmed that he had been able to see “the individual monthly costs for each sub-category of General Expenses”. He did not agree “that all the sub-items claimed were in fact time-related site overhead expenses that should form part of a claim for prolongation costs.”¹⁵⁹ In order to develop this objection, Mr Taft analysed the different General Expenses cost items and determined those which he accepted as time related and thus eligible for a claim as compensation costs and those items with respect to which he contested, fully or in part, that they were time-related.¹⁶⁰ He presented the results of this exercise in Appendices B1 and B2 of his Final Report in the form of a spread sheet which shows the rating, between 0 and 100%, and the resulting cost difference between the amounts claimed as General Expenses. Appendix B1 shows a difference between the amount claimed and Mr Taft’s assessment of 35.1%.

313. For many of the items so identified as not time-related nothing or only insignificant amounts are claimed. They can be disregarded for the decision of the Tribunal. The items for which the difference between the claim and Mr Taft’s assessment is significant are:

- Machine Repairs/Maintenance 50% allowed by Mr Taft;
- Transportation 50% allowed by Mr Taft;
- Transportation of workers 50% allowed by Mr Taft;
- and
- Food 50% allowed by Mr Taft.

314. Mr Taft explained his choice with respect to these items that

“... for transportation and food, I have assessed these to be 50% time-related site overheads because the transport could be of plant, materials or workers (not just site supervision staff) in which case these costs could vary as a function of volume of volume of work not simply time. On food, the costs seem to be very high and could therefore be for workers as well as site supervision staff; therefore these costs could also vary as a function of work volume rather than time only.”¹⁶¹

315. Mr Kennedy replied:

¹⁵⁸ Taft III, loc. cit.

¹⁵⁹ Taft III, paragraph 3.2.2.

¹⁶⁰ Taft III, paragraph 3.2.2 and Introduction to Appendix B, p. 1.

¹⁶¹ Introduction to Appendix B, p. 1.

*“In principle I agree with Mr Taft’s approach. However, Mr Taft has reduced the machine repairs and maintenance to 50%. I believe these machines within the General Items are for Engineers’ cars, buses, etc. and as such are in my view 100% time related. Similarly transportation is in my view entirely time related. Hospitality and entertainment are other items I regularly allow as time related since only those costs incurred in the overrun period are claimed as ongoing expenditures necessitated by the prolongation of the project.”*¹⁶²

316. Mr Kennedy explained with respect to terminology and classification of cost items that the allocation “with Turkish contractors does not necessarily follow protocols which Mr Taft has experienced previously”; he provided a table that showed the allocation applied in the present case.¹⁶³
317. The Tribunal notes that it is not contested that the Site General Expenditures must be included in the costs of compensable delay: the Engineer included them by using Daywork Rates; the Parties’ experts, having rejected the quantification on the basis of Daywork Rates, accept as a matter of principle that they must be included in the compensable costs. The Tribunal shares this view; these costs are typical of the costs which a contractor must bear when the works are delayed. The questions that remain concern the exact amount of these costs and the classification as General Expenditures.
318. The Tribunal has rejected Mr Taft’s position according to which delay costs can only be compensated if a link is shown to the specific compensable delay event. Since the delay affected the completion of the entire project, all costs of delay must be included in the quantification of the costs caused by compensable delay. This also applies to the General Expenditures. The allocation of these expenditures to certain parts of the works, as attempted by Mr Taft, therefore is not relevant for determining the General Expenditures during a given period of compensable delay.
319. With respect to the classification of the various items of costs, the Tribunal noted that differences may exist as to the category in which a certain cost item should be recorded. What is relevant are the criteria for the decision which the Tribunal has to make. In this respect, the decisive question is whether a particular item of cost incurred during a period of compensable delay falls into a category of costs which the Contractor had to support as a result to the delay. The objections which Mr Taft had raised in this respect may

¹⁶² Joint Expert Report, p. 3, Note 6.

¹⁶³¹⁶³ Kennedy II, paragraph 2.17.

have their origin, at least in part, in his bottom-up approach. In that approach, it may be of importance whether a certain cost item relates to a specific activity which is delayed. In the case of a general delay of the project as a whole, this allocation loses its importance. In such a situation it is immaterial whether the costs for food concern site supervision staff or productive workers, or both. The two categories of personnel are affected by the delay and the costs for both must be compensated. The question whether this is done as part of General Expenditures or as part of personnel costs is, at best, of secondary importance.

320. In view of these considerations, the Tribunal accepts the quantification of the General Expenditures as contained in Mr Kennedy's Final Report.

8.4.4 General or Head Office Overheads

321. The Claimant seeks, as part of the claim for EOT No 5, payment of an amount of US\$ 2'626'138.40 for its Head Office Overhead. Details of this claim were presented in Mr Kennedy's First Report. Mr Kennedy listed but did not quantify a number of cost items of a general nature that he considered in addition to the "directly incurred costs of delay".¹⁶⁴ He also stated that he had taken from the audited accounts the percentage of head office overheads for the years 2000 to 2005 and indicated them as follows:

2000	5.00 %;
2001	4.32%;
2002	5.71%;
2003	10.37%;
2004	2.81%; and
2005	5.78%.

322. He calculated the average rate over this period as 5.66%.¹⁶⁵ In his second report, Mr Kennedy provided a table showing the amounts of various items of overhead costs for each of the six years.¹⁶⁶ He also corrected the value for 2004, increasing it from 2.81% to 7.34%.¹⁶⁷ This increase brought the average rate to 6.42%,¹⁶⁸ adding that this percentage was his "experience of such matters what I would expect within the industry".¹⁶⁹

¹⁶⁴ Kennedy I, paragraph 38.

¹⁶⁵ Kennedy I, paragraph 42 and Attachment 11, showing also the total totals for turnover and head office costs per year.

¹⁶⁶ Kennedy II, Attachment A9.

¹⁶⁷ Mr Kennedy explained

¹⁶⁸ Kennedy II, Attachment A8.

¹⁶⁹ Kennedy II, paragraph 2.50.1.

323. Mr Kennedy also provided a list of 25 “tenders returned or declined by the Contractor during the Years from 2003 to 2005”, implying that, if its resources had not been tied up in Kyrgyzstan on the present Project, the Claimant could have concluded other contracts which would have made contributions to the company’s overheads and thus preserved an overhead rate at the level of the average just mentioned. With his second report, Mr Kennedy provided a list of 21 projects showing details concerning each of the projects, including their value, ranging from US\$10 million to US\$250 million.¹⁷⁰
324. In order to calculate the amount of overhead contribution to which, in his opinion, the Claimant is entitled, Mr Kennedy relied on Mr Wiseman’s determination concerning the responsibility of the overall time extension of 1’043 days which the Engineer had granted. According to Mr Wiseman, 808 days thereof were the responsibility of the Employer, of which 672 days for delays in the five EOT claims and 136 for winter shutdown periods; an additional period of 136 days were allocated to delay attributed to joint responsibility.¹⁷¹
325. On the basis of these assumptions Mr Kennedy calculated the loss of overhead contribution by using the Emden formula, a method recommended by a reputed English publication.¹⁷² According to this formula the daily general overhead cost is obtained by dividing the contract sum (US\$41’768’448) by the contract period (1’965 days) and multiplied by the overhead percentage determined.¹⁷³ On this basis Mr Kennedy applied a daily rate of US\$2’517.87.¹⁷⁴
326. The principle that general overhead costs may be claimed and that they may be calculated by using the Emden formula is not really contested. Mr Taft’s objections concern essentially the failing evidence for (i) the Claimant’s overhead costs during the years in question¹⁷⁵ and for (ii) the “missed tenders”.¹⁷⁶ Relying on the amount of overhead costs in 2004 prior to the correction of this value by Mr Kennedy, Mr Taft opines that the percentage for this year would be more representative and proposes a value of 2.39%., leading to a daily rate of US\$937.33.¹⁷⁷
327. Mr Taft also raises the “potential duplication of costs between prolongation costs and the Claimant’s head office overheads

¹⁷⁰ See also Joint Expert Report p. 6.

¹⁷¹ Kennedy I, paragraph 39.

¹⁷² Kennedy I, paragraph 45 and 46, referring to Emden’s Building Contracts and Practice, 8th edition, volume 2, p. N 46.

¹⁷³ Kennedy I, paragraph 46 and Taft III, FN 12 at p. 16.

¹⁷⁴ Joint Expert Report, p. 6

¹⁷⁵ Taft III, paragraph 3.5.3.

¹⁷⁶ Taft III, paragraph 3.5.1.

¹⁷⁷ Taft III, paragraph 3.5.6 and Joint Expert Report, p. 14.

claim”¹⁷⁸ and questions whether, in the absence of the delays for which extensions were granted, the Contractor would have finished in time.¹⁷⁹ Finally, Mr Taft points out that the period must be determined which “might have caused a lost contribution to Entes’ overheads”; he objects to the manner in which Mr Kennedy treated non-compensable periods and periods of joint responsibility.¹⁸⁰

328. The Tribunal has examined the costs listed in the table presented by Mr Kennedy with his second report. Subject to the possible duplication, which shall be considered below, it is uncontested that these costs can be taken as general overheads. The Tribunal has no reason to question Mr Kennedy’s statement that the costs in that table were taken from the Claimant’s audited accounts. On this basis the average rate for the Claimant’s general overheads during the relevant period would be 6.42%, corresponding to US\$2’517.87 per day.¹⁸¹ In the circumstances, the Tribunal considers this daily rate as adequately documented and proven.

329. Concerning Mr Taft’s argument about possible overlap, the Tribunal noted that indeed there are a number of items which appear both in the table showing the Claimant’s general overheads for the years 2000 to 2005 and in the project specific General Expenditures or Preliminaries. Mr Taft listed the cost items which he considered relevant as follows:

- Portage and transportation;
- Maintenance and repair of machines inventory stock;
- Vehicles fuel expenses;
- Vehicles maintenance repair expenses; and
- Vehicles depreciation.¹⁸²

330. These items appear with the same or very similar descriptions both in the table with the General Overheads¹⁸³ and in the Direct General Expenditures.¹⁸⁴ The Tribunal has not seen a satisfactory answer from Mr Kennedy to the argument of possible overlap. It accepts, therefore, that a substantial part of the listed items in the General Overheads are duplicative of the costs which are taken into account under the heading of General Expenditures. Therefore, the Tribunal makes a deduction from the General Overheads rate which it accepted above in principle.

¹⁷⁸ Taft II, paragraph 2.50.1, p. 10 and 11.

¹⁷⁹ Taft III, paragraph 3.5.2.

¹⁸⁰ Taft III, paragraph 3.5.7.

¹⁸¹ Joint Expert Report p.6. The calculation of Mr Kennedy reaching this percentage has not been contested by Mr Taft.

¹⁸² Taft II, p. 10 and 11.

¹⁸³ Kennedy II, Attachment 9.

¹⁸⁴ Kennedy II, table at p. 10 and Taft III, Appendix B2.

331. In the list presented as Attachment 9 to Mr Kennedy's Reply Report, the value for the cost items listed compared to the Contractor's total overheads during the years 2000 to 2005 varies between around 5 and 8 %. Assuming that a major part of these items are already included in the project General Expenditures, the Tribunal reduces the daily rate for General Overheads from US\$2'517.87 to US\$2'350 which corresponds to an overhead rate of some 6%.

332. Mr Taft explained:

*"For the purposes of this assessment I cannot reach a firm position on the quantum of the head office overheads on the basis of the information provided. In my opinion, whilst it is possible that Entes overheads could be as high as 5 – 6% I know of many contractors which are able to operate at much lower levels of overhead in the region of 2 – 3 %."*¹⁸⁵

333. Mr Kennedy commented the rate of 2.39% proposed by Mr Taft by stating:

*"I have never in my long experience of successful international contractors seen Head Office overheads at a level of 2.39% as suggested by Mr Taft. Anywhere from 5% to 10% is what I have encountered and this fluctuates depending upon international and domestic economies, etc. Therefor, 6.42% would in my view be within the compass of my expectations."*¹⁸⁶

334. It follows that the overhead rate of about 6% accepted by the Tribunal is within the range considered by both experts.

335. As to Mr Taft's objection concerning the "missed contracts" or "missed tenders", the Tribunal notes that the matter is speculative by its very nature. A claim for lost contribution is based on the assumption that, in the absence of the delay, the contractor would have been able to use its resources for work on other projects. In the ordinary course of business, where a contractor regularly achieves general overhead rates in a given ratio, this assumption may be taken as supported, without there being a need for establishing proof for contracts that would have been concluded in the absence of the delay on the project in question. The Tribunal therefore accepts the assumption made with respect to "missed contracts".

336. In view of these considerations, the Tribunal accepts for General or Head Office Overheads the daily rate of US\$2'350.

¹⁸⁵ Taft III, paragraph 3.5.5.

¹⁸⁶ Joint Expert Report, p. 6.

337. The Claimant and Mr Kennedy apply this rate to the full period of excusable delay of 1'043 days, allowing only for the possibility of a deduction of 50% with respect to the period of "delay of joint responsibility".¹⁸⁷ The Tribunal is of the view that general overheads are part of the Contractor's prolongation costs. The Claimant is entitled to be paid for such costs only to the extent to which it demonstrates entitlement to compensation. It follows that general overhead costs are allowed only for days of delay which the Tribunal finds to be compensable.

8.4.5 Prolongation costs in cases where the delay is caused by variations

338. As explained above,¹⁸⁸ prolongation costs due to additional works are compensable. The difference between the Parties and their experts concerns the manner in which these costs are compensated.

339. In the claim for prolongation costs, as presented in the Statement at Completion, the Contractor quantified the claimed costs globally for the entire period of prolongation beyond the original contract period. In other words, during the initial phase the Contractor did not address specifically the quantification of each of the causes for delay on which he relied.

340. An analysis of the different causes for delay identifying the number of days attributable to each of the causes was first introduced by the Engineer in his Determination. In Table 2 attached to this determination, the Engineer identified for each EOT claim the causes for delay which he considered and attributed to each of them a number of days, distinguishing between compensable and non-compensable. Delay attributed to variations was classified as non-compensable; the Engineer stated that "varied works do not qualify for time related financial compensation". The Engineer explained that the Contractor is compensated for the varied work by the contractual rates and prices. If he seeks additional compensation, the Contractor must give notice under Clause 6.4 and Clause 52.2 GCC "of his intention to vary a rate or price". The Engineer added:

"... where an increased amount of work justifies an extension of time, the Engineer has to consider whether the increased amount has rendered the Contract rate inapplicable. The nature of the work does not have to change, but if the overheads during the extended period exceed the overheads covered by the additional

¹⁸⁷ Joint Expert Report, p. 6.

¹⁸⁸ Section 8.2.4.

volume of work, the rate for the work is no longer applicable and should be adjusted."¹⁸⁹

341. This position of the Engineer is contested by the Claimant. It raises two issues: first, have the contractual notice requirements been respected and, if not, what are the consequences; and second, if the Contractor is entitled to claim compensation, does the compensation take the form of a modified or new rate for the varied work or is it calculated in the same manner as the compensation for prolongation costs on other grounds.
342. Concerning the first of these issues, the notice requirement, Clause 6.4 GCC concerns claims for delay resulting from the Engineer's failure or inability to issue in due time "any drawing or instruction". This is not the issue here, where the effect of variations on the duration of the works is the basis of the claim.
343. Clause 52.2 GCC, the other provision on which the Engineer relied, concerns the rates to be applied to varied work. The second paragraph of this clause requires the Contractor to give notice "of his intention to claim extra payment or a varied rate or price". However, this requirement applies in the context of the valuation of varied work on the basis of contractual rates or prices or their modification. The passage states expressly that "no varied work ... shall be valued under Sub-Clause 52.1 or under this Sub-Clause unless" the specified notice requirement is met. However, the claim which the Contractor is making here does not concern the valuation of the variations at contractual or other rates. It concerns the question whether the variation caused delay and whether this delay entitles the Contractor to compensation of the resulting costs. The claim for prolongation costs is of a nature different from that concerning the valuation of the variation itself. The notice requirements in this respect are those of claims in general, as they have been considered above. The claims for prolongation costs caused by variations are not precluded by Sub-Clause 52.2 and are admissible, subject to the condition that can be verified by contemporary records.
344. The second objection of the Engineer concerns the valuation of the claims for the Contractor's prolongation costs. The Engineer's position rests on the assumption that the Contractor is fully compensated for a variation by the application of the contractual rates and prices and possibly modified or newly fixed rates and prices. This is clearly wrong. The rates and prices are fixed for the actual performance of the works, including variations. Site overheads are paid for under a separate bill, named "General items".

¹⁸⁹ Exhibit C-2, p. 7.

At the hearing the question was discussed whether the quantification of the variations included an amount for these general items. At the end of this discussion, all experts agreed that the quantification included “only the work items” and not the General Items.¹⁹⁰

345. In other words, the rates and prices which were applied for the valuation of the variations did not include any payment for site overheads and general overheads. When a variation causes delay which prolongs the contract period, the Contractor has to bear additional costs for site overheads and general overheads. These costs are not included in the rates and prices; indeed, it would be quite irrational to do so, because the prolongation costs do not depend on the work itself but on the time of its performance. Depending on the time when the variation is performed, no delay at all may be caused and hence no prolongation costs.
346. The Engineer seems to have understood the issue at least in part. In the quoted passage, he recognises that the timing of the performance may affect the “overheads during the extended period”; but he seemed to have believed that the consequences can be settled simply by adjusting the rate, which obviously is not the case.
347. Mr Taft recognises that the prolongation caused by variations does cause additional costs but, in one of the alternatives which he considers, he is of the opinion that the prolongation caused by variations should be treated differently from all other prolongations. While such other prolongations should be assessed on the basis of costs, the valuation of prolongation caused by variations should be based on Clause 52 “which refers to the Contract BQ”.¹⁹¹ He refers to “General Items (Preliminaries) set out in the Contract BQ” and to “rates for certain types of plant/machinery and labour”. By reference to Bill 01 General Provisions, Mr Taft assigned to each item a percentage to reflect the extent to which he considered it time related. In this manner he reduced the total of US\$5’620’568.79 of this bill to US\$3’636’225.61 and divided this reduced amount by the original contract period of 1’065 days, producing a daily rate of US\$3’414.30. Mr Taft used this rate for an alternative quantification of the prolongation costs for additional works in EOT 3 and EOT 5.¹⁹²
348. However, as a principal method of valuation, for these prolongation costs based on variations, Mr Taft did not use the rate derived from the BQ. Instead he used the monthly costs during the period indicated as relevant by Mr Marshall, according to the method

¹⁹⁰ Tr 673.

¹⁹¹ Joint Expert Report, p. 11, Note 9.

¹⁹² Taft III, Appendix C2 ; Joint Expert Report, pp. 11 (Note 9), 12 and 13.

discussed above. This method required that specifically P&M costs be shown to be “time related and impacted by the specific delays forming the subject of this claim”,¹⁹³ an approach which the Tribunal has rejected. On this basis, Mr Taft reached a daily rate higher than that derived from the BOQ and which he indicated as US\$4’967.67 for EOT 3 and a rate varying between US\$1’520.13 and US\$2’664.99 for EOT 5.¹⁹⁴

349. Mr Kennedy treats the prolongation costs caused by variations in the same manner as any other prolongation cost, except that he makes an allowance described as “abatement”. For this purpose Mr Kennedy considers that, in the cases where the prolongation was caused by additional works, the Contractor used productively the resources engaged in these additional works and was paid for them under the Contract. Mr Kennedy looks “at any value earned by P&M in the relevant period(s)”, noting the Contractor was paid for this additional work at contract rates. He sees, in this payment, remuneration for the use of P&M which otherwise would have been idle during the critical delay periods.
350. In order to calculate the “abatement”, Mr Kennedy considers the total value of variations ordered and paid, identifying the P&M part in this amount and removing purely time related costs, Mr Kennedy calculated a daily rate of US\$831 which he deducted from the P&M costs to make allowance for the value earned during the prolongation period through the payment for the variations.¹⁹⁵
351. The Tribunal finds that prolongation caused by variations causes costs which are not covered by the rates and prices used for the valuation of the variations themselves. This has been established clearly at the hearing, as just pointed out. These costs do not consist simply in the prolongation of the General Items, as the alternative quantification of Mr Taft assumes. They include in particular the cost for P&M which must remain for a longer period on site to produce the same work for the same remuneration. Therefore, the Tribunal does not accept, as explained above, the position of Mr Taft that the prolongation costs should be limited to the specific section of the work directly affected. All of the costs during the relevant prolongation period must be considered. However, allowance must be made for the compensation which the Contractor received through the payments for the variation. The Tribunal accepts therefore that, as a matter of principle, the allowance for the compensation earned through the variation

¹⁹³ Joint Expert Report, p. 9, Note 2.

¹⁹⁴ Joint Expert Report, pp. 12 and 13 ; no valuation was proposed by Mr Taft for the delay attributed to additional works in EOT 1.

¹⁹⁵ Joint Expert Report, p. 1, Note 2

payments (the “abatement”, as described by Mr Kennedy) must be made.

352. As to the quantum of the abatement, the Respondent’s experts have contested the principle by relying on the “bottom up” method, but not specifically the calculation presented by Mr Kennedy. The Tribunal, therefore, accepts the approach to the quantification of the “abatement” by Mr Kennedy,¹⁹⁶ subject to some modifications. Mr Kennedy identified the total of Additional Works executed and paid under the Contract at US\$2’496’064. He assumes that 45% of this amount is the P&M component of these payments for additional works. He deducts an amount for the part of P&M which was “purely time related and not capable of earning any value (such as engineer’s cars, workers transport, generators, etc.), which the experts agree at 22.6% of the P&M”. He divides the resulting amount by 1’043, the number of days in the extended period. The result is the amount which, according to Mr Kennedy, the Contractor earned on average per day by the contractual payments for the additional work.
353. While accepting, in principle, Mr Kennedy’s calculation, the Tribunal does not see the justification of considering only the P&M value: the costs which Mr Kennedy and the Tribunal use for quantifying the prolongation costs are not limited to the Contractor’s P&M costs, they also include “Actual Prelims”, “Personnel (Turkish)” and “Personnel (Local)”. While the “Prelims”, entitled also “General Provisions”, are a separate lump sum item in the BOQ, which is not paid through the rates and prices for the work actually performed, the personnel costs were remunerated by the payments for the additional work. Therefore the Tribunal takes account not only of the P&M value paid through the additional works but also the personnel value.
354. The total costs of the Contractor, as recorded in Mr Kennedy’s corrected table is US\$58’660’497. “Actual Prelims” (US\$10’119’259) form 17.25% of this total. The remaining 82.75%, consisting of P&M and Turkish and local Personnel, represent the part of the Contractor’s costs for which he earned revenue through the payments for additional work. It is this percentage which must be applied to the actual revenue from additional work (US\$2’496’064), producing the sum of US\$2’065’493. The Tribunal sees no justification for deducting from this sum another 22.6% for P&M not earning value. The calculated amount is the total revenue earned by the Contractor for the resources on site during periods of critical delay and for which prolongation costs are claimed.

¹⁹⁶ Set out in the Joint Expert Report, p. 1, Note 2.

355. The Tribunal therefore bases the calculation of the “abatement” on the total amount of US\$2’065’493 and divides it by 1’043, the number of days in the extended period, producing an average daily abatement of US\$1’980 to be applied to those daily costs for which compensation is awarded as prolongation costs attributed to delay due to additional work.

8.4.6 Summary: the Tribunal’s approach to quantifying the prolongation costs

356. For the reasons set out in the preceding sections, the Tribunal examines the claim for prolongation costs by reference to each EOT and the grounds for time extension accepted by the Engineer in each of them. It determines for each of the grounds which the Engineer classified as non-compensable, whether this classification is justified or must be changed to compensable.
357. For each of the delay periods which the Engineer had classified as compensable or for which the Tribunal reached this conclusion, the prolongation costs are then determined by reference to the Contractor’s costs during the relevant period, quantified as described above. In this respect, the Tribunal takes as starting point the position of the Parties’ experts as recorded in the Joint Expert Report, as subsequently corrected in the case of Mr Kennedy, considering also any relevant subsequent corrections, the Parties’ Post-Hearing Briefs as well as the Parties’ other submissions and expert reports.

8.5 Costs related to EOT 1

8.5.1 The claim, its components and evolution

358. The Claimant seeks prolongation costs with respect to its Extension of Time Claim No 1 for three causes of delay considered by the Engineer in its Determination:
- US\$ 1'638'173.83 (alternatively 1'477'293.55) for 50 days of Design Delay;
 - US\$ 1'049'697.00 (alternatively 947'590.71) for 33 days of Additional Works Delay; and
 - US\$ 3'111'729.88 for 107 days of Winter Break.¹⁹⁷
359. The Claimant makes allowance separately for the amount certified by the Engineer and paid by the Employer which included compensation for 50 days of Design Delay in an amount not specified for this cause of delay.
360. The Respondent denies that the Claimant is entitled to any additional payment.¹⁹⁸ In the Rejoinder the Respondent also argued that it had no obligation to provide any design to the Claimant.¹⁹⁹
361. The claim was first presented in the "Interim Extension of Time Claim" of 25 July 2002 in which the Contractor sought an extension of time by 469 days, reserving its "right to submit financial claims related to the delays caused to the completion of the project due to reasons beyond his control". The causes of the delay on which the Contractor relied were:
- Changes in designs, requirements to do design and produce drawings and lack of design information which has caused delays to the completion of Works;
 - Changes in Alignment and other Works which resulted in increase in the quantities of Works and thus caused the delays due to additional works instructed to the Contractor;
 - Unforeseeable crisis in the supply of petroleum products;
 - Exceptionally adverse climatic conditions; and
 - Serious delays in payments to the Contractor against his approved Monthly Payment Certificates.²⁰⁰
362. Following correspondence and meetings, the Engineer, in its decision of 17 September 2002, granted 83 days, of which 50 days

¹⁹⁷ C-PHB p. 121.

¹⁹⁸ R-PHB p. 11, paragraph 10.

¹⁹⁹ R-Rejoinder p.4.

²⁰⁰ Exhibit C-5.

for design delays and 33 days for delay due to additional works. In this decision, the Engineer reported that the “methodology of determination was explained to the Contractor and the Employer in meetings of 16/09/02 and on 17/09/02 held in JOC office in Bishkek. In the absence of a logical clarification by the Contractor as to why the Engineer determination of the EOT should be varied, the Engineer confirms his determination of the Contractor’s entitlement of EOT for the Interim Claim to be 83 days”.²⁰¹

363. The Contractor sought compensation for the delay presented in EOT 1 as part of the Costs due to Extension of time included in the Statement at Completion. In his Determination of 18 May 2005, the Engineer:
- granted 50 days of compensable delay due to « design delay ». ²⁰² Since the quantum of the compensation was stated only for the total of the compensable delay, the amount certified by the Engineer for this specific period cannot be determined with precision. It can be estimated at some US\$400’000;²⁰³ and
 - 33 days and 107 days as excusable but non-compensable for Additional Works and Winter Break, respectively.²⁰⁴
364. Table 2 at the Engineer’s Determination also includes 29 days as “Excusable Delay” for “adverse climatic conditions”, but does not allocate these days to the compensable or non-compensable delay. The experts agree that this “appears to be an erroneous entry”.²⁰⁵ In any event, no claim is made with respect to these 29 days.
365. The Claimant accepts the duration of the delay attributed to each of the three causes for which the Engineer granted an extension of time and the number of days accepted by the Engineer. The dispute therefore concerns (i) the costs attributed to the 50 days of compensable “design delay and the entitlement to and the quantum of the compensation for (ii) 33 days for additional works and (iii) 107 days for Winter Break.

8.5.2 The 50 days of design delay

366. In the EOT 1 claim, the Contractor relied on “changes in design, requirement to do design and produce drawings and lack of design information which has caused delays to the completion of Works” and quantified this delay as 174 days.²⁰⁶ Contrary to the Respondent’s argument, design information had to be provided by

²⁰¹ Exhibit C-6.

²⁰² Determination of 18 May 2006 (Exhibit C-2)

²⁰³ Tr 577 and 581.

²⁰⁴ Exhibit C-2, Table 2.

²⁰⁵ Tr 216.

²⁰⁶ Exhibit C-5.

the Employer through the Engineer.²⁰⁷ The Engineer did not contest that such an obligation existed and accepted that delay occurred. He quantified it “taking 21 days as average expected duration for a single case of approval”. On this basis, he quantified the delay caused by the design related issues at 50 days.²⁰⁸

367. In his Determination, the Engineer accepted that this delay was compensable. The Engineer explained:

“There were numerous design changes during this period, which affected the progress of work and made the Contractor to suffer additional cost due to delays in approval.”²⁰⁹

368. The Engineer’s decision was not contested by the Employer. In this respect the decision it has become binding. Objections to the compensability of this period of delay raised by the Respondent in the arbitration²¹⁰ are in contradiction with this clear statement of the Engineer which remained uncontested at the time. In any event, the Respondent quotes the Report of its own experts stating that “Mr Marshall holds that the Engineer made a right decision in specifying 50 days as a compensable delay”.²¹¹

369. The Experts agree both with the number of days and with the conclusion that the delay is compensable.²¹² The Tribunal confirms this conclusion and finds that the design delay is compensable.

370. The remaining difference concerns the valuation of the costs caused by this delay.

371. The Engineer did not value specifically the 50 days in EOT 1; the experts were unable to determine the costs allowed by the Engineer for this period.²¹³ Based on the Engineer’s overall valuation for the entire period of 153 days of compensable delay, in the order of US\$ 1’16 million, the costs for the 50 days in EOT 1, as explained above, proportionately are around US\$400’000.

372. At the hearing the experts agreed that the correct valuation of the costs resulting from the 50 days of delay is higher than this amount;²¹⁴ but the experts did not agree on the correct valuation. In their post-hearing consultations and submissions, the experts

²⁰⁷ See C-Legal Grounds, paragraph 13 et seq., C-PHB, paragraph 214 et seq., Special Specifications Clause 1.2.3 (Exhibit C-2, p. 665).

²⁰⁸ Exhibit C-6.

²⁰⁹ Exhibit C-2, p. 5.

²¹⁰ E.g. R-Rejoinder p. 4 et seq.

²¹¹ R-PHB, paragraph 9.

²¹² Reported by Mr Hamann at the end of the expert consultation : Tr 574.

²¹³ Tr 577.

²¹⁴ Tr 582.

presented the following values: Mr Kennedy: US\$ 1'477'293.55 and Mr Taft US\$431'585.64.²¹⁵

373. In his final report of 18 January 2012, Mr Kennedy refers to Mr Wiseman's report of 19 December 2011 and increases the quantification to US\$1'638'173.83. In Addendum 1 of 20 January 2012 to Mr Taft's Report, the quantification is reduced to US\$ 425'067.27. Based on the valuation of Mr Kennedy, the Claimant seeks US\$1'638'173.83; alternatively US\$ 1'477'293.55.²¹⁶
374. Applying the method of quantification and the applicable values, the Tribunal must first determine the reference period during which the compensable delay occurred and which will have to be considered for the quantification of the costs of this delay.
375. Mr Kennedy, the Claimant's quantum expert, initially situated the delay for EOT 1 at the time immediately after the contractual completion date, i.e. from 3 December 2002 to 11 June 2003,²¹⁷ as identified in the Engineer's Determination for EOT 1.²¹⁸ This is the period by reference to which the design delay claim is quantified by him in the Joint Expert Report. Following this report, Mr Kennedy reconsidered the reference period. Based on analysis in his earlier reports, Mr Wiseman situated the period during which the design driven delay occurred from 1 March to 15 December 2000 and 1 April to 31 May 2001.²¹⁹ It is by reference to this modified period that Mr Kennedy recalculated the delay costs: applying a daily rate of US\$32'763.48 to the 50 days of delay he reached a total of US\$1'638'173.83.²²⁰
376. Mr Taft, relying on Mr Marshall's calculations, took as reference a period of 50 days from 1 March until 19 April 2000.²²¹ By the adjustments proposed in his Addendum, Mr Marshall sought to correct some errors identified by him.²²²
377. When determining the correct reference period, the Tribunal considered that generally design must precede the construction so that delay related to the design is likely to affect the Project at an early phase. However, the design driven delay occurred over a prolonged period. The reports of Mr Wiseman rely on a large number of examples where design driven delay occurred during the

²¹⁵ Joint Expert Report, p. 4/16 and 12/16.

²¹⁶ C-PHB paragraphs 40 and 41.

²¹⁷ Joint Expert Report, p. 4

²¹⁸ Exhibit C-2, Table 2.

²¹⁹ Wiseman IV, p. 24.

²²⁰ Joint Expert Report, p. 4.

²²¹ Joint Expert Report p. 12.

²²² Taft IV, p. 3.

first year of the work and beyond.²²³ Indeed, the Engineer, when considering this item of the claim, in the passage quoted above, explained that there “were numerous design changes during this period which affected the progress of work”; he also referred to delays in approvals.²²⁴

378. Mr Marshall identified the delays which occurred to the “clause 14 programme” and identified substantial delays in different sub-sections and considered sub-section 5 as the most relevant. With respect to this sub-section he stated that the “design for the bulk of the volume was not released until 22 September 2000”.²²⁵
379. All of this shows that, in the circumstances considered here, the delay was not restricted to the initial period from 1 March to 19 April 2000, as assumed by the Respondent’s experts; it was spread over a longer period. The only other quantification of this period is that by Mr Wiseman, who concluded that the design delay affected the project during the period starting 1 March to 15 December 2000 and 1 April to 31 May 2001. The Tribunal accepts this as the reference period.
380. The Contractors costs during this period have been quantified by Mr Kennedy on average at US\$ 32’763.48 per day. The Tribunal has accepted the basis for this quantification, except that the daily rate of the P&M costs claimed by the Contractor must be reduced by US\$1’508. Therefore, the rate to which the Claimant is entitled for the 50 days of design delay is US\$31’255.48. The costs attributable to the **50 days of compensable design driven delay** therefore amount to **US\$1’562’774**.

8.5.3 The 33 days of delay due to additional works

381. The delays for which the Contractor claimed in EOT 1 included “Changes in Alignment and other Works which resulted increase [sic] in the quantities of Works and thus caused the delays due to additional works instructed to the Contractor”.²²⁶ In its decision of 17 September 2002 the Engineer took position as follows:

“The claim for delay due to additional works by the Contractor comprised 195 days for earthworks and 100 days for bridgeworks. The Engineer determined that these two events to be not located on a single critical path. The Engineer assessed the Contractor’s entitlement for the additional earthworks to be 33

²²³ In particular Wiseman II, p. 23 et seq, and Wiseman III, p. 49 et seq.,

²²⁴ Exhibit C-2, p. 5.

²²⁵ Marshall III, paragraph 2.1.14 and 2.1.12 (e).

²²⁶ Exhibit C-5.

*days, taking into account of quantities of works agreed during contract negotiations ...*²²⁷

382. In the Statement at Completion the Contractor referred to the delays relied on in the EOTs and the extension of the completion date to claim the prolongation costs.²²⁸ The Engineer denied the claim, classifying the 33 days of extension as non-compensable.
383. The Tribunal has found that delays caused by additional works are compensable.²²⁹
384. With respect to the quantification, Mr Kennedy identifies the reference period as from March 2000 to June 2001²³⁰ and calculates the average daily costs during this period as US\$32'640. After deducting US\$831 as "abatement",²³¹ a daily rate of US\$31'809 was reached. On that basis, Mr Kennedy calculates the claim at US\$1'049'697. Mr Taft does not provide any quantification of this claim, stating that he understands the claim "to be agreed as not compensable at the start of the Hearing on 19 October 2011".²³² The Tribunal is not aware of any such agreement, which would have been contrary to the Experts Consultation Table which shows the claim as being compensable. The Claimant continued to pursue the claim in its Post Hearing Brief and the Respondent did not rely on an agreement to treat the delay as non-compensable. The Tribunal proceeds with the quantification of this claim.
385. For the reasons explained above when considering the quantification of the claim for prolongation costs, the Tribunal accepts Mr Kennedy's quantification, subject to (i) the reduction of the P&M costs to exclude overheads and profit with respect to the Contractor's own P&M and (ii) in cases where the claim concerns additional work, an abatement of US\$ US\$1'980, instead of US\$831, as quantified by Mr Kennedy. On this basis, the Tribunal reduces the daily rate calculated by Mr Kennedy by US\$1'508 and US\$ 1'149 to US\$ 29'152. The costs attributable to the **33 days** of compensable delay attributed to **additional work** therefore amounts to **US\$ 962'016**.
386. The total amount awarded in relation to **EOT 1 is US\$2'524'790**. The 107 days for Winter Break shall be discussed separately below.

²²⁷ Exhibit C-6.

²²⁸ Statement at Completion, Tab 19.

²²⁹ Above Chapter 8.3.x

²³⁰ Kennedy IV, Appendix A.

²³¹ See above Chapter 8.4.10.

²³² Joint Expert Report, p. 12.

8.6 Costs relating to EOT 2

387. The Claimant seeks prolongation costs with respect to its Extension of Time Claim No 2 for 61 days of Additional Works delay in an amount of US\$2'150'380.54 (alternatively US\$1'210'889.65).²³³ The Respondent denies the Claim, relying on the Engineer's decision.²³⁴
388. In EOT claim No 2 of 20 March 2003, the Contractor listed a number of causes to which the delay was attributed and claimed an overall extension of time. These causes included "Additional Works (Variations & New Design)" and "Additional Work (Landslides)"; these claims (described as "additional works and quantities") were quantified as 61 days. The claim stated expressly that the Contractor "also reserves his rights to submit financial claims related to the delays caused to the completion of the project due to reasons beyond his control".²³⁵
389. The total number of days claimed under EOT 2 varies in the documents produced: at one page the total is indicated as 144 days, at another page the claims add up to 148 days. In a letter of 26 March 2003, responding to queries of the Engineer of 11 March 2003, the Contractor identifies the duration claimed for each of the causes relied on in EOT 2 as follows:
- 63 days attributed to "the Employer's failure to relocate the utilities";
 - 61 days attributed to "additional works instructed to the Contractor";
 - 17 days attributed to "the approval of epoxy material"; and
 - 11 days attributed to "exceptionally adverse weather conditions".
390. These numbers, adding up to 152 days, are confirmed in a subsequent letter of 8 April 2003. However, the number of days claimed for additional works is consistently 61 days.²³⁶
391. It appears that in 28 April 2003, the Contractor terminated the Contract. The following negotiations were concluded on 15 May 2003 by the conclusion of Addendum No 1 to the Contract which contained the following provision:

"1. The Employer, after evaluating and honouring the requests of the Contractor for Extension of Time 'EOT No.2' for the completion of the Project under Clause 44.1 of the Conditions of

²³³ C-PHB p. 121.

²³⁴ R-PHB p. 15.

²³⁵ All these documents are filed as Exhibit C-8.

²³⁶ Exhibit C-8.

Contract, and also taking into consideration the delays in the commencement of Works in relevant actions, hereby accepts:

- a) To grant to the Contractor the 152 days of EOT requested under EOT No. 2.*
- b) To revise the relevant articles in Appendix to Bid of the Contract, regarding the Article 47.1 as follows ...”*

392. The remaining provisions of this Addendum concern payment and related matters.

393. Shortly thereafter and “further to Addendum No 1”, on 23 May 2003, the Parties concluded Addendum No 2 which contains the following provisions:

“Bearing in mind the good will of the Contractor and the successful completion of the Project, the Contractor agrees not to claim any compensation for the cost incurred by him during the negotiations period and the works suspension periods which is between 17/05/2003 - 23/05/2003.

...

The Contractor shall not claim any additional extension of time for adverse climatic conditions that may take place during the 152 days granted by the Employer subject to the employer giving his decision by 22nd of June 2003 for the land slides that happened throughout the project.

The Contractor has agreed to revoke the notification of termination of his employment under the conditions of Contract dated 28 April 2003. The above notification has become invalid upon signing of this Addendum #2.”

394. As in the case of other EOT claims, the Contractor included this time extension in the claim for prolongation costs presented as part of the Statement at Completion. In his Determination, the Engineer addressed this claim together with EOT 3 and stated the following:

“EOT 2 and EOT 3 were not granted by the Engineer following contractual procedures. These were granted as part of negotiations between the two contracted parties as part of Addenda to Contract. The Engineer witnessed these Addenda, however, he was not a negotiating party.

The Engineer determines to award zero compensable days against EOT 2 for the following reasons:

Relocation of utilities 63 days

*EOT No 2 for 152 days was granted by the Employer as part of Addendum No 1 to Contract. This does not mean that such time is compensable. The Engineer always maintained that the Contractor's claim was not reasonable and the delays due to relocation of utilities did not lie on the critical path of the Contractor's activities and hence did not impact on the Contractor's resources utilisation. ...*²³⁷

395. A similar explanation is given with respect to the 17 days attributed to the late approval of epoxy material. In this respect, the Engineer stated that he “always maintained that the Contractor's claim was not reasonable and the delay due to epoxy was the Contractor's fault”.²³⁸ There are no explanations with respect to the other causes to which the Contractor had attributed the delay, in particular the 61 days claimed for additional works are not discussed. Nevertheless, Table 2, in which the Engineer recorded his conclusions about the extension of time, records all 152 days of extension, as quantified above, including 61 days for additional works; 7 days for Work suspension by the Contractor are added, bringing the total to 159 days.
396. The Claimant argues that the 61 days recorded as additional work must be compensable on the grounds which have been considered above and which the Tribunal has accepted. However, this extension is not the result of an assessment by the Engineer and therefore cannot be taken at face value. The fact that the Employer agreed to an extension of time which was calculated by reference to a claim that included this period, in itself is not conclusive. The agreement on this extension was reached as a settlement covering a number of contested issues and may not be taken ipso facto as an acceptance by the Employer that the Contractor suffered 61 days critical delay due to additional works.
397. It is true that in the Addendum, the Contractor renounced only to specifically identified claims; the prolongation costs related to EOT 2 were not included. One may conclude from this fact that in Addendum No 1 the Contractor did not renounce the claims for financial compensation which he reserved when submitting EOT 2. While this may have kept alive any claims for compensation which the Contractor may have had, it does not suffice to establish that during the time indicated and for the reasons alleged by the Claimant, the Contractor suffered 61 days of critical delay. In the absence of any assessment by the Engineer, the Claimant would have to establish in this arbitration the reality of the delay and its criticality.

²³⁷ Exhibit C-2, p. 5 and 6.

²³⁸ Exhibit C-2, p. 6.

398. The Tribunal has examined the evidence produced by the Claimant in this respect and was unable to conclude that 61 days of critical delay occurred due to additional works. Mr Wiseman, the Claimant's delay expert himself was unable to provide this evidence. He refers to "the undisputed period of 61 days";²³⁹ but, in the circumstances, this is not the required evidence: the 61 days are part of the background of a settlement to which the Employer agreed but there is no agreement establishing that they constitute critical delay. And it is only if it were established that 61 days critical delay were caused by additional works that the Tribunal could consider awarding the related prolongation costs. In this respect, Mr Wiseman stated candidly:

*"Neither the Contractor's Interim Claim No 2, nor the Engineer's responses contain sufficient details on which I could base a review of cause and effect. In the absence of such details, I have only undertaken a limited review of the facts available upon which I provide a conditional opinion. I invite the tribunal to consider whether or not a more detailed review is required of these matters and await further instructions on this matter."*²⁴⁰

399. It is obviously not for the Tribunal to give instructions to Mr Wiseman how to conduct his analysis. What becomes clear from this report of the Claimant's expert is that the evidence available to him is insufficient to establish that during the EOT 2 period, 61 days of critical delay occurred due to the additional works on which the Claimant relies. The Tribunal takes this as the demonstration that this claim cannot be "verified by contemporary records", as required by Clause 53.5 GC and has not been established.

400. The claim for prolongation costs based on EOT 2 is rejected.

8.7 Costs relating to EOT 3

8.7.1 The claim and its history

401. The Claimant seeks prolongation costs with respect to its Extension of Time Claim No 3 for four causes of delay:

- US\$491'898.11 (alternatively US\$310'224.81) for 15 days delay attributed to the relocation of utilities;
- US\$ 5'010'393.30 (alternatively US\$3'148'622.40 or US\$3'275'357.25) for 165 days delay attributed to additional works;

²³⁹ Wiseman IV, p. 46 paragraph 215, summary.

²⁴⁰ Wiseman IV, p. 46 paragraph 214.

- US\$2'805'132.47 for 119 days delay attributed to Winter Breaks; and
 - US\$1'091'895.53 (alternatively US\$1'385'670.81) for 35 or 67 days delay attributed to Lost Days.²⁴¹
402. The Claimant makes allowance for the compensation certified by the Engineer and paid by the Employer for costs of 15 days of delay attributed to the relocation of utilities at an amount below that claimed.
403. The Respondent relies on the Engineer's decision and denies that any payment beyond the amount certified and paid is due.²⁴²
404. EOT 3 claim was presented to the Engineer with copy to the Employer on 31 October 2003. The claim covers the period from 1 April to 15 October 2003 and a subsequent Winter Period. The causes of delay and their quantification were presented as follows:
- 41 working days attributed to "Lost Working Days";
 - 150 working days attributed to Design issues-instructions (Section 9 and others);
 - 15 working days attributed to "Relocation of utilities in the vicinity of road"; and
 - 180 working days attributed to "Additional Works".
405. The claim document added:
- "The Contractor accepts that the above delays have run concurrently. Therefore the net effect of above delays is 180 working days."*
406. The Contractor expressly reserved "his right to submit financial claims related to the delays caused to the completion of the project due to reasons beyond his control".²⁴³
407. One and a half months after the filing of this claim, on 15 December 2003, the Parties concluded Addenda No 3 and No 4 to the Contract. The former regulated a number of payment issues and matters concerning the "Winter Maintenance Period". In Addendum No 4, the Parties recorded the desire of the Employer to add various "safety-related and structural works" and the Contractor's proposal concerning the performance of these works, as they were set out in a list attached to the Addendum entitled "Proposed Essential Works".

²⁴¹ C-PHB p. 121.

²⁴² R-PHB p. 16.

²⁴³ Exhibit C-9.

The Addendum sets out the terms for the performance of these works and contains the following provision:

“6. The Employer agrees and grants an Extension of Time of 180 days against the Contractor’s EOT Claim No 3 for the completion of the Project. The Contractor shall not only complete the items in the original scope of works but also complete the ‘PROPOSED ESSENTIAL WORKS’ within the times stated above; however the Contractor will try to complete all the Works as soon as possible.”

408. No mention is made of the financial consequences of the extension of time granted; but clause 10 of the addendum provides that “all other terms and conditions in the original Contract and Addendum Nos 1, 2 and 3 to the Contract already signed between the Employer and the Contractor shall remain effective and unchanged”.
409. The financial costs related to the EOT 3 claim were claimed in the Statement at Completion. The Engineer’s Determination contains the sentence quoted above according to which “EOT 2 and EOT 3 were not granted by the Engineer following contractual procedures” but in the Addenda.²⁴⁴ However, contrary to what he did with respect to EOT 2, where he declared two of the claim items as “not reasonable”, he took position with respect to at least one item of the EOT 3 claim: he accepted 15 days delay attributed to Relocation of utilities as compensable. With respect to the remainder of the delay claimed in EOT 3, 165 days for Additional works, the Engineer classified them in Table 2 as excusable but non-compensable. He did not explain whether this classification was reached because of the Engineer’s belief that the prolongation costs of additional works, in principle, are paid through the rates and prices in the Contract or whether he was of the view that delay was not critical and therefore, as a matter of principle, did not justify and compensation of prolongation costs. Table 2 also classified as non-compensable 119 day for the winter break from 5 December 2003 to 2 April 2004, and 67 days as “Lost days (rested on Sundays and public holidays during the claim period of EOT 1 to EOT 4)”.
410. At the hearing, the experts considered the Engineer’s decision concerning the 180 days of excusable delay, allocating 15 days of compensable delay to the relocation of utilities and 165 days to additional works. Mr Wiseman opined that, in his belief, “the engineer has made the 165 and 15 fit the 180”.²⁴⁵ In other words, “take the 180 days which are agreed and allocate them to these two

²⁴⁴ Exhibit C-2, p. 5.

²⁴⁵ Tr 226.

causes”.²⁴⁶ This may well be the case. The Tribunal therefore considers these two items of the claim together.

8.7.2 The 180 days attributable to Addendum No 4

411. EOT 4 claim was for a number of causes; but the Contractor recognised their concurrency and claimed only for a total of 180 days. This claim was accepted in full by Addendum No 4.
412. The Tribunal considered first whether Addendum No 4, when granting the 180 extension requested by the Contractor in EOT 3, settled the consequences of this delay in their entirety or whether the prolongation costs remained still open. The Contractor had reserved the prolongation costs when making the EOT claim. These costs and the reservation of the cost claim are not mentioned in the addendum. Mr Ozkoseoglu testified that during the negotiations relating to the EOTs, “the subject of compensability was never raised”.²⁴⁷ The text of Addendum No 3 and the passages quoted above show that, when the Parties wished to exclude claims, they did so expressly. A particularly important consideration relates to the Engineer’s decision to classify one component of this claim as “compensable”, including the cost of 15 days of delay attributed to relocation of utilities in the amount certified and paid by the Engineer. This certification and payment are clear evidence against the assumption that all claims relating to EOT 3 had been finally settled by Addendum No 4. The Claimant nevertheless must establish entitlement and quantum.
413. Contrary to EOT claims 1, 4 and 5, the extensions granted pursuant to EOT claims 2 and 3 were not made on the basis of the Engineer’s determination but by agreement of the Parties. As explained in the context of the claim for EOT claim 2, the Tribunal therefore does not take the time shown in the Engineer’s Table 2 as establishing in a conclusive manner that, with respect to these two claims, the Contractor suffered critical delay during the periods indicated in that table. Criticality and cause remain to be established.
414. When considering the Engineer’s position concerning EOT 3 one notes two substantial differences in comparison with EOT 2: first, the Engineer did not make any reservation as to the reasonableness of the Contractor’s claim. Second, the Engineer classified 15 days as compensable and included this in his overall valuation; in other words it treated this period as part of the critical delay which the Contractor suffered. With respect to this decision, the Engineer

²⁴⁶ Tr 227.

²⁴⁷ Tr 644.

cannot rely on Addendum No 4 as an agreement by the Parties. It is his own decision; the Parties had not considered this matter.

415. Since the Engineer made a decision about part of the EOT 3 claim, it would seem likely that he also examined the remaining 165 days of this claim. The absence of any doubts expressed by the Engineer may be an indication that he considered this delay as critical. The experts have examined the evidence produced and concluded that these days related to the delay in 2003 caused by the design issues which were resolved by Addendum No 1 of 15 May 2001 and No 2 of 23 May 2003. Prior to this addendum, the Contractor had performed some of the design which the Employer had to provide. Addenda No 1 and No 2 provided payment for this design and awarded additional payment for further design work which the Contractor accepted to perform. Mr Wiseman explained at the hearing:

“The delay arises within 2003 specifically as a result of the design delays which arise from addendum 1, which covers the additional design work that the Claimant was required to assist with developing the design²⁴⁸ for both road alignment and slope stabilisation ...”

416. In his final report, Mr Wiseman specified the period as being situated between 17 April and 15 October 2003.²⁴⁹ Mr Marshall accepted that the delay was

“a design delay in 2003 of an unknown period which occurred between, I think, 1 April and December 2003”.²⁵⁰

417. He confirmed it shortly thereafter:

“The 165 that the engineer was compensable [recte: non-compensable], that was design delay. The 15 days was utility delay.”²⁵¹

418. After the hearing, Mr Marshall confirmed that this had been his opinion but he “retracted” it “as the evidence points the other way”. He then attributed the delay to “additional/varied work”. The evidence he relies on is the fact that the Engineer treated the delay as non-compensable. This is because, according to the Engineer, delay caused by varied work are non-compensable and delay resulting from design delay was compensable.²⁵²

²⁴⁸ Tr 633.

²⁴⁹ Wiseman IV, p. 58.

²⁵⁰ Tr 639.

²⁵¹ Tr 640.

²⁵² Marshall III, paragraph 2.1.20.

419. Mr Wiseman accepts the full period of 165 days as critical.²⁵³ Mr Marshall finds it probable that the additional works affecting the earthworks progress (which he considers to be the cause for the delay) “would have caused some critical delay”.²⁵⁴ Mr Taft opines that the “Additional Works delay of 165 days identified as not compensable by the Engineer has been reviewed by Mr Marshall and is considered to have impacted section 9 and is therefore to have been critical to Section B and probably to the Project.”²⁵⁵
420. The Tribunal has considered these opinions which coincide inasmuch as they at least prove that some critical delay occurred in 2003. It has also considered that, following the agreement settling the difference about the design issues, the Contractor had to provide additional design work which preceded the related construction and present this design work in EOT 3 as one of the principal causes for the delay. The Tribunal is satisfied that this delay was critical and in the order of 165 days. It does not consider the explanation which Mr Marshall gave for his change of mind to be convincing. It may well be that, when in December 2003 the Parties, and in May 2006 the Engineer, considered the delay and accepted a total of 180 days and, as far as the Engineer is concerned, 165 days of “additional works”, some delay attributable to the additional works was also taken into account. Since there is no indication that a detailed delay analysis was performed, the Tribunal is not concerned by the apparent lack of precision in the terminology and the attribution by the Parties.
421. The Tribunal concludes that 165 days of critical delay occurred in 2003 due to the delay in design as described in EOT 3 and therefore attributable to the Employer. Indeed, the experts of both Parties accept that this delay is compensable.
422. With respect to the 15 days attributed to Relocation of utilities, the Tribunal considered the description in the EOT claim document:
- “Under the Conditions of Contract including the Minutes of Negotiations the Employer is responsible for the relocation of all utilities in the vicinity of the working area. However, during the course of the Works between the Claimant Period, the Contractor suffered additional delays due to the late relocation/dismantling of the supports at Km 407+000. ...”*
423. This explanation has not been contested. It demonstrates that the cause clearly concerns the failure of the Employer to make the site

²⁵³ Wiseman IV, pp. 47 et seq.

²⁵⁴ Marshall III, paragraph 2.1.22.

²⁵⁵ Taft III, p. 18, reference omitted.

available without obstacles for the Contractor. The resulting critical delay is attributable to the Employer and the related costs must be quantified accordingly.

424. Mr Taft quantifies costs of the 15 days delay by reference to the period from 1 April to 15 October 2003.²⁵⁶ On the basis of contemporaneous correspondence between the Contractor and the Engineer, Mr Wiseman situates the delay between 2 and 16 April 2003.²⁵⁷ Mr Kennedy quantifies this delay at an average daily cost of US\$32'793.21, producing a total of US\$491'898.11. For the reasons explained above, the Tribunal accepts this quantification, subject to the deduction of US\$1'508 for the element of overhead and profit in the rates used by Mr Kennedy and which must be extracted with respect to the Contractor's own P&M. Consequently, the daily rate is reduced to US\$31'285.21, producing for the 15 days a total of US\$469'278.15. The claim for the prolongation costs attributed to the **Relocation of utilities** is awarded at **US\$469'278.15**.
425. As to the 165 days of delay described by the Engineer as Additional Works, Mr Taft situates them in the period from 1 April to 15 October 2003.²⁵⁸ Mr Wiseman situates them in the period from 17 April to 15 October 2003.²⁵⁹ Mr Kennedy quantifies the costs of this delay at the daily rate of US\$31'197.02 and deducts US\$831 per day as "abatement" in the quantification of delay attributed to variations. The Tribunal has attributed these costs to **design delay** and therefore does not make this deduction; instead it deducts US\$1'508 with respect to overheads and profit in the rates for the Contractor's own P&M. The rate applied therefore is US\$ 29'689.02 and the total for the 165 days is **US\$ 4'898'688.30**.
426. The total amount of prolongation costs attributable to the 180 days **related to Addendum No 4** is **US\$5'367'966.45**. The claim for the Winter Break and the Lost Days in relation to EOT 3 will be considered separately below.

8.8 Costs relating to EOT 4

8.8.1 The claim and its history

427. The Claimant seeks prolongation costs with respect to its Extension of Time Claim No 4 for two causes of delay:

²⁵⁶ Joint Expert Report, p. 12.

²⁵⁷ Wiseman IV, p. 48.

²⁵⁸ Joint Expert Report, p. 12.

²⁵⁹ Wiseman IV, p. 58.

- US\$1'779'678.30 (alternatively US\$1'410'095.19) for 94 days of delay, attributed to the late issuing of the order to commence the slope stabilisation work; and
 - US\$1'347'950.00 for 92 days of Winter Break.
428. The Claimant makes allowance for 75 days compensable delay attributed by the Engineer in his Determination to “Late issuance of commencement order for slope stabilisation works”.
429. The Respondent “upholds the Decision of the Engineer in respect of delays within EOT 4”; the Engineer having included 75 days of compensable delay in his Determination. The Respondent also relies on Mr Marshall’s opinion and states that the 75 days “cannot be the reason which influenced on completion of works”.²⁶⁰
430. In EOT 4 of 8 September 2004, the Contractor had claimed a total of 368 working days of delay attributed to the following reasons:
- 102 working days attributed to late processing of Addendum No 4;
 - 220 working days attributed to “late instructions of the Engineer to proceed with the works required to be carried out as per Addendum No 4”;
 - 169 working days attributed to additional works instructed under Addendum No 4;
 - 83 working days attributed to the “Employer’s failure to resolve issues related to Slope Stability Works”;
 - 25 working days attributed to late approval of materials; and
 - 119 working days attributed to “Bitumen Supplies”.
431. Recognising that these delays “have run concurrently”, the Contractor claimed 368 as the “net effect” of the delays.²⁶¹
432. In its letter of 27 December 2004, the Engineer accepted 94 days for the claim which the Contractor had attributed to “delays caused due to late instructions of the Engineer to proceed with the works required to be carried out as per Addendum No 4”. In the table summarising the decision the Engineer specified that he reached the number 94 by “adding 12 lost days to 82”.²⁶² The Engineer justified this decision as follows:

“The commencement order was issued for VO 14 ‘Slope stabilisation works’ and VO 23 ‘Access Roads’ on June 16 and May 6, 2004 respectively. Since the JBIC’s approval was given on

²⁶⁰ R-PHB, p. 17.

²⁶¹ Exhibit C-10

²⁶² Exhibit C-11, p. 1 and 2.

March 26, 2004, the work could have been commenced immediately thereafter. The Contractor lost days during these periods due to delay of the Employer's consent to the issuance of commencement order by the Engineer.

The Contractor suffered delay for VO 14 for 82 days (converted to 94 calendar days based on the site report.)

The delay of VO 23 occurred concurrently with VO 14 and is absorbed in the said 82 days. So, the delay of VO 23 is not counted.”²⁶³

433. Later in the letter, the Engineer specified that “82 days of EOT given for VO14 spans over the months of April, May and June 2004”; but he continued that he “determined to grant 94 calendar days for their claim period from December 16, 2003 to August 12, 2004”.²⁶⁴
434. In concluding the letter, the Engineer confirmed “that days shall be counted on calendar days basis and the Contractor is instructed to submit their claim on calendar day basis from now on in accordance with the conditions of the Contract”.²⁶⁵
435. In the Statement at Completion, the claim for prolongation costs was referred to EOT 4 and covered the entire period exceeding the original completion date.
436. The Engineer fixed in his Determination a total of 186 days of excusable delay with respect to EOT 4, attributing 94 days to “Late issuance of commencement order for slope stabilisation works” and 92 days to “Winter break (15/12/04 to 16/03/05)”; the former category included the 75 days of compensable delay mentioned already. The latter claim will be considered separately below in the context of the claim for the Winter Breaks.

8.8.2 Assessment of the claim concerning the late commencement order for slope stabilisation

437. Mr Asman explained in his witness statement that there were certain locations of the road where the designed slope inclinations were not safe and caused landslides. Mr Asman's testimony continues by stating that despite the Contractor's warning and proposals,

²⁶³ Exhibit C-11, p. 2.

²⁶⁴ Exhibit C-11, p. 3.

²⁶⁵ Exhibit C-11, p. 4.

“... the Engineer did not accept these and insisted on steep slopes, with less earthworks quantities. But in the end, after all landslides, they decided to stabilise some of the dangerous slopes. After long discussions and exchanged letters, the Employer was persuaded to approve these additional works and these were included as additional works to the project scope under Variation order No. 14 as part of Addendum No. 4. Employer’s long approval process caused serious delays to the works. Decisions on the details of the slope stabilisation work i.e. locations and slope inclinations, took also long time and caused further delays to the works.”²⁶⁶

438. The Engineer accepted that the delay caused by these events was excusable and, in his Determination, he also accepted that 75 days were compensable. Neither the Contractor nor the Employer objected to this decision within the contractual period which thus has become binding. The dispute concerns the quantification of the compensation for this period and the compensability of the remaining 19 days.
439. As explained above, by its letter of 27 December 2004, in response to the EOT 4 claim, the Engineer had awarded 94 days, of which 82 days were for delay caused to the implementation of VO 14 concerning slope stabilisation and 12 days for “lost days”. The duration of 82 days was calculated by reference to the period from 26 March to 16 June 2014, i.e. between the Engineer’s approval and the commencement order given by the Employer. In the Determination, the Engineer confirmed the number of 94 days of excusable delay but allocated these days differently: (i) he reduced the time due to the Employer’s delay in issuing the commencement order from 82 to 75 and (ii) he modified the 12 “lost days” to 19 days allocated to the Winter Break.
440. In the Determination, the Engineer recorded the relevant Winter Break as lasting from 5 December 2003 to 2 April 2004.²⁶⁷ This is uncontested. It explains the reduction of the number of days of compensable delay from 82 to 75: in his letter of 27 December 2004 the Engineer wrote that approval by the Engineer had been given on 26 March 2004 and that “the work could have commenced immediately thereafter”. However, 26 March 2004 was still in the Winter Break. Work could have started only at the end of this break on 2 April 2004. Therefore the Contractor lost only 75 days as a result of the delay in the commencement order.
441. The 7 days difference between 82 and 75 days are absorbed in the Winter Break and thus should not be considered separately.

²⁶⁶ WS Asman, paragraph 18.

²⁶⁷ Exhibit C-2, Table 2, p. 27 (EOT 3).

442. The remaining 12 days cannot be allocated to the delay in the commencement order because, in the Engineer's calculation, this delay lasted from 26 March to 2 April 2004, i.e. 82 days. This period must be deemed to be "lost days", as the Engineer had explained in his letter of 27 December 2004.
443. Consequently, the delay is allocated to the following causes:
- 75 days to the delay in the commencement order;
 - 7 days absorbed in the period of the Winter Break and need not be considered further; and
 - 12 days to be treated as "lost days".
444. According to the Engineer's calculation, the 75 days compensable delay occurred during the period starting 2 April 2004, the end of the Winter Break, to 16 June 2004, the commencement order. According to Mr Kennedy's table attached to his Final Report, the monthly costs in April, May and June amount to US\$1'722'880.²⁶⁸ The daily rate is therefore US\$ 18'932.75. Allowing for the Contractor's own P&M, it must be reduced by US\$1'508 to US\$17'424.75. Applied to the 75 days of compensable delay, the amount awarded is **US\$1'306'856.25**.
445. The claims for the 12 days treated as Lost Days shall be considered separately below.

8.9 Cost relating to EOT 5

8.9.1 The claim, its components and evolution

446. The Claimant seeks prolongation costs with respect to its Extension of Time Claim No 5 for five causes of delay:
- US\$1'228751.28 (alternatively US\$935'810.80) for 76 days of Additional Works delay;
 - US\$211'320.86 (alternatively US\$170'875.80) for 13 days of design revision delay;
 - US\$186'986.56 (alternatively US\$144'587.26) for 11 days of unavailability of bitumen delay;
 - US\$95'885.55 (alternatively US\$92'010.07 for 7 days of political unrest delay; and
 - US\$531'833.76 (alternatively US\$460'050.37) for 35 days of Lost Days delay.

²⁶⁸ April 2004 : 606'991 ; May 2004 : 533'428 ; June 2004 :582'461.

447. The Claimant makes allowance for the payment certified and received for 13 days delay attributed to design revisions.
448. The Respondent denies the claim, contesting that no additional payment is due.
449. In his EOT 5 claim of 23 June 2005,²⁶⁹ the Contractor sought time extension by a total of 287 “working days”. He attributed the delay to the following causes, accepting that the delays had run concurrently:
- 52 days attributed to Lost Working Days;
 - 100 days attributed to “additional works instructed”;
 - 19 days attributed to “delays due to revisions and obstructions related to the Works”;
 - 230 days attributed to “delays incurred due to Bitumen Supplies”; and
 - 66 days attributed to “Suspension of Works for reasons related to Clause 20.4 of the Conditions of Contract”.²⁷⁰
450. Here, as in the other EOT claims, the Contractor expressly “reserved his right to submit financial claims”.²⁷¹
451. In his response of 13 July 2005, the Engineer awarded an extension for a total of 128 days, composed of:
- 21 days for Lost Working Days;
 - 76 days for additional works;
 - 13 days for Design Revision;
 - 7 days for Political Unrest; and
 - 11 days for Unavailability of Bitumen.²⁷²
452. Following the Contractor’s Statement at Completion, the Engineer fixed in his Determination the same number of days as excusable delay, except for the “Lost days (rested on Sundays & public holidays and adverse climatic days after the claim period of EOT 4)” for which the Engineer granted 35 days, compared to the earlier award of 21 days. The Engineer treated all of these delays as non-compensable, except the 13 days for design revision which he considered compensable.

²⁶⁹ Exhibit C-13.

²⁷⁰ Exhibit C-13, p. 12.

²⁷¹ Exhibit C-13, pp. 5 and 6.

²⁷² Exhibit C-14, p. 3.

8.9.2 Compensability

453. The Engineer had determined that **13 days** are compensable as “**Design Revision**”. Neither the Contractor nor the Employer gave notice of arbitration against this aspect of the decision which thus has become final and binding, according to Clause 67.1 GC. The quantification of the claim will be considered below.
454. With respect to the **76 days for additional works**, the Engineer decided that they were excusable but not compensable.
455. The Employer did not give notice of arbitration against this determination. The Claimant gave notice against it but, during the arbitration, accepted the determination of the duration of the delay attributable to additional works. The issue that remains to be decided in this respect is whether this period of delay is compensable and, if so, in what amount.
456. In the Determination, the Engineer decided that no compensation had to be paid for delay attributable to additional works (he used the term “varied works”), since (i) the Contractor did not give timely notice and (ii) he was compensated through the rates paid for the additional work performed. This is also the position adopted by the Respondent.²⁷³ The Tribunal has considered this position and, for the reasons explained above, concluded that delay attributable to additional work is compensable, but that in the quantification of the related prolongation costs, allowance must be made for the payment received by the Contractor. This decision applies here, too. It did, however, give rise to a debate about the extent of the compensable delay which shall be discussed below in the context of the quantification of this claim.
457. In support of the claim for the costs of **7 days delay attributed to “political unrest in 2005”**, the Contractor in EOT 5 referred to the “Event that occurred in the Country of the Employer and its related affects [sic], including the Suspension of Works related to Clause 20.4 of the Conditions of Contract” and claimed 66 days of extension.²⁷⁴ In the Statement of Claim, the Claimant explained that the “Event” referred to the “Tulip Revolution” in the spring of 2005.²⁷⁵ Mr Asman described the situation in his witness statement:

“27. After the first round of parliament elections were held on 27th February 2005, the opposition started to complain of widespread violations.

²⁷³ R-PHB, p. 18.

²⁷⁴ Exhibit C-13, p. 10.

²⁷⁵ SoC, pp. 43 to 46.

28. *On 1st March, we heard that some hundreds of protestors occupied Dzalal Abad Oblast Governorship building. One of them was allocated as the Governor of the oblast. Karakul, where our main camp and majority of the plants and equipments were located is a city of Dzalal Abad Oblast. On 14th March, one day after second round of elections in Toktogul, protestors blocked the traffic on Bishkek-Osh Road. Our only connection to Bishkek for supply purposes was cut. Due to the violence in Dzalal Abad, we were unable to provide diesel as well. KGB Chief of Karakul said that we as expatriates were in danger and in order to protect us better, he instructed me to get all Turkish personnel to stay at camp instead of their rented apartments and not to get out after 6.00 p.m. until the situation normalises. ...*

29. *The protestors in Osh and Dzalal Abad started their route to Bishkek on 22nd March, and Karakul was on their way. Some of our personnel were very concerned and they were asking me why we were waiting but not go to Bishkek and fly to Turkey. I knew that the target of the protestors was Bishkek and to stay in Karakul with a low profile would be better than going to Bishkek to leave the country. We did so. The protesters passed through Karakul in busses and cars....*

30. *Situation was unsafe for a long time all along the country. On 13th of April, some of our staff coming from Bishkek to Karakul was threatened by protestors who clocked the road at Torken (km 301) and our staff had to turn back to Toktogul office. That week, some unknown protestors cut the electrical cables feeding our batching plant and stole the cables.*

31. *We started our activities on 5th May as the situation got relatively normal.*²⁷⁶

458. On 14 April 2005, the Contractor informed the Engineer that:

*“... on 13-04-2005 our Turkish staff was stopped at point between Km.298 and Km.299 by a crowed [sic] of over 150 protesting locals and were threatened and denied through passage, as a result our staff returned back to Toktogul Site office.”*²⁷⁷

459. In his response of 13 July 2005 to the Contractor’s EOT 5 claim of 23 June 2005, the Engineer understood what was meant by the “Event” and wrote:

²⁷⁶ WS Asman, pp. 10 and 11.

²⁷⁷ Exhibit C-74.

“The Contractor claimed 66 days (gross claim days) delay caused to him having to suspend his works due to allegedly unfavourable security conditions prevailed from 01/03/2005 to 05/05/2005. Based on the Engineer’s assessment of information made available by the Contractor and information collected by the Engineer from other sources, the engineer determined that there was no direct imposition of suspension on the Contractor’s activities caused by the Political Unrest. However, we are aware that the Contractor adopted a self imposed suspension of works. We assess that it was probably justifiable for the Contractor to suspend his activities from 22/03/2005 to 29/03/2005 as a precautionary measure and perhaps for another week (i.e. until 05/04/2005) for confirmation of normalcy. We also have taken into account an isolated incident of road blockage occurred within Section A on 18/04/2005. However, there is no evidence of direct causal impact on any construction activity.

Based on the above, we award 7 EOT days (out of 23 gross days after filtering out days overlapped with days awarded for above item 1 to 4.”²⁷⁸

460. In his Determination, the Engineer confirmed the award of 7 days and classified them as non-compensable. The Contractor takes the position that this delay is compensable and should be included in the prolongations costs.
461. The Claimant relies on Clause 20.4 CPA.²⁷⁹ The Engineer did not expressly mention this or any other contract provision when granting the time extension and confirming it in the Determination. However, from the circumstances, the only possible basis for the Engineer’s decision is Clause 20.4 CPA in combination with Clause 65.5GCC. The Respondent does not contest that the events on which the Contractor relied indeed qualify as Employer’s risk, as defined in Clause 20.4 CPA.
462. In these circumstances, and view of the written and oral evidence, the Tribunal accepts that the 7 day critical delay described by the Engineer as “political unrest” qualifies as Employer’s risk and is therefore compensable.
463. The Respondent objects to compensation being awarded to the Claimant and invokes the notice provision specific to Clause 65.5 GCC. The Respondent argues that the Contractor “did not indicate any specific amount”.²⁸⁰ The relevant passage in Clause 65.5 GCC

²⁷⁸ Response to the EOT 5 claim, dated 13 July 2005, p. 2 and 3.

²⁷⁹ C_PHB, paragraph 291.

²⁸⁰ R-Rejoinder, paragraph 31.

provides that “the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof”.

464. During the period the events occurred, in March and April 2005, the Contractor wrote at repeated occasions to the Engineer, referring specifically to “the event under Clause 20.4 of the Conditions of Contract” and announcing his “intention to claim additional costs, damages, losses ...”²⁸¹ On 29 April 2005, the Contractor wrote again under the reference to Clause 20.4 and informed the Engineer of his “decision to re-commence the Site operation and Works with effect from May, 05, 2005”. He announced a “claim for additional costs under Clause 53.1 as soon as we complete the quantification”.²⁸² The costs for this, as for all other delays, were claimed in the Statement at Completion, submitted on 17 March 2006.
465. Clause 65.5 GCC does not prescribe any specific period during which the cost claimed under this provision must be quantified and does not state that, after a certain period, the Contractor’s claim is forfeited. The Tribunal notes that the causes for delay were interlinked and that eventually the Contractor decided to quantify the related costs in a combined manner. This was possible only once the works were completed and was done as part of the Statement at Completion. Since the Contractor had made it quite clear from the time when the events occurred that it intended to claim for the delay costs due to the case of an Employer’s risk, the Tribunal accepts that the claim is not forfeited in application of the notice provision in Clause 65.5 GCC. It admits the claim for compensation.
466. Finally, the Engineer had awarded an extension of time of **11 days for unavailability of bitumen**. The Contractor considers this delay as compensable. In EOT 5, the Contractor had claimed 230 days of “delays incurred due to Bitumen Supplies”.²⁸³ In that claim, the Contractor explained that he had faced “difficulties ... in receiving the supplies of bitumen due to reasons beyond his control”.
467. The Engineer refused to grant any extension for difficulties in the supply of bitumen as required for the original scope of work; delay in this supply was the Contractor’s risk. However, the Engineer accepted that the order for Essential Additional Work required 50 tons of additional bitumen, which was confirmed only in June 2004. He “assigned 125 gross days from 13/08/2004 to 15/12/2004 for supplying of the additional 50 tons of bitumen. After filtering out

²⁸¹ Letter of 23 March 2005, Exhibit C-68; letter of 25 March 2005, Exhibit C-71; letter of 14 April 2005, Exhibit C-74.

²⁸² Exhibit C-76.

²⁸³ Exhibit 13, p. 12.

days overlapped with awarded days for above items 1 to 5” he awarded 11 days extension.²⁸⁴ The Claimant confirmed at the hearing that it only claimed for the delay that occurred due to the late availability of bitumen required for the additional works.²⁸⁵

468. The Claimant’s expert pointed out that the delay in the availability of the additional bitumen is closely related to the delay attributed to additional works in EOT 3 and to the slope stabilisation works in EOT 4. He opined that, if the delays were counted in these claims,

*“... this event relating to the unavailability of bitumen [falls] within that period impacted by preceding events and thus does not attract additional compensation over that already compensated.”*²⁸⁶

469. The Claimant followed this position and stated the following:

*“Accordingly, if the Tribunal decides that Claim 3 – Additional Works (165 days) and Claim 4 – Late Issuance of commencement order for Slope Stabilisation Works (75 days) are compensable for 11 days unavailability of bitumen this does not attract any compensation....”*²⁸⁷

470. The Claimant asks for compensation of these 11 days only if the 165 and 75 days are found not to be compensable.

471. The consequences of the additional works to which the bitumen claim relates were claimed and decided under EOT 4. The Tribunal has found that the delay for which the extension was granted is compensable. It does not accept any further compensation for this event. The Claimant’s withdrawal of the bitumen claim therefore is fully justified. No compensation is granted for this part of the claim.

472. In conclusion, the Tribunal decides that on account of events invoked in EOT 5, the following number of days are compensable:

- Design revision 13 days;
- Additional works 76 days;
- Political unrest in 2005 7 days; and
- Unavailability of bitumen 0 days

473. The claim for Lost Working Days will be considered separately.

²⁸⁴ Exhibit C-14.

²⁸⁵ Summary of the position by the Tribunal at Tr 279.9

²⁸⁶ Wiseman IV, p.98.

²⁸⁷ C-PHB, paragraph 274.

8.9.3 Quantification of 76 days for Additional Works

474. There was extensive debate at the hearing about the question of the loss caused by the 76 days granted by the Engineer for additional work. In his decision of 13 July 2005, the Engineer wrote in this respect:

“4. Additional Works (reason 3 of the claim)

*The Contractor claimed 100 days (gross claim days) delay caused to him having to do additional works instructed during the claim period EOT 5. After filtering out overlapped days with days accounted in above items 1 to 3, **76 days are awarded.**”²⁸⁸*

475. In EOT 5, the Contractor had identified the additional work as follows:

- “1. Additional drainage works at 362+800 LHS hillside (cracked areas), 66 days*
- 2. Additional culvert at km 382-781, 22 days*
- 3. Additional culvert at km 384+465, 12 days.”²⁸⁹*

476. It is clear from the witness evidence and the analysis of the Experts that this additional work was performed at Sections 5 and 6 during the time between August and December 2004. By that time, the work at these sections had been completed and the Contractor was working on Sections 8 and 9.²⁹⁰ This is expressly confirmed by the Claimant:

“... the delay was due to the additional drainage and culvert works at section 5&6. At that time, in 2003, Section 5&6 were taken over and the remaining work was at Sections 8&9.”²⁹¹

477. As a matter of principle, work on sections that have been completed and taken over is unlikely to cause prolongation costs. The Respondent’s delay expert, Mr Marshall concluded:

“In conclusion, in my view whilst the 76 days extension of time was probably ‘compensable’ contrary to what was stated by the Engineer, I consider it very unlikely that any critical delay was caused to completion of the Works.”²⁹²

478. The explanation regarding why work on a completed section caused critical delay to the works was that, in order to perform the

²⁸⁸ Exhibit C-14, p. 2, highlighting in the original.

²⁸⁹ Exhibit C-13, p. 9.

²⁹⁰ See e.g. Marshall III, pp. 12 and 13.

²⁹¹ C-PHB, p. 13, paragraph 246.

²⁹² Marshall III, paragraph 2.1.42.

additional work at the completed Sections 5 and 6, resources had to be moved from Sections 8 and 9, perform the additional work there and then return to their previous location, thus delaying the work in the section where they should have been engaged. Mr Asman explained the situation at the hearing:

“MR ASMAN: ...although these two culverts, we see that only as culvert works, but at these sections I remember that we have completed all the pavement work. I mean, asphalt was paved there and light planning, everything was there, including the road signs, so they were finished but these culverts were instructed after that. We needed to excavate the already paved roads and construct these culverts. Because this road is under traffic, you have to do it halfway. For example, you have to do the first right-hand side, finish it, backfill it and then move to the left-hand side. It takes some time, more than usual, since it is under traffic.

Also you have to pave this after the culvert is constructed. You have to make sub-base, base and asphalt course, binder course and bearing [recte: wearing?] course. We have to mobilise our resources which were dealing with the works in section 8 and 9 to execute these paving works, to pave the locations at these culverts.

THE CHAIRMAN: What delay costs did you suffer which were not covered by the rates and prices you were paid under the BOQ?

MR ASMAN: As these are completed sections [i.e. sections 5 and 6], there would be no delay there. Since there was a delay we are talking about, 76 days, this delay must be related to the outstanding works which were in sections 8 and 9 and that totally must be compensable.

THE CHAIRMAN: How would the works at section 8 and 9 be affected?

MR ASMAN: As I explained, we have to mobilise, we have to stop at some parts our works where we were paving binder and bearing [recte: wearing] also we were paving asphalt. We have to come back to these locations and make asphalt over these culverts. So, we had to stop some works going on in sections 8 and 9 and come back, mobilise our resources to these locations and cover these pavements. This goes late to the outstanding works because of the allocation of resources.”²⁹³

²⁹³ Tr 359 – 361.

479. This explanation has not been contradicted by any witnesses or documentary evidence. The Claimant confirms these explanations in its Post-Hearing Brief²⁹⁴ and the Respondent does not contest it. Mr Wiseman quotes extensively from the testimony at the hearing and concludes that the 76 days of critical delay certified by the Engineer occurred during the period starting 13 August to 17 December 2004.²⁹⁵ Mr Marshall states that the “minor works in sub-sections 5 and 6 cannot possibly have delayed completion of the works in sub-sections 8 and 9 which was almost exclusively paving...”.²⁹⁶ He does not consider the testimony of Mr Asman. Mr Marshall’s statement that paving works were ongoing in Sections 8 and 9 indeed confirms the case of the Claimant: moving the paving machine and related equipment to Sections 5 and 6 must have caused delay to the works in Sections 8 and 9 from where this equipment was temporarily removed.
480. The Tribunal therefore concludes that the critical delay, which the Engineer quantified as 76 days, was caused to Sections 8 and 9 of the works by the removal of the resources needed for the additional work in Sections 5 and 6 of the road, which by that time had been completed and were open to traffic.
481. With respect to the P&M that was removed temporarily from sections 8 and 9 to Sections 5 and 6, the Contractor suffered loss only during the time required for the moves. For the remainder, these resources were employed productively in their new location and remunerated accordingly. The loss occurred with respect to the productive resources that were scheduled to work on Sections 8 and 9 and were not removed to work on Sections 5 and 6. Those resources which depended for their work on the presence of the removed P&M must have remained idle or at least underemployed until the work could resume upon the return of the transferred resources or they performed work for which the removed resources were not necessary. These are the prolongation costs that must be compensated.
482. The situation is basically the same as that considered above in the context of the quantification of prolongation costs in cases of variations: some of the resources affected by the critical delay are not idle or underperforming but are employed productively. The Tribunal has made allowance for this productive employment by deducting what Mr Kennedy described as “abatement”. Mr Kennedy calculated the amount of this abatement by reference to the total amount paid to the Contractor for additional work and derived from this total an average daily rate. Given the description which Mr

²⁹⁴ C-PHB, pp. 60 – 66.

²⁹⁵ Wiseman IV, p. 80.

²⁹⁶ Marshall III, paragraph 2.1.41.

Asman made of the work that had to be performed in sections 5 and 6, the remuneration earned for the culvert and drainage work considered here may have been above the daily “abatement” rate; but this is in the nature of an average rate: in other claims, the remuneration earned by the additional work may have been below the abatement operated in the quantification of the claim. The Tribunal, therefore, is satisfied that the specific situation of the present claim is adequately taken into account by quantifying the critical delay as the other claims for prolongation costs caused by additional work.

483. Mr Wiseman situated the time during which this delay occurred in the period from 13 August to 17 December 2004;²⁹⁷ the period which the Contractor had identified in the EOT claim. Mr Taft identified three shorter periods within this overall period. Since Tribunal has not accepted the “bottom-up” method of Mr Taft, it does not rely on the periods used by the latter and quantifies the claim by reference to the periods indicated by Mr Wiseman. The average costs during this period have been quantified by Mr Kennedy at US\$ 16’998.78. Applying the reduction for overhead and profit in the Contractor’s own P&M (US\$1’508) and the “abatement” for revenue earned through the additional works as quantified by the Tribunal (US\$1’980), the daily rate of US\$ 13’510.78 is obtained, and for the 76 days of critical delay **for additional work** the total of US\$ **1’026’819.28** is awarded.

8.9.4 Quantification of the Prolongation Costs relating to Design Revision and Political Unrest

484. The Tribunal has decided that, in addition to the 76 days for Additional Works, the Claimant is entitled compensation for prolongation costs attributed to 13 days of delay attributed to Design Revision and 7 days of delay attributed to Political Unrest.
485. The delay due to **Design Revision** occurred, according to Mr Kennedy’s quantification during the period starting 25 September to 7 October 2004.²⁹⁸ Mr Taft situates 13 days within this period and, adopting the analysis of Mr Marshall, 2 days in August of that year.²⁹⁹ The Tribunal has not accepted the method of quantification of Mr Taft. It bases the entire quantification on the period starting 25 September to 7 October 2004.
486. The average daily costs during this period, in the corrected quantification of Mr Kennedy which the Tribunal accepts, are US\$16’255.45. Applying the reduction for overhead and profit in

²⁹⁷ Wiseman IV, p. 80.

²⁹⁸ Kennedy IV, p. 4.

²⁹⁹ Joint Expert Report, p. 13.

the Contractor's own P&M (US\$1'508), the average monthly costs relevant for this claim are US\$14'747.45. Therefore, the Claimant is entitled to **US\$191'716.85** as prolongation costs for 13 days attributed to **Design Revision**.

487. The 7 days delay attributed to **Political Unrest** is situated by Mr Kennedy from 22 to 29 March 2005, and by Mr Taft, from 3 to 5 April 2005. The Tribunal noted that the unrest continued from March to April 2005. Therefore it based the quantification on the costs during these two months, i.e. $424'636 + 498'270 = 922'906$ producing an average daily cost of US\$15'129.61. Reduced by the deduction for overhead and profit in the Contractor's own P&M, the daily rate is 13'621.61. The compensation to which the Claimant is entitled for the 7 days for **Political Unrest** therefore is **US\$ 95'351.27**.
488. The **total amount** awarded for prolongation costs related to EOT 5 is **US\$1'313'887.40**.

8.10 Winter Breaks

489. The Claimant seeks compensation for the delay caused by three Winter Breaks, i.e. the time during which the works had to be suspended during the three additional winters after the contractual completion date. The claims are quantified as follows:
- For the Winter Break from 15 December 2002 to 1 April 2003: 107 days at US\$3'111'729.88;
 - For the Winter Break from 5 December 2003 to 2 April 2004: 119 days at US\$2'805'132.47; and
 - For the Winter Break from 15 December 2004 to 16 March 2005: 92 days at US\$1'347'950.
490. To this claim must be added 7 days from EOT 4 which the Tribunal has classified as Winter Break above in Section 8.8.2.
491. The Respondent denies that any payment on this account is due.

8.10.1 Compensability of the Winter Breaks

492. The Minutes of Contract Negotiations with Entes Company of 3 August 1999,³⁰⁰ which form part of the Contract,³⁰¹ in paragraph 15 provide the following:

³⁰⁰ Contract Bundle and Exhibit R-13.

³⁰¹ Form of Agreement, paragraph 2 (a).

“The Contractor will hand over the road to the Maintenance Department for winter maintenance free of any obstacle that may hamper normal traffic flow. The approximate period will be between 15th December and 15th March each year. The Contractor also agreed to provide two graders to help the Maintenance Department during this mentioned period without additional costs.”

493. It is undisputed that during the winter maintenance period the Contractor had to suspend construction. In this respect, the Claimant relies on Item 4 of the General Information which provided that:

“Whilst maintenance responsibility for a road section rests with the Employer the contractor will not be permitted to execute works on that section.”³⁰²

494. Mr Marshall opined that some work could have been performed despite this suspension, a point which will be considered below in the context of the quantification of the claim.

495. It is undisputed that this requirement of suspension of the work during the winter maintenance period also applied during the three years after the contractual completion date.

496. The Contractor argues that the three maintenance periods after December 2002 are additional and that the costs during these additional periods must be compensated. He writes:

“The original completion time was 3 December 2002 and the Claimant was supposed to stay on site for two WSP/WMP³⁰³’s. Accordingly, when the Claimant prepared its price for the works, it calculated the costs of the two WSP/WPM’s. Due to the Employer’s acts and omissions, the Claimant stayed three WSP/WMP’s more than planned. The contract prices/rates were not changed, even the actual completion dates was three years later than the original completion date. The Claimant prepared his tender in 1999 on the basis that the work was to be completed by December 2002. However, due to the delay caused by the Respondent the actual completion date was October 2008.

The Claimant maintains that WSP are fully compensable. The Claimant’s position can be summarised as follow, if excusable delay brings the Claimant into the WSP, the Claimant is entitled to the costs of the whole WSP.”³⁰⁴

³⁰² C-PHB, paragraph 83.

³⁰³ Winter Suspension Period, Winter Maintenance Period.

³⁰⁴ C-PHB paragraphs 74 and 75, referring also to the explanations by Dr Gokyayla at Tr 611).

497. The Claimant also relied on Clause 40 GCC305 which provides that, upon instruction of the Engineer, the Contractor shall suspend the progress of the works. Clause 40.2 provides that the Engineer shall determine:

“(b) the amount, which shall be added to the Contract Price, in respect of the cost incurred by the Contractor by reason of such suspension...”

498. However, this provision does not apply in certain specified cases, including when the suspension is “otherwise provided in the Contract”.

499. The Respondent argues that the Winter Suspension Periods had been provided in the Contract by the provision quoted above. Referring to this provision, the Respondent wrote:

“Hence, when signing the Contract the Claimant understood and agreed that it had to bear on its own the costs for each winter period within the terms of validity of the Contract.”³⁰⁵

500. The Respondent relies on the provision of Clause 40.1 which excludes compensation of suspension costs where the suspension is provided in the Contract and refers to the quoted passage in the Minutes of Contract Negotiations. It argues:

“... the Parties had agreed upon that the winter period ‘should be between 15 December and 15 March of each year’.

The Contract does not indicate specific years which include WSP/PTM. On the contrary, the Contract states that WSP/PTM shall be between 15 December and 15 March of each year. Hence, the period of each year during which the Contract is in effect is concerned.

Thus, each suspension of works for a period of WSP/PTM irrespective of whether it occurred during the initial term of the Contract or during the extended terms of the Contract took place under the Contract. Consequently, the provisions of Clause 40.2 of the Contract may not be applicable in this case.”³⁰⁷

501. The Tribunal agrees with this statement of the Respondent insofar as the requirement of winter maintenance applies to the entire period of construction, even after the expiration of the contractual

³⁰⁵ C-Submission on Legal Grounds, p. 23 et seq.

³⁰⁶ SOD, paragraph 20(a).

³⁰⁷ R-Rejoinder, paragraphs 38 to 40, emphasis in the original.

period. It is therefore wrong for the Claimant to argue that the “Works were suspended by the Engineer for the WSP/WMP beyond the original completion date” and that this suspension was not “otherwise provided for in the Contract”.³⁰⁸ The requirement for Winter Breaks was a contractual requirement; and the Contractor complied with it and did indeed suspend the construction during the additional winter periods.

502. Therefore, Clause 40 GCC is not a proper basis for the claim for prolongation cost caused by the Winter Breaks. The Tribunal must examine the other grounds for compensation invoked by the Claimant when seeking compensation for the costs incurred during the additional winter periods.

503. In this respect the Engineer, in a statement on which the Respondent also relies, took a more nuanced position than that of the Respondent. In a letter subsequent to the Determination in which he provided additional reasons for his decision, he wrote the following:

“The Contractor must have been aware of the winter of the Kyrgyz Republic when the contract was extended. He could have taken into account this period and managed the equipment allocation/rotation to the best of his interest. Otherwise, he should have agreed with the Employer in the addendum with regard to the treatment of the suspended winter period. As we stated in Item 1 above, granting of EOT is not an automatic confirmation of the Contractor’s entitlement to financial compensation. It must be understood that EOT is granted not only for causes created by the failure of the Employer but also for causes neither the Contractor nor the Employer is responsible. In the latter case, both contracted parties may suffer losses where neither party is responsible to compensate the other’s losses. This in keeping with the generally accepted principle that no party to a contract is responsible for the other party’s losses caused by circumstances outside the first party’s control, unless so agreed. If no party is responsible, nor gains undue benefit, the costs lie where they fall.”³⁰⁹

504. In this statement three different situations must be distinguished: at the beginning of this passage, the Engineer considers the quantum of the costs and the question whether the costs could have been reduced. This does not address the question whether the Contractor is entitled to compensation. The Engineer then considered specifically the situation resulting from the fact that some of the EOT was granted not by a decision of the Engineer but by agreement of the Parties in Addenda. The effect of the Addenda

³⁰⁸ C-PHB, paragraphs 135 and 136.

³⁰⁹ Letter of the Engineer of 15 June 2006, Exhibit R-11, p. 3, paragraph 4; relied upon in SoD, paragraph 20(b).

on the claim for prolongation costs has been considered already in the context of the relevant EOT. However, a specific issue arises under Addendum No. 3; this shall be considered separately below.

505. The third situation considered by the Engineer concerns the distinction made in relation to the causes of the losses and responsibility of the parties. This is indeed the correct approach: the Contractor argued that delay that occurred before the winter set in prevented him from completing the works before he had to suspend for the Winter Maintenance Break. The question therefore is one of causation: what caused the delay which brought the works into the winter period?
506. The situation is clear with respect to circumstances with respect to which the Employer owes compensation to the Contractor. If the Contractor shows that these circumstances cause the prolongation of the work to the point that the Contractor had to face an additional Winter Maintenance Period, this additional period has to be included in the prolongation costs. The issue is one of causation and must be considered as such.
507. Insofar the Tribunal agrees with the Respondent: the matter is not governed by Clause 40 GCC; the winter suspension is regulated in the Contract and there is no need for a suspension order by the Engineer. However, this does not exclude compensation for the relevant costs. What has to be examined is the causation for these costs, the question whether works were extended into the winter period as the result of compensable delay.
508. For the same reason the Parties' argument relating to Article 630 KCC³¹⁰ is not determining. Article 630, paragraph 6 on which the Claimant relied affords to a contractor the right to an increase in the contract price in the following terms:

"In the event of a considerable increase in the cost of materials and equipment to be provided by the contractor and of services rendered by third persons to it after the contract was entered into, the contractor shall have the right to demand that the established price (estimate) be increased and, should the customer refuse to comply with its demand cancel the contract in accordance with Article 412 of this Code."

509. In the claim for prolongation costs during the Winter Breaks, the Claimant does not seek compensation for increased costs of materials. It seeks compensation for the cost of equipment and personnel during these breaks. That may or may not be considered

³¹⁰ C—Submission on Legal Grounds, paragraph 119 and R-Rejoinder, paragraph 41.

an increase of cost as contemplated by Article 360(6) KCC. The Tribunal need not decide the issue since that provision affords to a contractor the right to demand an increase in the price; but if the employer does not agree to such an increase, the remedy for the contractor is the right to terminate the contract. The Claimant has not even attempted to demonstrate that the circumstances of “material change in circumstances”, as required by Article 412 KCC have been met and does not request termination or contract adjustment according to this provision. In any event, an amendment of the contract, which a court may grant “in exceptional cases” under Article 412(4) KCC, would seek to restore the balance of the contract, taking into consideration the interest of both parties. The compensation which the Claimant seeks here is the payment of its additional costs; it does not make allowance for the interests of the Respondent. Such claims require a clear basis as it has been explained above in the context of the decision with respect to compensability.

510. It follows, that, if it wishes to obtain compensation for the costs of the Winter Breaks, the Claimant must establish that these costs have been caused by one or the other of the grounds which entitle it to claim, as they have been examined above. As stated above, the issue is one of causation.
511. Mr Marshall, the Respondent’s delay expert, stated quite clearly this issue of causation:

“In my view, if the Claimant was critically delayed by a matter for which it was entitled to an extension of time and that matter was also one for which the Contract provisions gave an entitlement to additional payment (i.e. a ‘compensable delay’), and as a result completion was delayed beyond a period of neutral delay (such as a period of exceptionally adverse climatic conditions) then the neutral delay would also become ‘compensable’.

However, the above would not apply if the preceding delay was a ‘neutral’ delay (i.e. entitlement to time but not to money). That is because, in my view, the additional costs arising from the subsequent ‘neutral’ delay have to be considered as having been caused by the preceding delay. Therefore, if the cause was a matter for which no compensation was allowable, then that must also extend to the subsequent delay”.³¹¹

512. This is indeed the correct view, as it had emerged already at the hearing in the discussion between the experts: the decisive question is the responsibility for what was called the “driving delay”, i.e. the

³¹¹ Marshall III, paragraphs 2.2.4 and 2.2.5.

delay which drove the performance of the work into the Winter Break. As summarised by the Tribunal in the context of the similar issue of lost days:

*“... the experts agree you have to know whether the driving day [recte: delay] was compensable or not in order to determine whether the lost day is also compensable.”*³¹²

513. The Claimant does not really contest this conclusion. It simply argues that it has proven that “all driving events (delay in design, additional works) are compensable”.³¹³ The question whether this affirmation is correct is indeed what the Tribunal will have to address now.
514. In considering this question, the Claimant raised the question of the burden of proof.³¹⁴ The Claimant argued that it was the Respondent who bore this burden. In support of this position, the Claimant relied on Article 365(2) KCC which concerns the consequences of a person failing to perform an obligation. If that failure is established, the provision allows exemptions from liability and stipulates the grounds for such exemptions. It is for the party invoking such exemptions to prove these grounds.
515. This is not the issue here. The question of compensability of the driving delay has been decided by the Tribunal in the previous sections. This decision was based on the Tribunal’s examination of each of the periods of excusable delay considered by the Engineer. The Tribunal noted that all of these periods were critical which means that they were driving delays. The Tribunal also noted that collectively these delays extended the completion of the works to the actual completion date, which means that in the Engineer’s Determination there were no other critical or driving delays. In particular, the Engineer did not identify any concurrent critical delays caused by the Contractor.³¹⁵
516. Mr Marshall asserts that there were concurrent delays caused by the Contractor. In support of this assertion, Mr Marshall relies on a contractual completion date of 20 June 2002 and argues that the 5.5 months until 3 December 2002 must be treated as float and disregarded for the purpose of calculation of compensable delay.³¹⁶ However, this is not what the Engineer has done. He identified the “Original Contract Period” as running from 3 January 2000 to 3 December 2002. Moreover, when attempting to demonstrate “that

³¹² Tr 684.

³¹³ C-PHB, paragraph 141.

³¹⁴ C-PHB, paragraphs 142 et seq.

³¹⁵ See C-PHB, paragraphs 23 and 24.

³¹⁶ Marshall III, paragraph 2.2.18.

the Claimant would have been on site during the winter 2002/3 irrespective of the Respondent's delays", Mr Marshall relies on the date when the Claimant requested its first EOT on 25 July 2002.³¹⁷ However, this date is irrelevant for determining when the Claimant's works were affected by the delay: what matters is the time when the delays affected the Contractor's work. As explained above, both the design delays and the additional works affected the work during a period starting in March 2000 and ending in June 2001. The demonstrations of Mr Marshall for the subsequent periods are similarly unreliable.

517. For these reasons, the Tribunal bases its assessment on the critical delays identified by the Engineer as the driving delays. It has decided above which of these delays were compensable and which not.
518. The issue to be considered now is to determine whether the Winter Breaks were caused by compensable delays or not. This must be done separately for each of the three Winter Breaks. Since it is the Claimant that seeks payment for these delays it is the Claimant which must prove this causation.
519. The contractual completion date was 3 December 2002. The **first Winter Break** thereafter, as confirmed by the Engineer in his Determination lasted 107 days from 15 December 2002 to 1 April 2003. The preceding critical delays identified by the Engineer were 50 days for design delay and 33 days for additional works. These delays occurred at various times during the period from 1 March 2000 to June 2001. All of these 83 days were found to be compensable.³¹⁸ There were no non-compensable delays identified by the Engineer prior to the first Winter Break.³¹⁹
520. Since in the only delays in the Engineer's presentation were found by the Tribunal to be compensable, the following delay during the Winter Break 2002/2003 also must be compensable. The Tribunal holds that the **107 days** of this additional Winter Break are compensable.
521. The **second Winter Break** after the contractual completion date was identified by the Engineer as lasting for 119 days from 5 December 2003 to 2 April 2004. Before the start of this break the Contractor presented EOT 2 and EOT 3.

³¹⁷ Marshall III2.2.10.

³¹⁸ See above sections 8.5.2 and 8.5.3.

³¹⁹ Table 2 to the Determination (Exhibit C-2) show in the place of EOT 1 29 days for "adverse climatic conditions". At the hearing it was determined that these days were not counted by the Engineer and were merely "virtual"; see Tr 327.

522. With respect to EOT 2 the Engineer had accepted 159 days as excusable but found that they were non-compensable. The Claimant sought to reverse this determination and claimed compensation for this period. Tribunal denied the claim. Consequently all 159 days of EOT 2 are non-compensable.
523. EOT 3 concerned, in addition to the 119 days of Winter Break and 67 Lost Days which will be considered separately, time extension of 180 days agreed in Addendum No. 4. The Engineer determined that 15 days for the relocation of utilities were compensable while 165 days for additional works were not. The Tribunal found that all 180 days were compensable.
524. The delays to which the EOT 2 request refers must have been prior to 26 March 2003, the date on which the Contractor confirmed the request.³²⁰ Those of EOT 3 occurred during the period from April and October 2003.³²¹ By the end of the first Winter Break the Project had accumulated, according to Table 2 of the Engineer's Determination, 190 days of delay. The Tribunal found this delay compensable and therefore does not consider it for the calculation of subsequent prolongation costs.
525. The delays that must now be considered are the 159 non-compensable days of EOT 2 and the 180 compensable days of EOT 3. The former occurred prior to March 2003, i.e. before any of the compensable EOT 3 delays could exercise an effect on the performance of the works. Therefore, the delay which drove the work into the second additional Winter Break was that of the 159 days of non-compensable delay. It follows that the **119 days** of the second additional Winter Break were caused by the non-compensable delays and, therefore, are **non-compensable**.
526. The **third Winter Break** after the contractual completion date, as confirmed by the Engineer's Determination, lasted for 92 days from 15 December 2004 to 16 March 2005. By the start of this break, the Contractor had presented EOT 4 on 9 September 2004 for which the Engineer granted an extension of 75 days compensable delay attributed to the delay in the commencement order; the Tribunal confirmed this compensability and quantified the costs by reference to the period between April and June 2004. In addition the Engineer granted 19 days extension which he classified as non-compensable and which the Tribunal attributed to Lost Days (12 days) and Winter Break (7 days).
527. If one considers the period between the second and the third additional Winter Break, the driving delay were the compensable 75

³²⁰ Exhibit C- 8.

³²¹ See above section 8.7.2.

days; the delay of the third Winter Break therefore must also be compensated. The same conclusion would be reached if one took account of the earlier delays which had not yet been brought to bear in the calculation. In the period prior to the second additional Winter Break the Tribunal had identified both a period of non-compensable delay (in EOT 2) and of compensable delay (in EOT 3). The former has been taken into account in the decision concerning the second additional Winter Break; the latter was disregarded in this decision and may still be considered with the effect it had on the delay causing the Project to be driven into the third additional Winter Break.

528. For both these reasons, the **92 days** of the third additional Winter Break must be treated as compensable.

8.10.2 Quantification

529. The Claimant quantified the prolongation costs attributed to the additional Winter Breaks in the same manner as the other prolongation costs, i.e. by reference to the total resources on site during the relevant period, as corrected by Mr Kennedy in his final report.
530. The objections of Mr Taft to the quantification of the Winter Break costs are different from those of the other prolongation costs, as the “bottom-up” method does not apply here: the Winter Break costs are quantified on the assumption that the Contractor could not work. However, Mr Taft proposes that this assumption be corrected by reference to “specific machines working”. He also points out that “there is evidence of plant being de-mobilised at the end of the winter periods and which therefore could reasonably be assumed to be in a position to have demobilised at the start of the Winter period in question.”³²²
531. In support of the first of these objections, Mr Taft refers to a letter from the Contractor to the Engineer of 11 November 2001, the content of which he summarises as follows: the letter “stated that some works would be ongoing - and that a specific list of plant would be maintained throughout the winter period - thus reducing the amount of plant that must have been standing during this period”.³²³ Mr Taft states that in Appendix B4.1 to his Final Report he “made adjustments to the plant resources/costs for these winter periods”, but he accepts that “prolongation costs in this winter period have not been claimed”.

³²² Taft III, paragraph 3.6.10.

³²³ Joint Expert Report, p. 10 Note 4.

532. With respect to the subsequent winter periods there was some reference at the hearing to payment certificates IPC 29³²⁴ and IPC 34³²⁵ as evidence for continuing work during the winter periods of 2003/2004 and 2004/2005. As Mr Kennedy demonstrated, the certificates cover periods and activities which do not prove that work was performed in these winter periods.³²⁶ The point was not pursued subsequently.
533. In the absence of any other evidence for the allegedly “working plant”, the Tribunal cannot make reductions in the costs claimed for subsequent winter periods.
534. Concerning the second argument of Mr Taft, the Tribunal noted that indeed at the end of the winter period 2003/2004 and, to a lesser extent, at the end of the winter period 2004/2005, a sharp drop in P&M costs occurred. This development with respect to the P&M costs is all the more surprising since during these two periods, as shown in the graph at Appendix C1 of Mr Taft’s Final Report, the number of machinery on site dropped significantly while the costs remained unchanged compared to the pre-winter period.³²⁷
535. The Claimant contests Mr Taft’s argument and states that (a) the Employer was aware “of the exact nature and amount of resources on site and any duty to mitigate would sensibly fall equally upon him”; (b) the Engineer would not allow any removal of plant; (c) once the winter arrived “it was logistically impossible to remove plant over this extended mountainous area until the end of the WSP”; (d) removal of plant to Turkey and returning it was impractical and (not realistic).³²⁸
536. The Tribunal has considered these arguments in the context only of the claim for Winter Break 2004/2005, since the claim for the previous winter has been dismissed as not compensable:
- As to (a): it is the Claimant who seeks compensation for the resources that stayed on site over the winter; it is for the Claimant to show that it was necessary to keep the resources on site; it is irrelevant whether the Employer was aware of the presence on site of these resources, since at that time the Contractor had simply reserved his claim for financial consequences but had not announced that he intended to claim for the costs of the resources which stayed on site during the winter. The Tribunal does not accept that, in these

³²⁴ Exhibit HR 5.

³²⁵ Exhibit HR 6.

³²⁶ Tr 479 et seq, and C-PHB, p.31.

³²⁷ Taft III, Appendix C 1.

³²⁸ C-PHB, p. 85 et seq.

circumstances, the Employer should bear all or part of the costs of P&M which could have been removed from site on the ground that the Employer should have asked for their removal.

- As to (b): the Claimant relies on a single letter by the Engineer, dated 28 November 2003 and produced in Appendix 3 of Mr Marshall's Final Report.³²⁹ In that letter the Engineer complains that machinery was removed from site without his consent. He does not object to the removal as such and does order that the machinery be returned. The letter is no evidence that the Engineer objected to the removal of P&M that was no longer required. In any event, the letter concerns machinery removed before the winter 2003/2004 which is not in issue here.
- As to (c): The Contractor can be expected to use proper planning and remove before winter sets in, P&M that is no longer needed rather than keeping it on site and removing it only at the end of the winter. In any event, in order for this argument to be persuasive, the Claimant would have had to show that it was the actual winter conditions which prevented the removal, rather than making the argument in the abstract, stating that "Winter did arrive".
- As to (d): the argument is irrelevant since the objection of Mr Taft is not that the Contractor should have removed the P&M temporarily for the Winter Break and return it thereafter; the argument applies only to P&M which was removed at the end of the winter. Mr Taft assumes that, if the P&M was not needed at the end of the winter and was removed then, it could just as well have been removed at its beginning.

537. The Tribunal concludes that none of the replies presented by the Claimant are convincing. It accepts Mr Taft's argument and quantifies the costs of the Winter Break 2004/2005 by reference to the P&M costs in the period immediately thereafter.

538. On the basis of these considerations, the Tribunal quantifies the prolongation costs attributed to the compensable additional Winter Breaks as follows:

539. Concerning the **First Winter Break** after the end of the original contract period (2002/2003): 107 days were found to be compensable. They were quantified in Mr Kennedy's final and corrected tables at the rate of US\$29'081.59 per day. For the reason explained, this rate must be reduced to exclude overheads and profit with respect to the Contractor's own P&M costs by US\$1'508 per day. The daily rate to be applied to the 107 days therefore is US\$ 27'573.59. The amount due is **US\$2'950'374.13**.

³²⁹ Marshall III, Appendix 3.

540. The Second Winter Break (2003/2004) is non-compensable.
541. With respect to the third Winter Break (2004/2005), 92 days were found compensable. Mr Kennedy quantified the prolongation costs attributable to these days at the rate of US\$14'651.63 per day. This quantification is based on monthly P&M costs US\$336'786 which dropped after the end of the winter to US\$264'916, a difference of US\$ 71'870 or US\$ 2'318.39 per day. The daily rate must further be reduced by US\$1'508 concerning overhead and profit for the Contractor's P&M, bringing it to US\$10'825.24. At this rate the 92 days are quantified as **US\$995'922.08**.
542. Consequently, the prolongation costs attributable to the compensable Winter Breaks are awarded at **US\$3'946'296.21**.

8.11 Lost Days

543. The Claimant seeks compensation for 35 or 67 "Lost Days Delay" in respect of EOT 3, in the amount of US\$1'091'895.53, alternatively US\$1'385'670.81; and for 35 such days in respect to EOT 5, in the amount of US\$531'833.76, alternatively US\$460'050.37. The Claimant explains that:

"Lost Working Days simply represent those days which the Contractor could not work but which fall within the extended period beyond the original date for completion and arising as a result of excusable delay".³³⁰

544. The Engineer had included in Table 2 of his Determination such Lost Days: 67 days with respect to EOT 3 and 35 days with respect to EOT 5. He treated these days as excusable but non-compensable.³³¹
545. The Respondent stated that it "upholds the position of the Engineer in respect of non-compensability of 67 days" and the 35 days, concerning EOT 3 and EOT 5, respectively.³³² It argues that the Contract required the Contractor "would not work on weekends" and does not provide that "suspension of works because of weekends or public holidays shall be compensated".³³³
546. The basis of this claim has been discussed at the hearing, where it was noted that the reason why lost days may have to be considered is that the delays were counted in working days and not in calendar

³³⁰ C-PHB, paragraph 307, referring to Wiseman IV, p. 112.

³³¹ Exhibit C-2, pp. 27 and 28.

³³² R-PHB, p. 16 and 19.

³³³ R-PHB, p. 17.

days.³³⁴ The time extensions claimed by the Contractor and those granted by the Engineer were calculated as working days and did not account for the non-working days (Sundays, public holidays, adverse climatic conditions).

547. The original contract period was calculated as 1065 calendar days, which meant that the Contractor had to make allowance for a number of non-working days during this period as part of his own risk. He was not entitled to any extension for Sundays and public holidays during this period and not to any compensation for the costs occurring on these days. When, during this period, delays occurred, the delay was counted by working days; the non-working days were disregarded since they were days on which the Contractor could not have worked and thus could not have been delayed. When the Engineer then calculated the time extension which he granted to the Contractor, he relied on the delay calculated in working days and added them to the contract period. This meant that he granted the working days as if they were calendar days. In so doing he granted an extension in which the number of working days granted to the Contractor was reduced by the number of non-working days which occurred during the extended period. This number of non-working days, “embedded” within a period which should have been a period of working days, are the Lost Days for which the Contractor is claiming.

548. The situation was explained by the Contractor:

“... the Contractor has lost 52 working days within the period of Extension of Time granted by the Engineer against the Contractor’s Interim EOT/04. The Contractor is thus entitled to additional 52 days of Extension of Time solely due to the fact that he was unable to avail the Extension of time granted by the Engineer against his Interim EOT/04. This is a fair and clear entitlement of the Contractor irrespective of the fact that he disputes the Engineer’s determination on EOT/o4 under the relevant Conditions of Contract.”³³⁵

549. In his response of 13 July 2005, the Engineer explained that a “total of 27 lost days (holidays, Sundays, and Saturdays the Contractor honoured as rest days)” had been accounted for; the Engineer added a further 21 days under the heading of “Lost working days”.³³⁶

550. In his Determination, the Engineer made the method of calculating time extensions quite clear by stating:

³³⁴ Tr 336.

³³⁵ EOT 5 request, Exhibit C-13, p. 8.

³³⁶ Exhibit C-14.

“Note: The duration of time extension granted does not include Sundays, public holidays and winter break.”³³⁷

551. This explains why the Engineer, in the same Determination, considered these non-working days separately and granted altogether 102 days on this account, thus recognising that the extensions which he granted on other accounts did not fully quantify the additional time to which the Contractor was entitled. In other words, the manner in which the Engineer quantified the extensions of time which he granted was such that the non-working days had to be granted separately.
552. It follows that the claim for Lost Days is not an independent claim for suspension on weekends or other non-working days. Rather, it forms part of the claims for prolongation costs on other grounds and relates to the quantification of these other claims. It simply corrects, as the Engineer has done, the insufficient extension resulting from the fact that the Engineer determined the extension to which the Contractor was entitled on the basis of working days and granted the extension as calendar days. The claim enters into the calculation of the extension on calendar days, the non-working days that had been left out when the extension was calculated.³³⁸
553. It may have been simpler if the Engineer, rather than counting the extension in working days, had counted them in calendar days. Since the Engineer did not do so and, in the circumstances of this case, the Tribunal had to follow the allocation of the Engineer in order to determine compensability and quantification, the Lost Days must also be considered.
554. However, in doing so, a distinction must be made depending on the basis for the extension. Lost Days are compensable only to the extent to which they related to delays which are compensable. Although in their conclave at the hearing the experts could not agree on a specific allocation of compensable and non-compensable days, they did agree on the principle. As the Tribunal’s expert, Mr Hamann concluded:

“We could not actually decide whether they were compensable or not, because in our opinion they would only be compensable if the work on these days had to be done due to a shifting on an event also compensable.”³³⁹

³³⁷ Exhibit C-2, p. 5.

³³⁸ This understanding of the claim was explained at the hearing, Tr 334.

³³⁹ Tr 677.

555. This demonstrates a similarity between the approach to the Lost Days claim and that for Winter Breaks. Indeed, Mr Marshall deals with both these claims in the same chapter of his Final Report.³⁴⁰
556. It might be considered as inherent in the logic of the Lost Days claim to consider entitlement and quantum by reference to the time when the time extension becomes effective. However, since the extension in working days is determined at the time when the delay occurred, it appears preferable to also determine the Lost Days on this basis. This latter approach amounts to determining the extension on the basis of the working days and the associated non-working days. The Tribunal considers this approach the most suitable one.
557. In order to allocate the Lost Days determined by the Engineer between compensable and non-compensable, the Tribunal assumes that these days are distributed evenly over the relevant period. On the basis of the proportion between compensable and non-compensable days for that period, the Tribunal allocates the Lost Days to one or the other category.
558. The first Lost Days claim relates to 67 days in EOT 3 and, according to the identification of the Engineer, concerns “rested on Sundays and public holidays during the claim periods of EOT 1 to EOT 4”.³⁴¹ The Claimant seeks compensation only for 35 days.³⁴² To this must be added the 12 days in EOT 4 which the Tribunal allocated to Lost Days, bringing the total to 47 days. The total number of delay days during these four periods (not counting Lost Days and the 7 days absorbed in the EOT 4 Winter Break) is: $190 + 159 + 299 + 167 = 815$ days. Of these 815 days, the Tribunal found 537 days compensable, corresponding to 65.89 %. This percentage applied to 47 Lost Days in this period leads to 31 days of compensable delay. The applicable daily rate for this period as calculated by Mr Kennedy is US\$31'197.02; deducting US\$1'508 concerning overhead and profit for the Contractor's P&M brings the applicable daily rate to US\$29'689.02. The prolongation costs for the 31 days therefore amount to US\$ **920'360.24**.
559. The second Lost Days claim is made for 35 days in EOT 5 and, according to the Engineer, concerns “rested on Sundays & Public holidays and adverse climatic days after claim period of EOT 4”.³⁴³ The total number of delay days during this period, not counting the Lost Days is 107 of which 96 were found to be compensable. The proportion of compensable days is therefore 89.7% or 31 days. Mr

³⁴⁰ Marshall III, section 2.2.

³⁴¹ Determination, Table 2, p.1.

³⁴² C-PHB, paragraph 310.

³⁴³ Determination, Table 2, p. 2.

Kennedy calculates two different rates for this period: one rate is US\$14'510.96 and must be reduced to US\$ 13'002.96; the other is US\$16'221.69 and must be reduced to US\$14'713.69. In Mr Kennedy's calculation, the former rate applies to 21 days (corresponding to 60% of the period) the other to 14 days (40%). Dividing the 31 compensable days in the same proportion, 19 and 12 days are obtained. The prolongations costs for the two periods thus are:

19 days x US\$13'002.96 = US\$247'056.24; and
 12 days x US\$14'713.69 = US\$176'564.28.

560. The total prolongation costs for the 31 compensable Lost Days related to EOT 5 therefore are of **US\$423'620.52**.
561. The Tribunal therefore awards **US\$1'343'980.76** for prolongation costs on account of 62 Lost Days.

8.12 Head Office Overheads

562. The Claimant seeks US\$2'626'138.40 for Head Office Overheads.³⁴⁴ The Respondent denies the claim.
563. The Tribunal has examined already the compensability of Head Office Overheads. It has concluded that these costs are compensable at the daily rate of US\$2'350.³⁴⁵ This rate is applicable only to days which the Tribunal has found to be compensable.
564. The total of compensable days is summarised as follows
- | | |
|-----------------|-----------|
| • EOT 1 | 83 |
| • EOT 2 | 0 |
| • EOT 3 | 180 |
| • EOT 4 | 75 |
| • EOT 5 | 96 |
| • Winter Breaks | 199 |
| • Lost Days | <u>62</u> |
| Total | 695 |
565. At the rate of US\$2'350 per day, the Head Office Overheads for 716 days of compensable delay are at **US\$1'633'250**.

³⁴⁴ C-PHB, p.122.

³⁴⁵ See Section 8.4.9.

8.13 Summary of awarded prolongation costs

566. On the basis of the explanations above, the Tribunal concluded that the Claimant is entitled to compensation of its prolongation costs under the following heads:
- (i) For EOT 1: US\$2'524'790;
 - (ii) For EOT 2: that part of the claim is dismissed;
 - (iii) For EOT 3: US\$5'367'966.45;
 - (iv) For EOT 4: US\$1'306'856.25;
 - (v) For EOT 5: US\$1'313'887.40;
 - (vi) For the costs of Winter Breaks: US\$3'946'296.21;
 - (vii) For the costs of Lost Days: US\$1'343'980.76; and
 - (viii) For Head Office Overheads: US\$1'633'250.
567. The total compensation for the Claimant's Prolongation Costs is US\$17'437'027.07. Against this amount, must be credited the sum already certified by the Engineer and paid by the Employer of US\$1'161870.19. The sum due on account of the prolongation costs therefore is **US\$16'275'156.88.**

9. THE CLAIM FOR INTERESTS ON LATE PAYMENTS

568. The Claimant seeks payment of US\$151'889.38 as interest on amounts that were paid late. The Respondent denies any entitlement.

569. The claim concerns payment delays in the initial period of the Contract up to the effective date of Addendum 1, i.e. 15 May 2003.³⁴⁶

9.1 The dispute

570. Clause 60.8 CPA is entitled "Time of Payment and Interest". It provides the following:

"The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause 60, or to any other term of the Contract shall, subject always to the provisions of Clause 47, be paid by the Employer to the Contractor within 56 days after the Contractor's monthly statement has been submitted to the Engineer for certification or, in the case of the Final Certificate pursuant to sub-Clause 60.13, within 84 days after the agreed final statement and written discharge have been submitted to the Engineer for certification. In the event of the failure of the Employer to make payment within the times stated, the Employer shall pay to the Contractor interest compounded monthly at the rates stated in the Appendix to Tender upon all sums unpaid from the date at which the same should have been paid, in the currencies in which the payments are due."

571. The Minutes of Contract Negotiations, forming part of the Letter of Acceptance, provide the following:

"Budget in excess of the Loan Agreement will be compensated by using local funds. The local portion will be paid through the Kyrgyzautobank in Kyrgyz Soms using the exchange rate of National Bank on the payment date in accordance with the contract payment conditions. Payment delays in the local portion shall not exceed three months."

572. The Employer's payments of the local portion, in some cases were made more than 56 days and 90 days after the submission of the monthly statements. The Contractor complained in a letter of 10 November 2002, stating that the Employer's payments had exceeded

³⁴⁶ Confirmed by the Claimant at the hearing, at Tr p. 148.

the agreed payment terms. The Contractor argued that these delays caused serious problems in respect to its payments to the suppliers and subcontractors, receivables having accumulated to an amount of US\$ 634'523.³⁴⁷ The Employer responded by bringing the matter to the Engineer's Representative, requesting, on 14 November 2002, an Engineer's Decision according to Clause 67 CC.³⁴⁸ The Engineer's Representative declined to rule on the request and referred the Employer to the Engineer to whom the Employer addressed the same request on 19 November 2002.³⁴⁹

573. The Engineer wrote on 25 November 2002, with the reference "Engineer's Decision on Interpretation of Minutes of Contract Negotiations regarding Delayed Payment of Local Portion".³⁵⁰ In that letter, the Engineer stated that he "believe[d] it is natural to consider that the delay admissible under the present situation is considered as three months (not 90 days) from the elapse of 56 days, against the original condition of contract that the delay starts immediately from the elapse of 56 days". The Engineer added "that this does not not [sic] necessarily mean that the Employer may pay at the end of 56 days plus three months (not 90 days), because it is the duty of the Employer to pay without any delay and it is not the right of the Employer to delay". The Engineer concluded by "suggest[ing] that both the Employer and the Contractor are requested to discuss and agree on the period in disputes applicable to the payment from December 4, 2002 onward, ...".
574. On 23 January 2003, the Contractor wrote to the Employer under the reference "Notice of Intention to Commence Arbitration under Clause 67.1 of the Conditions of Contract", expressing his dissatisfaction with the decision.³⁵¹
575. As suggested and requested by the Engineer, the Parties did indeed discuss this and on 15 May 2003 agreed Addendum 1, which settled a number of issues including the payment terms. It referred to Clause 60.8 CPA and provided a 56 days payment term for "all the forthcoming Interim Payment Certificates". The Amendment also contained the following clause:

"The Contractor also agrees not to commence proceedings of Arbitration regarding the Engineer's decision under Clause 67.1 dated November 25, 2002, provided that the Employer shall fulfill all other conditions of this Addendum."

³⁴⁷ Exhibit C-95.

³⁴⁸ Exhibit C-96.

³⁴⁹ Exhibit C-97.

³⁵⁰ Exhibit C-94; also Exhibit R27.

³⁵¹ Exhibit R-28.

576. In the Statement at Completion, the Contractor claimed US\$300'741.13, stating that the "Employer has failed to make payments to the Contractor within the times stated in Clause 60.8 of the Conditions of Particular Application". In the Determination of 18 May 2006, the Engineer referred to his Decision of 25 November 2002 according to which, prior to Addendum 1, "interest should be applied to 'after 90 + 56 days'". He accepted US\$25'165.01 and rejected the balance of the claim.
577. In the Notice of Arbitration of 15 January 2009, the Contractor claimed for the balance in the amount of 275'576.12.

9.2 Time bar

578. The Respondent argues that the claim is time barred. It considers that the "reference point" for the three year period under the KCC is 23 January 2003 "when the Claimant sent the notification of its intention to initiate arbitration proceedings against the Engineer's Decision of 25 November 2003". On this basis the claim would be time barred on 23 January 2003.³⁵²
579. The Tribunal has considered this objection and noted that the 25 November 2002 "Decision" expressed a view of the Engineer about the interpretation of the two clauses dealing with the time for payment. It did not decide and reject a claim by the Contractor but rather expressed contradicting positions by expressing a "belief" about the calculation of the payment period while, at the same time, emphasising "the duty of the Employer to pay without any delay", leaving doubts about the treatment of a claim by the Contractor for delay interest if such claim should be made. The Tribunal also considered that a few months after the Claimant sent the Notice of its intention to initiate arbitration, the Parties concluded Amendment 1 by which they deferred and rendered conditional the time when the Contractor could resort to arbitration. The Tribunal concludes that the Claimant's 23 January 2003 notification is not the proper starting point for calculating the period of limitation.
580. As explained above in Section 7.1, the period of limitation started running when, following the submission of the Statement at Completion, the Engineer's Determination was notified to the Contractor on 18 May 2006. The claim then was included in the Notice for Arbitration of 15 January 2009, before the expiration of the three year period under Kyrgyz law. The claim is therefore not time barred.

³⁵² SoD, paragraphs 70 – 73 and R-PHB, paragraph 2.12.

9.3 The Claimant's entitlement

581. When discussing the entitlement of the Claimant to delay interest, the Parties essentially revert to the arguments that had been made before the Engineer issued in 2006 its determination.
582. The Claimant argues that the last sentence in in clause of the Minutes of Contract Negotiations “does not change the contractual payment period. This is a statement from the Employer and by this statement, the Employer undertook and warranted that the **‘Payment delays in the local portion shall not exceed three months’** (emphasis in the Claimant’s quotation).³⁵³
583. At the hearing, Mr Ozkoseoglu explained that, in the Claimant’s understanding, the clause means “that the maximum amount of delayed duration shall not exceed three months”. The Tribunal summarised Mr Ozkoseoglu’s position as follows: “Your interpretation is that they have 56 days, beyond 56 days they have to pay interest. They say irrespective of interest, in any event they will not delay more than three months.”³⁵⁴
584. The Respondent argued that the two periods must be added. It described the three months period in the Minutes of Contract Negotiations as “a grace period” and considered that the “duration specified in paragraph 60.8 of the CPA is general, it also includes payment of the local portion plus the duration of the three months”.³⁵⁵
585. The Tribunal considered that Clause 60.8 CPA constitutes a general clause fixing the time for payment at 56 days. Clause 6 of the Minutes of Contract Negotiations deals specifically with the payment delays with respect to the local portion. The question on which the Parties differ is whether this latter provision affects the contractual payment period and, if it does, whether it derogates from the period of 56 days or adds an additional period.
586. The wording of Clause 60.8 is clear. It requires the Employer to pay interim certificates within 56 days and, if he fails to make timely payment, to pay interest. Clause 6 is not quite as clear. However, when the clause states that “payment delays shall not exceed three months”, it expresses a clear intention that delays within this period are admissible. Therefore, the Tribunal does not agree with the Claimant. It considers that no sanction in the form of interest on outstanding local payments may be applied during the three month period.

³⁵³ SoC, paragraph 2911

³⁵⁴ Tr p. 151 and 152.

³⁵⁵ Tr p. 153 and 154.

587. Remains the question as to whether the three month period must be added to the general period of 56 days according to Clause 60.8 or whether it replaces this period. Clause 6 makes it clear that it applies to payments “using local funds” and that such payments are made in the specific situation where payments are made “in excess of the Loan Agreement”. The clause uses the term “budget” which, in the context of the clause, the Tribunal reads as “payments due to be made”. Since Clause 6 provides a special payment regime for amounts not covered by the Loan Agreement, it must be read as derogating from those provisions which are applicable generally.
588. With respect to “payment delays”, Clause 6 does not state that the Employer has an additional period of three months; the Clause clearly states that, for payments of “the local portion”, the payment delay shall not exceed three months. The Tribunal sees no indication that the Parties intended Clause 6 to provide for an additional period for payments and for a cumulative application of the two periods. The Tribunal concludes that the period within which local payments had to be made is three months.
589. Clause 60.8 CPA provides for interest in case payments are made after the expiration of the stipulated payment period. Clause 6 replaces the payment period of 56 days by a period applicable especially for local payments. It does not deal with the sanction in case of payment after the stipulated period. The general provision on interest in Clause 60.8 therefore also applies to payments in local funds after the three month periods.
590. The Tribunal concludes that payments in local funds made after the expiration of three months bear interest at the rates stipulated in Clause 60.8 CPA.

9.4 Quantification

591. The Claimant has presented differing calculations of the amount claimed. Eventually, Mr Kennedy revised the figures originally quoted and quantified the claim in his Reply Report by reference to three alternative payment periods: 56 days, 90 days and, for the period after 13 May 2003, 56 + 90 days.³⁵⁶ The amount of delay interest for payments exceeding 90 days is US\$84’671. He confirmed the amount in the Joint Expert Report, subject to a deduction for the amount originally certified by the Engineer.³⁵⁷

³⁵⁶ Kennedy Reply Report, paragraph 2.58.3.

³⁵⁷ Joint Expert Report p. 7 of 16.

592. Mr Taft, the Respondent's expert, examined the valuation by Mr Kennedy and the amounts put forward and saw no "significant difference between our respective assessments". He concluded: "subject to the Tribunal's decision on whether the Claimant's or Respondent's position is correct, I can support Mr Kennedy's revised figures (subject to a reduction by the amount certified under the Engineer's Determination of US\$25'165.01)".³⁵⁸
593. In view of this concordance in the quantification by the Parties' respective experts, the Tribunal decides that the Respondent must pay to the Claimant US\$84'671 minus US\$25'165.01, i.e. the rounded **amount of US\$59'506** as interest on delayed payments.

³⁵⁸ Joint Expert Report p. 15 of 16.

10. THE CLAIM FOR GUARDRAILS

594. The Claimant seeks payment of US\$ 202'304.20 for the installation of guardrails in quantities exceeding those for which the Engineer certified payment. The works in question also are referred to as "Road Furniture", "road fences" and "road construction". The Respondent denies the claim, arguing that it had not agreed to any additional installations.

10.1 The dispute

595. The Bill of Quantities prescribes in Bill "08 Road Furniture" for each of the 9 sections an Item 8.5 – 3 with the following work: "Provide and place new concrete parapets" at a rate of US\$13 per meter. It does not contain an item for Guardrails or other forms of safety barriers.³⁵⁹

596. Further to a Protocol of 5 September 2002, the Employer instructed the Engineer on 26 December 2002 that 32.8 km "safety barriers" be installed at the rate of US\$13. The instruction specified the conditions of this installation and provided that, if more safety barriers would be installed, "a new unit rate will be applied in consultation with the contractor".³⁶⁰

597. The Engineer transmitted the letter to the Contractor on 27 December 2002 and repeated the instructions in the following terms:

"According to the above referenced letter, please proceed with the procurement, fabrication and installation of safety barriers with the conditions stated below:

- According to the approval of the Employer total length of safety barriers of three types (Steel guardrails Standard, Steel Guardrails with shock absorbers and concrete parapets) will be 32.8 km. Payment for installation of above mentioned barriers will be made on permanent contract price - \$13.00USD/mt.*
- The contractor's proposal of installation of solely steel guardrails at all sections without any concrete parapet is not acceptable for the Employer. However, if installation of more safety barriers of any type is required, a new unit rate will be considered upon consultation between Employer and the Contractor.*

³⁵⁹ Confirmed by testimony by Mr Asman at Tr 119.

³⁶⁰ Exhibit C-85.

- *The location of these safety barriers will be according to the survey done and submitted to the Engineer by the Contactor. (Letter No: TL/YPN/865 dated 05/04/2002)*
- *The contractor will be responsible for any delay connected with supply and installation of safety barriers.*³⁶¹

598. The Contractor proceeded with the delivery and installation of guardrails. On 22 August 2005, the Contractor wrote to the Engineer that on 14 August 2005, the length of installed guardrails and concrete parapets reached 32,776m and added:

“If any additional guardrail works are going to be executed, our rate for these additional guardrails is 70USD/m.”

599. This statement was followed in the letter by a table showing the quantities of additional guardrails and their locations with a total of 2’149m. The letter concluded by stating:

*“Please inform us within 1 week of this letter if the Employer and the Engineer agree to the additional 2’149m of guardrails by the Engineer at the rate given above. If the Employer does not reply to this letter within a week, the remaining guardrails installation works shall be considered to be excluded from the scope of works.”*³⁶²

600. The Engineer responded on 24 August 2005, referring to a list showing a total of 32.8 km of safety barriers, which had been prepared by the Contractor and on which the instructions of 27 December 2002 had relied. He continued by stating that, based on further instructions of the Employer, a revised list for safety barriers for Section A and Section B of the road had been prepared in consultation with the Contractor. The Engineer presented a table of the steel guardrails and concrete parapets approved for installation showing a total of 32,776kms. Referring to the Contractors statement that, after having installed 32,776km, 2’149m of steel guardrails remained to be installed, the Engineer stated:

“Therefore, either your account of installed length is incorrect or you have installed barriers in locations not in approved lists. Please clarify whether your account of installed guarded length is correct and if so provide the Engineer with details of authorization for you to depart from the approved list.

Subject to your substantiation that you received due authorization for departing from the approved list, as you have correctly pointed out in your letter (ref a), the Contractor should negotiate with the

³⁶¹ Exhibit C-86.

³⁶² Exhibit C-87.

Employer for a new rate for additional length you claimed to have installed departing from the list.

Notwithstanding the above substantiation and agreement of new unit rate, you are requested without delay to fulfil your obligation to install safety barriers as per the approved list.”³⁶³

601. The Contractor responded on 2 September 2005, attaching a list, “prepared and signed by the topographers of the Contactor and the Engineer on 22/04/2004” showing the length of guardrails in Section A of the road as “jointly measured”. The list shows a total installed guardrail length of 13’407.09m in Section A compared to 10’877m as per the approved list. The difference was explained in a message, also attached to the letter, which Mr Olmez, foreman of the Guardrail Installation Team, had sent to Mr Asman on 29 August 2005. It stated:

“When we had started installation of guardrails in Section A we were instructed by Mr Avazbek Chalakaev from JOC to install the guardrails in such a way that end terminals should not be within the km intervals given in the approved list, but outside. Therefore almost at every location, more guardrails were installed than the list.

Besides, at about 9 to 10 locations close guardrail groups were combined which was also instructed by JOC. Furthermore, guardrails were installed on the bridges although these were not covered by the list. As a result of also this, installation quantities increased in comparison with the list.”³⁶⁴

602. The Contractor’s letter concluded by stating:

“Consequently, we shall require the payment of the additional quantities which have been already installed according to the instructions of your site staff and any other additional quantities, which are necessary to be installed for the safety of the road users.

All the quantities in addition to the approved list will be installed on the understanding that these additional quantities will be paid to us according to our new rate.

Please be notified that we are commencing to install these additional quantities as of 2nd September 2005, unless we are instructed otherwise by you.”³⁶⁵

³⁶³ Exhibit C-88.

³⁶⁴ Exhibit 7 to Mr Asman’s witness statement; also attached to Exhibit C-89.

³⁶⁵ Exhibit C-89.

603. The Engineer announced on 5 September 2005, that he was undertaking a “review of guardrail installation list attached to your letter and assess the validity of reasons you have given for the additional length of guardrails”. The Engineer also announced that he would “recommend a basis for negotiations between the Employer and the Contractor for a new unit rate”.³⁶⁶
604. The letter did not express any objection to the continuation of the guardrail installation announced by the Contractor. The Tribunal invited the Respondent to provide any evidence at the hearing as to whether there had been any such objection. Failing such evidence, it would conclude that there was no objection.³⁶⁷ No such evidence was produced at the hearing or thereafter.
605. The Engineer reverted to the matter in his letter of 31 October 2005. The letter does not object to the Contractor proceeding with the installation of guardrails but explains the Engineer’s position concerning the measurement of the length of installed guardrails for which the Contractor is to be paid. The Engineer explained that, in calculating this length, he excluded “all ‘terminal’ length, guardrails installed on bridges (ref a) and for guardrails installed on Sargata bridge approaches.” Applying this approach to measuring the length of guardrails, the Engineer concluded that the length of guardrails remained below 32.8km and that, therefore, “there is no need for a new unit rate”.³⁶⁸
606. The claim was included in the Statement at Completion (under the heading “Road Furniture”). In his Determination, the Engineer rejected the claim, arguing that he had “dealt with this matter in detail and asked the Contractor to substantiate his claim”. He added that, in his view, the Contractor had failed to substantiate his claim and was not entitled to any payment beyond that certified.³⁶⁹
607. The Contractor then included the claim in the Notice of Arbitration for the same amount as that in the Statement at Completion, US\$202’304.20.

10.2 The issues

608. The Claimant relies on the Employer’s and the Engineers instructions of 26 and 27 December 2002, relating to the location where guardrails had to be installed.

³⁶⁶ Exhibit C-90.

³⁶⁷ Tr p. 141 and 142.

³⁶⁸ Exhibit C-92.

³⁶⁹ Determination p. 3.

609. The Respondent denies that additional quantities and the new rate had been validly agreed.
610. The issues which must be decided therefore concern the question whether the length of Guardrails installed exceeds 32.8km and whether any such exceeding length was instructed by the Engineer.
611. If it is found that the length of Guardrails instructed and installed exceeds 32.8km, what is the rate to be applied to the exceeding length?
612. Since the claim was presented in the Statement at Completion and, following the Engineer's determination, in the Notice of Arbitration, the Respondent's general defence based on time bar is rejected for the reasons explained above in chapter 7.1.

10.3 The difference about the method of measurement

613. The Contractor and the Engineer differed about the quantity of Guardrails installed. When comparing the statements of the Contractor and of the Engineer about these quantities, one notes a difference in the method of measuring the length of guardrails installed. This difference must be considered first so that the information provided by either of them can be properly compared.
614. The Contractor measured the length of installed guardrails by reference to the total length installed while the Engineer certified only what he called the "guarded length of guard rails",³⁷⁰ excluding in particular the terminals at each end of an installed section.
615. In his witness statement, Mr Asman reported an explanation given by the Engineer for its position concerning the measurement:

*"The Engineer came up with an argument that the guarded length of the guardrails should be paid and this was less than the total length of the guardrails installed. He intended not to count the two end sections of the guardrails, which was never raised before and not acceptable at all."*³⁷¹

616. In his letter of 31 October 2005, the Engineer explained the distinction between, on the one hand, "guarded length" of the Guardrails and, on the other hand, "terminals", to which he also referred to as "anchorage zone". The Respondent's expert described this latter part of the guardrails as "end terminals" or "sloping

³⁷⁰ Engineer's Determination, p. 3.

³⁷¹ WS Asman, p. 8.

sections”;³⁷² they are those parts at the end of each section of the guardrails which gradually descent into the ground. Mr Alp explained at the hearing that these end terminals are around 50m on each side of a section of installed guardrails.³⁷³

617. The Engineer justified the exclusion of the end terminals by stating that “terminals do not guard veering vehicles”.³⁷⁴ The Engineer does not provide any further justification for this exclusion; nor did the Respondent.

618. The Tribunal considered that, from the perspective of safety design, relying on the “guarded length” of guardrails may well have a useful function. However, when measuring installed material for the purpose of paying the Contractor for materials provided and work performed, the material that was actually installed must be considered.

619. Both the Claimant’s and the Respondent’s expert have adopted the same view. Mr Kennedy wrote in the Joint Report:

*“The experts agree that the length of guardrails should be measured on the actual length, irrespective of height thereof, terminals and slopings should be included.”*³⁷⁵

620. Mr Taft confirmed this in the Joint Report,³⁷⁶ relying on the explanations in his first report where he had provided the following explanation:

*“I note that Mr Kennedy states that guardrails are measured for the actual length irrespective of height by reference to extracts of a method of measurement included at Appendix A1/8 of his report. The attachments to Mr Kennedy’s report appear to be extracted from CESMM [Civil Engineering Standard Method of Measurement]. I cannot see a reference within the Contract that the Bills of Quantities are measured on the basis of CESMM however I do note that within the ‘General specifications’ part of the Contract, item 8.5.3 refers to the measurement and payment of guardrails which states ‘guardrails shall be measured by the linear metre ...’. On this basis, I consider that the length measured and applied to the rates should be measured on the actual length irrespective of height (and therefore terminals and sloping sections should be included). ...”*³⁷⁷

³⁷² Experts’ joint report, p. 15 of 16.

³⁷³ Tr. p. 134.

³⁷⁴ Letter of 31 October 2005, Exhibit C-91.

³⁷⁵ Joint Expert Report, p. 7 of 16.

³⁷⁶ Joint Expert Report p. 15 of 16

³⁷⁷ Taft I, paragraph 3.4.12, references omitted.

621. On this basis the Tribunal concludes that the length of installed guardrails must not be measured, as the Engineer has done, by reference to the “guarded length” but by reference to the full length of guardrails installed.

10.4 The length of Guardrails installed

622. The Contractor provided the following information about the length of guardrails and concrete parapets:

- i) On 22 August 2005, the Contractor wrote that as of 14 August 2005, the quantity of installed guardrails and concrete parapets had reached 32’776m. The Contractor specified the type and location of additional guardrails that remained to be installed, showing a total of 2’149m.
- ii) In the letter of 2 September 2005, the Contractor refers to a joint measurement of the length of guardrails in Section A and produced copy of a list with measurement, dated 22 June 2005 and bearing two signatures which the Contractor identified as “topographers of the Contractor and the Engineer”. The Contractor stated that “the total installed guardrails length is 13’407.09m whereas this should be 10’877m according to the approved list”.³⁷⁸ The difference is 2’530.09m.
- iii) In his letter of 19 December 2005, the Contractor specified the “actual installed quantities of safety barriers” as 35’108.19m; he compared it to a limit of 32’776.13m beyond which he said the rate for “excess quantities” would apply. For the difference of 2’332.06m the Contractor claimed application of the rate of US\$70.³⁷⁹
- iv) In the Statement at Completion of 17 March 2006, the Contractor claimed that he installed 32’776.13m at the rate of US\$13; and 2’890.06m “excessive quantity”³⁸⁰ for which he sought payment at a rate of US\$70 per meter and a total of US\$.202’304.20.³⁸¹ The “excessive quantity” so claimed is composed of:

³⁷⁸ Exhibit C-89.

³⁷⁹ Exhibit C-93.

³⁸⁰ Statement at Completion, Part B, 368m in Section 3 : 8 (p. 39) and 2’522.06m in Section 9 : 8 (p. 45).

³⁸¹ Ibid. Summary of Claims (p. 1).

- Additional guardrail
(as per the letter of 19 December 2005) 2'332.06
- Reinstated guardrail 368.00
- New concrete parapets 190.00³⁸²

623. The Engineer wrote on 14 December 2005 that, based on his own assessment, 22'667m of guardrail were installed.³⁸³ He seems to have certified 32'776.13m at the rate of US\$13.³⁸⁴ As explained above, based on his own method of measurement, the Engineer denied the claim for the additional length claimed by the Contractor.
624. The Engineer did not provide any measurement on the method applied by the Contractor which the Tribunal found relevant.
625. The Parties' experts have not made their own measurements of the guardrails.
626. In these circumstances, the Tribunal must rely on the data provided by the Claimant to the extent to which the Respondent or the Engineer were given an opportunity to verify these data. The claim is based on the quantities presented in the Contractor's Statement at Completion and is broken down as shown above.
627. The Contractor's letter of 19 December 2005 expressly requested the Engineer to review his assessment of the guardrail installed. There is no evidence that the Engineer contradicted the measurement on the basis of the method which the Tribunal accepted, or provided a different quantity. The same applies with respect to the Statement at Completion; the quantities relevant to the present claim, applying the correct method of measurement, were not contested.
628. When calculating the additional guardrail quantities, the Tribunal must bear in mind, as pointed out by Mr Taft,³⁸⁵ that up to 32'800m the rate of 13US\$ in the Bill of Quantities applied. The additional quantities for which a new rate had to be agreed are those above 32'800m as specified in the December 2002 instructions and not 32'778.13, the quantity certified by the Engineer and described by the Claimant in the Statement at Completion as "excessive quantity" for which a new rate had to be applied.
629. Therefore, **21.87m must be paid at US\$13 and 2'310.22m at the new rate.**

³⁸² Kennedy I, paragraph 57 with supporting documentation.

³⁸³ Exhibit C-92.

³⁸⁴ See Report Taft I, paragraph 3.4.6.

³⁸⁵ Joint Report, p. 15 of 16.

10.5 The rate to be applied for the additional quantities

630. The Claimant seeks payment for the entire “excessive quantity”, in the length of 2’890.06m with payment at the rate of US\$70.
631. Respondent objects to the Claim on the grounds that “the Claimant did not furnish any proofs that it had agreed with the Respondent the installation of additional safety fences”.³⁸⁶ It also stated that the new rate for additional guardrails had not been agreed.³⁸⁷
632. The Tribunal has concluded that the Engineer’s method of measurement was not correct. The quantity of safety barriers was higher than what the Engineer certified. Even though the Contractor had informed the Engineer on 22 August 2005 that the quantity of 32’776m had been reached,³⁸⁸ the Engineer gave instructions to continue installing safety barriers:

“Notwithstanding the above substantiation and agreement of new unit rate, you are requested without delay to fulfil your obligation to install safety barriers as per the approved list.”³⁸⁹

633. The Employer’s instructions of 26 December 2002 clearly foresaw the possibility that the quantities to be installed could exceed 32.8km. The “excess” which did occur is due to the difference in the method of measurement. The Tribunal therefore concludes that the full quantities installed must be paid.
634. What remains to be decided is the rate at which these quantities must be paid.
635. The Claimant seeks payment at the rate of US\$70 for all quantities exceeding 32’776m. It relies on its letter of 22 August 2005 in which it announced this rate for all installations above this limit. This letter stated, as quoted above, the rate which the Contractor intended to apply to the additional quantities specified in the letter. It concluded by stating:

“Please inform us within 1 week of this letter if the Employer and the Engineer agree to do the additional 2’149m of guardrails proposed by the Engineer at the rate given above. If the Engineer does not reply to this letter within a week, the remaining guardrail installation works shall be considered to be excluded from the scope of works.”

³⁸⁶ SoC, paragraph 54.

³⁸⁷ R-PHB, p. 20.

³⁸⁸ Exhibit C-87.

³⁸⁹ Exhibit C-88.

636. In his reply of 24 August 2005 the Engineer, as explained above, contested the Contractor's statement about the length of the guardrail installation. As to the rate, the Engineer pointed out that the rate had to be negotiated with the Employer. The letter concluded by the Engineer giving the following instruction:

*"Notwithstanding the above substantiation and agreement of the new unit rate, you are required without delay to fulfil your obligation to install safety barriers as per the approved list."*³⁹⁰

637. The Tribunal concludes that, at that time, there was no agreed rate with respect to the additional quantities of guardrails; but the Engineer nevertheless instructed the Contractor to proceed. Therefore, a reasonable rate had to be agreed according to the instructions given in December 2002 by the Employer and the Engineer.

638. After the Engineer had instructed the Contractor to proceed with the installation of additional guardrail, neither the Engineer nor the Employer fixed a new rate for the additional guardrail; nor did they agree to the rate which the Contractor had proposed. Indeed the Engineer expressly refused to propose or fix a new rate, stating that "there is no need for a new unit rate".³⁹¹

639. The Contractor indeed installed additional quantities on the clear instructions of the Engineer. Both the Employer and the Engineer had undertaken to agree to a new rate. Thereby, they expressed the view that the rate contained in the Contract for concrete parapets was not applicable to the guardrails which the Contractor was instructed to install and that, above 32.8km, the rate for such parapets was not applicable.

640. Therefore, a "suitable rate" had to be agreed upon between the Engineer and the Contractor according to Clause 52.1 GCC. The CPA provides a modification to Clause 52.1; but this modification concerns multiple currencies and is not relevant here. Therefore, the Engineer had to agree with the Contractor on a new rate for the guardrails, as this had been confirmed in the instructions of December 2002.

641. The difference between the Contractor and the Engineer that resulted from the Engineer's refusal to even consider the need for fixing a new rate constitutes a dispute which can be brought before the Arbitral Tribunal according to Clause 67 GCC, as the Contractor has done.

³⁹⁰ Exhibit C-88.

³⁹¹ Letter of 14 December 2005, Exhibit C-92.

642. According to Clause 67.3, the Tribunal has:

“... full power to open up, review and revise any decision, opinion, instruction, determination, certification or valuation of the Engineer related to the dispute”.

643. The Tribunal therefore has power to revise the Engineer’s decision by which he refused to fix a new rate for guardrails in a length above 32.8km. In so doing, the Tribunal may replace the Engineer’s decision by what it considers the correct decision which the Engineer should have taken. This includes fixing the “suitable rate” for guardrails.

644. It follows that the Contract contains a detail mechanism which allows the Tribunal to fix the rate which the Engineer failed to agree with the Contractor. This rate takes the position of a contractual rate.

645. Contrary to what the Respondent argued,³⁹² Article 665 KCC is not applicable here. This provision applies to situations where, without instructions from the employer, the contractor faces circumstances which require additional work. Here the Contractor was instructed to perform additional work. Moreover, Article 665 reserves different regulations in the contract. As just explained, the new rate which the Tribunal may have to fix for the defaulting Engineer takes the position of a contractual rate.

646. Concerning the “suitable rate” for the additional guardrails, the Tribunal noted that, in the correspondence during course of 2005, the Contractor claimed US\$70 per meter. On this basis, the Contractor quantified his claim for US\$202’304.20. However, no support was provided for the calculation of this rate.

647. At the hearing, Mr Asman tried to explain the difference between the rate of US\$13 in the Bill of Quantities and the rate of US\$70 in the claim for additional guardrail. He referred to the time that elapsed between the bid and the time when the guardrail were delivered and installed. He also mentioned that the guardrails had to be imported from Turkey; but he did not provide any calculation to support the claimed rate and his explanations were not of a nature to justify a rate anywhere near the US\$70 claimed.³⁹³

648. Instead of supporting the US\$70 rate, the Contractor produced with the Statement of Claim, Mr Kennedy’s first expert report which contains the following passage:

³⁹² R-PHB, p. 20.

³⁹³ Tr, pp. 120 to 121.

*“I am instructed that the purchase price in Turkey for guardrails was US\$12.00 per metre and that the transportation costs were a further US\$3.50 per metre and deriving a total of US\$15.50 per metre and to which is added approximately 35% for labour totals approximating US\$20.00 per metre.”*³⁹⁴

649. Mr Kennedy considered a rate of US\$20 as reasonable and confirmed this in the Joint Report.³⁹⁵ Mr Taft agreed that US\$20 per metre is a “reasonable rate” for guardrails.³⁹⁶
650. The Tribunal has no information which would justify a valuation different from that of the experts of both Parties. It accepts that the rate for additional guardrail be **US\$20 per meter**.
651. The Claim as quantified by the Claimant’s expert also includes 368m of “**guardrails dismantled and re-instated** due to patchwork in Section A”. The Engineer had accepted as a matter of principle that the Contractor was “entitled to be compensated for removal, re-installation and for new components used as replacement to damaged/un-recovered components”; but qualified this acceptance by adding that this “entitlement is only for the locations where pavement/embankment settlement was not your liability”.³⁹⁷
652. The Claimant produced a list with precise indication of the locations of the work for which it claimed.³⁹⁸ This list shows a “length to be paid” as 368m. This list has not been contested by the Respondent. Since the Engineer accepted as a matter of principle that the Contractor was entitled to compensation and none of the locations for which the Claimant seeks compensation was contested, the Tribunal **accepts the claimed length of 368m**.
653. The Claimant’s expert quantifies this claim at US\$ 20per metre.³⁹⁹ However, he does not explain how he reached this rate. Obviously, dismantling and re-installing existing guardrails cannot be quantified in the same manner as purchasing guardrails in Turkey, transporting them to the site and installing them.
654. Mr Taft contests the use of the US\$20 rate by Mr Kennedy for this claim. He allows US\$5 for dismantling and US\$5 for re-installing them, i.e. a total of 10US\$.

³⁹⁴ Kennedy I Report, paragraph 65.

³⁹⁵ Joint Report p. 7 of 16.

³⁹⁶ Joint Report p. 15 of 16.

³⁹⁷ Letter of 14 December 2005, Exhibit C-92.

³⁹⁸ Attachment A1/8 at p. 3 of Kennedy I Report.

³⁹⁹ Kennedy I Report, paragraph 57.

655. The Tribunal noted that in Mr Kennedy’s calculation of the additional guardrails, some 4.5US\$ was allowed as the cost of the labour for installing the guardrails. The 5US\$ allowed by Mr Taft each for dismantling and re-installing thus appears as reasonable. The Tribunal accepts that the work be **valued at US\$10 per metre**.
656. Finally, the Claimant seeks payment for 190m of **new concrete parapets**. In support, it relies on a Work Record Sheet, dated 20 December 2005 and signed by the Contractor and the Engineer. The sheet requires the Contractor to “Provide and place new concrete parapets” for total of 190m at identified locations. It has not been contested that these parapets were placed and have to be paid for.
657. By December 2005 the length of safety barriers had exceeded the 32.8m limit. A new rate had to be applied. Mr Kennedy applied the rate of US\$20;⁴⁰⁰ Mr Taft accepts that this is a “reasonable rate”.⁴⁰¹ The Tribunal has no reason to disagree. It accepts that **190m of new parapet be paid at US\$20**.

658. In conclusion, the Tribunal decides that the Claimant is entitled to the following payment:

21.87m at	US\$13	284.31
2’310.22m at	US\$20	46’204.40
368.00m at	US\$10	3’680.00
190.00m at	US\$20	<u>3’800.00</u>
Amounting to a total of		53’968.71

⁴⁰⁰ Kennedy I Report, paragraph 57.

⁴⁰¹ Joint Report, p. 15 of 16.

11. THE CLAIM FOR VALUE ADDED TAX

659. The Claimant seeks US\$185'748.62 as reimbursement of VAT paid on small purchases in the Kyrgyz Republic.
660. The Respondent denies the claim, arguing that the contractual VAT exemption concerned only payments made by the Employer to the Contractor. Moreover, the Respondent argues that the Claimant failed to follow proper procedures for claiming VAT reimbursement.
661. The Contract provides in Clause 73.2 CPA for an express exemption for "Value Added Tax on payments from the Employer to the Contractor". The present claim does not concern VAT on such payments. The Respondent argues that Clause 73.2 does not apply to the VAT reimbursement sought here by the Claimant.⁴⁰²
662. The Claimant argues that, in addition to the VAT exemption on payments by the Employer to the Contractor, it did not have to pay VAT on purchases for major items in the Kyrgyz Republic.⁴⁰³ At the hearing, Dr Gokyayla explained that "the Minister of Finance provided Entes with a document demonstrating that Entes had VAT exemption";⁴⁰⁴ adding that "for a big item like bitumen, gas, oil et cetera, this VAT exemption document worked and Entes did not pay VAT".⁴⁰⁵ Mr Ozkoseoglu explained:

*"So, if we were to procure 500'000 tonnes of diesel, that would take one paper permit from the Ministry of Finance, and the Ministry of Transport to Ministry of Finance and then this transaction would take place."*⁴⁰⁶

663. In his witness statement, Mr Alp summarised the situation as follows:

"As ENTES we were exempt from VAT during the course of the project and we did not pay for VAT for most of the purchases we made for the Project. It was easy to do this for big quantity purchases but it was not practical or easy for small purchases because we had to get the exemption documents each time. For example, we purchase 500 \$ worth of stationary for JOC from a local shop. Of course the shop does not know anything about our VAT exemption and charges us the VAT. The total of these VAT's

⁴⁰² SoD, p. 28 and Final Statement, p. 21.

⁴⁰³ Post Hearing Brief, paragraph 449.

⁴⁰⁴ Tr 507.

⁴⁰⁵ Tr 508.509.

⁴⁰⁶ Tr 513.

*paid were submitted to the Engineer at the end of the project but the Engineer did not certify them.*⁴⁰⁷

664. The purchases to which the claim relates were for minor items, such as purchases made for the Engineer like “tyres for their cars, office supplies” or “food supplies for the site office and other things”.⁴⁰⁸ In the words of Mr Ozkoseoglu:

*“So, if we were to pay tomatoes, potatoes, office supplies, that would mean that each individual item would mean a permit from the Ministry of Transport to the Ministry of Finance, so we could not do this.”*⁴⁰⁹

665. In the Statement at Completion of 17 March 2006, the Contractor included a claim item in the above mentioned amount for VAT receivables, explaining the following:

*“The Contractor was exempt from VAT in Kyrgyz Republic. The amount of VAT that the Contractor has actually paid and has become a receivable from Employer is attached.”*⁴¹⁰

666. The attachment referred to in this passage shows simply the total amount of VAT paid in each of the years 2000, 2001 and 2002 in som and the corresponding US Dollar amount.⁴¹¹

667. The Claimant explains that, following a request by the Engineer in a letter of 11 April 2006,⁴¹² it submitted on 17 April 2006, “2 folders of VAT receipts in substantiation of its claim to the Engineer”.⁴¹³ The Contractor’s letter of 17 April 2006 consists of a list of 9 items of documentation communicated to the Engineer; one of which is entitled “VAT receipts – 2 FOLDERS”.⁴¹⁴ The Claimant states that, these folders contained its evidence for the quantum of this claim and that it has not kept any copies.

668. The Engineer addressed the claim in its Determination of 18 May 2006, stating:

“The Engineer cannot verify the validity of the claim from the documents submitted by the Contractor. It must be pointed out that VAT payments might have been inadvertently compensated as part of Special Material price escalation (due to uncertainty

⁴⁰⁷ WS Alp, paragraph 33.

⁴⁰⁸ Ozkoseoglu at Tr 511.

⁴⁰⁹ Tr 513.

⁴¹⁰ Statement at Completion, Part B, Hill International Expert Report, Folder N° 7, Tab 19.

⁴¹¹ Ibid. Tab28.

⁴¹² Exhibit C-103

⁴¹³ SoC, paragraph 310.

⁴¹⁴ Exhibit C-101.

whether procurement price includes VAT or not). It is also necessary for the Contractor to substantiate why he did not use his VAT exemption status to exclude VAT for purchases he made for the project in the Republic of Kyrgyzstan.”⁴¹⁵

669. The claim was then included in the Notice of Dissatisfaction of 22 December 2006 and in the Notice of Arbitration of 15 January 2009. For the reasons explained above in chapter 7.1, the Respondent’s general defence based on time bar therefore must be rejected.
670. The only contractual provision on which the Claimant relies in support of this claim is Clause 73.2 CPA.⁴¹⁶ The quoted passage above shows that this clause provides VAT exemption for payments by the Employer to the Contractor and not for a claim for VAT paid on purchases from third parties.
671. The Employer arranged a procedure through which the Contractor benefitted from VAT exemption with respect to purchases from third parties. But the Contractor did not use this procedure in order to obtain VAT exemption for the smaller purchases which form the basis for the present claim. It may well be that this procedure was not suited for such smaller purchases.
672. The Tribunal notes, however, that, throughout the performance of the work, the Claimant did not raise the matter with the Engineer or the Employer, in order to find an alternative and more practicable approach. Mr Ozkoseoglu was expressly asked whether the Contractor made “an application or a request to the engineer or to the employer to change the procedure so that it is workable for the small items”. The Contractor did not do so.⁴¹⁷ The first time that the Contractor claimed for the VAT on the small purchases was in the Statement at Completion.⁴¹⁸
673. At the hearing, the Claimant argued that the Contractor had intended to use the VAT payments made on small purchases as a credit in the final settlement with the tax authorities.⁴¹⁹ In the Post Hearing Brief, the Claimant developed this basis for the claim: “The Claimant maintains that there would have been the possibility to set off the claims the Government had against the Claimant with the amount of VAT paid on the small amounts accounts.”⁴²⁰ The Claimant also explained:

⁴¹⁵ Exhibit C-2, p. 11, item 4.9.

⁴¹⁶ SoC, paragraph 305 and Statement of Legal Grounds, paragraph 209.

⁴¹⁷ Tr 514.

⁴¹⁸ Tr 510.

⁴¹⁹ Tr 516.

⁴²⁰ PHB, paragraph 457.

“The legal ground of this claim is the Employer’s obligation to cooperate and to eliminate the obstacles of the project. Article 671 of Kyrgyz CC provides for the cooperation of the parties under construction work contracts and the Employer’s duties to eliminate the obstacle whenever they occur.

The Claimant maintains that as part of its obligations to cooperate and eliminate the obstacles the Employer Ministry could and should have made the necessary arrangements with the Claimant to set off its tax debt (such as income tax) to the Kyrgyz Finance Ministry.”⁴²¹

674. Mr Ozkoseoglu stated the Contractor communicated directly with the tax authority:

“In return they asked for an authorisation letter from the Ministry of Transport, and that letter came through the engineer’s approval, which never came.”⁴²²

675. As the testimony progressed, the account of the steps taken became less and less precise. In the end the Tribunal summarised the explanations in the following terms:

“The only time when you requested the engineer or the employer to certify that you paid this VAT so that you could set it off against your tax obligations was in the statement at completion?”

Mr OZKOSEOGLU: That is correct, sir.”⁴²³

676. Now, the above examination of the relevant passages of the Statement at Completion has shown that there is no reference to a certification for the purpose of enabling the Contractor to set off the VAT paid against the outstanding claims from the tax authorities. Quite to the contrary, the Contractor claimed the VAT not for set off against such claims from the tax authorities but sought certification from the Engineer for payment by the Employer.

677. The Tribunal concludes that there is no evidence that the Contractor made an attempt to recover the VAT payments by way of set off against other tax claims and that he was prevented from doing so by the Engineer’s denial of the claim in the Statement at Completion.

678. In these circumstances, the Tribunal need not examine whether the Contractor was entitled to such a set off and, if so, whether the amount of such a set off was that claimed in the arbitration. The

⁴²¹ PHB, paragraphs 451 and 452.

⁴²² Tr 518.

⁴²³ Tr 519.

Claimant has failed to establish any responsibility of the Respondent for this claim. **The claim must be dismissed.**

12. THE CLAIM FOR ROAD AND EMERGENCY TAX

679. The Claimant seeks reimbursement of US\$39'969.47 on account of road and emergency tax paid to the Kyrgyzstan Republic.
680. The Respondent accepts, as a matter of principle, that the Claimant is entitled to the reimbursement of payments made on account of this tax; but it requires evidence to show that such payments were made and the amount of the payments.
681. The Claimant relies on item 14 of the Minutes of Contract negotiations:
- “The local taxes of 0.8 % (road tax) and 1.5 % (emergency tax) are not included in the unit rates amounting to approximately US 896'000.-. This amount will be reimbursed from the local portion to the Contractor if the taxes are paid to the government.”*
682. It is undisputed that, during the course of the performance of the work, the Contractor included in his payment application amounts for road and emergency tax and that these amounts were certified and paid by the Employer. The amount in this claim concerns, according to the Claimant, Certificate N° 35 with respect to which the Engineer deducted the sum of US\$39'969.47.⁴²⁴
683. The claim was presented in the Statement at Completion under the heading of Works Executed and described as follows: “Road tax and emergency tax amounts deducted in Certificate No. 35 are included in this certificate”.⁴²⁵
684. In his Determination, the Engineer responded by stating that he had
- “... dealt with this subject in detail in the past and required the Contractor to substantiate his claim. He has not substantiated his claim.”*⁴²⁶
685. The claim was included in the Notice of Dissatisfaction and in the Notice of Arbitration. For the reasons explained above in chapter 7.1, the Respondent's general defence based on time bar therefore must be rejected.
686. At the hearing the Respondent stated:

⁴²⁴ SoC, paragraph 262.

⁴²⁵ Hill International Expert Report, Folder 7, Tab 18.

⁴²⁶ Section 4.1 at p. 3.

*“Respondent is ready to make the payment for the road tax and emergency tax if they will give us the receipts that they paid, because otherwise they will not be able to release money from the Ministry. It is obligatory if they are paying they should keep their receipts”.*⁴²⁷

687. The Claimant responded the following day:

*“Claimant looked at his remaining documents but we were informed that the originals of the documents proving that these taxes were paid were delivered as an attachment of each IPC [Interim Payment Certificate] to the employer or to the engineer.”*⁴²⁸

688. The Tribunal invited the Claimant to identify the IPC with which the supporting documentation had been submitted. Dr Gokyayla announced that she would consult with the client on this.⁴²⁹

689. In its Final Submission, the Respondent referred to this exchange and confirmed its willingness to pay as follows:

*“... the Respondent agreed to pay to the Claimant the road and emergency tax, provided that the Claimant would fulfil the requirement of the Arbitral Tribunal and submit the documents proving that the Claimant had effected respective payments to the state”.*⁴³⁰

690. The Claimant also relied on the quoted statement as an acceptance of liability. It did not provide any additional evidence for the payment of the tax, nor did it identify the IPC to which the relevant payment documentation was attached. It merely stated that “the Engineer has not challenged that the Claimant paid this tax to the Kyrgyz authorities”.⁴³¹

691. The Tribunal considered the information according to which these two categories of taxes were levied on all businesses in Kyrgyzstan and were assessed on the profit or revenue of the business.⁴³² Mr Asman explained that the Contractor “was paying [the tax] to the related tax department and we were putting these receipts in our certificates for repayment”.⁴³³ Indeed, the IPCs which have been produced during the course of the arbitration contain a standard

⁴²⁷ Tr 550 – 551.

⁴²⁸ Tr 564 (Dr Gokyayla).

⁴²⁹ Tr 565.

⁴³⁰ FS paragraph 4.1.3.

⁴³¹ PHB, paragraph 422.

⁴³² Tr 110 and 111.

⁴³³ Tr 108; similarly Tr 109.

entry for “provision of Emergency Tax” and “Provision of Road Tax”.⁴³⁴

692. The Certificates produced do not show any indication that documents evidencing the tax payments in question were attached. In any event, the Respondent rightly points out that it would be surprising that the Contractor passed the originals of supporting documentation for the tax payments to the Employer or the Engineer with the IPC without keeping at least a copy of this documentation:

“According to the laws of Kyrgyz Republic, they were to keep accounting books and they could not pass the originals of the documents to the employer.”⁴³⁵

693. The Tribunal also considered the letter of the Engineer of 20 June 2008 in which he addressed the issue of these tax payments. In this letter, the Engineer does indeed state that the:

“... certificates have included tax amount in excess of the total due. We requested you to submit original invoices/receipts of tax payments and cumulative amount in tabular form. However, you have not responded to our letters”.

694. The letter continued by calculating the tax due and the tax reimbursed and concluded that up to Interim Certificate N° 33, the Contractor had received an “apparent net overpayment” of US\$91’162.90. The letter concluded by the following passage:

“Please be notified that we will adjust this over-reimbursement in your next interim payment certificate as an interim measure. A final tally of reimbursements will be made at the final certification stage at which time you will be required to submit us with ‘Certified true copies’ of tax receipts.

In the meantime, you may apply for refunding (or offset against other taxes you may owe) of the above amount from tax authorities producing your tax receipts and a letter from the Employer certifying the above account.”⁴³⁶

695. There is no evidence to show that the Contractor protested against the statement in this letter, pointing out to the Engineer that he was wrong and that the originals of the tax receipts or other evidence had been produced.

⁴³⁴ Exhibit C-82 (Monthly Invoice for Work, N° 25) and C-83 (Monthly Invoice for Work N° 35).

⁴³⁵ Tr 565 (Ms Smanalieva).

⁴³⁶ Exhibit C-84.

696. The Tribunal concludes that there is no evidence to show that the Contractor produced any documentation that would establish that in effect he paid more to the tax authorities on account of road and emergency tax than was actually reimbursed to him by the Employer.

697. **The claim is dismissed.**

13. THE CLAIM FOR CONTRACTOR'S EQUIPMENT DAMAGED DURING THE POLITICAL UNREST

698. The Contractor claims US\$39'490 for damage to the Contractor's equipment during political unrest in April 2005. The identified damage concerns "electrical feeding cables of batching plant".

699. In addition to the general objection based on jurisdiction and time bar, the Respondent denies the claim in particular in arguing that the Claimant failed to establish a causal link between the unrest and the damage claimed.

700. In a letter dated 14 May 2005, the Contractor referred to the "current situation which exists in the Employer's Country". He explained that on the day before his "Turkish staff was stopped ... by a crowd of over 150 protesting locals and were threatened and denied through passage ...". The letter continues to state:

"During the week, some unknown protestors cut the electric cable feeding our batching plant and stole the cables. Consequently we could not operate the plant."⁴³⁷

701. The Contractor also produced with a letter of 22 April 2005 two police certificates, one confirming that on 5 April 2005 the "electrical cables of batching plant" had been cut and stolen, the other confirming the incident of 13 April 2005 with 150 "local protesters".⁴³⁸

702. In the Statement at Completion, the Contractor claimed the above mentioned amount for "damage to the Contractor's equipment during political unrest and revolution in Kyrgyzstan in April 2005". The attached quantification of the claim consisted of a number of items of which the smallest was that for the cables (US\$490). The principal items were described as "Damaged Parts of the Batching Plant" (US\$15'000), "Damaged Precast Elements" (US\$5'000), "Installation Workmanship" and "Repair Workmanship" (US\$16'000).

703. In his Determination of 18 May 2005, the Engineer denied the claim, giving the following reason:

"The Engineer awards zero amount because the damage due to unrest was not the fault of the Employer. The Engineer based his

⁴³⁷ Exhibit C-74.

⁴³⁸ Exhibit C-75.

determination on Sub-clause 54.2 of GCC ‘Employer not liable for damages’”.

704. The claim was not included in the Notice of Dissatisfaction of 22 December 2006 nor in the Notice of arbitration of 15 January 2006. In the arbitration, the claim was first presented in the Statement of Claim of 15 March 2010.
705. The Tribunal concludes that more than three years elapsed since the Engineer’s determination of 18 May 2005. For the reasons explained above in chapter 7.1, the claim is time barred.
706. In any event, the Tribunal notes that, even if it had not been time barred, the claim would have failed for lack of a legal basis and for insufficient quantification.
707. In order to present a legal basis for this claim, the Claimant refers to Clause 54.2 and 65.1 to 65.3 GCC and 20.4 CPA.⁴³⁹ These clauses provide some exemptions of liability for the Contractor. Only Clause 65.3 GCC provides a basis under which the Contractor is “entitled to payment”. However, the payment provided in this clause is for damage and destruction to the Permanent Works and to “materials and Plant”. Plant is defined in Clause 1.1 (f) (iv) as “machinery, apparatus and the like intended to form or forming part of the Permanent Works”. It is distinguished from the “Contractor’s Equipment”. The batching plant and cable for its operation form part of the Contractor’s equipment; damage to them does not entitle the Contractor to any payment.
708. Moreover, there are serious reasons supporting the Respondent’s objections concerning the link of causation between the events of unrest on which the Claimant relies and the claimed damage. The Claimant makes no attempt to link theft of cable with the unrest which occurred only 8 days later and to show that this theft was not just an ordinary criminal act, rather than a Special Risk according to Clause 65 GCC. Similarly, it is difficult to see how the theft of cable worth US\$490 led to the other items forming part of the Claimant’s calculation.
709. For all these reasons **the claim must be dismissed.**

⁴³⁹ In particular SoC pp. 61 – 63.

14. INTERAKT CASE

710. The Claimant seeks payment of US\$379,519,65 as damages for having had to pay to Interakt, its subcontractor for drainage works, this sum due to “decisions of the Courts of Kyrgyzstan”.⁴⁴⁰ The Claimant attributes these decisions to “incorrect information submitted by the Employer to the Court Officials”.⁴⁴¹
711. The Claimant explains that the works performed by Interakt were defective and rejected by the Engineer. According to the Claimant, it was eventually paid for these works, but only after it had redone the work of Interakt at its own expense.⁴⁴² Therefore, it refused to pay Interakt but, as a result of the court decisions, had to make the claimed payments to Interakt.
712. The Claimant relies on Article 9 KCC, providing that a person intending to cause harm and committing abuse of rights shall pay damages.
713. In support of the quantification of the amount claimed, the Claimant submits a number of documents apparently in Russian without translation. The Claimant’s expert stated: “I cannot understand such documents and I am therefore unable to comment”.⁴⁴³
714. The Respondent objects that the claim falls outside the scope of the arbitration clause and therefore the present Tribunal has no jurisdiction.⁴⁴⁴ On the merits the Respondent states that it did not intervene voluntarily but was made a party to the court case.⁴⁴⁵ It denies that its representative made false statements and argues that, if the Claimant was of the view that the court decision was the result of false statements, the Claimant should have appealed the decision and pursued the person who had made the statement.⁴⁴⁶
715. Concerning the question of jurisdiction, Clause 67.1 gives a very wide scope to the arbitration clause. It applies to any “dispute of any kind whatsoever” which “arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the works”. The present claim concerns the performance of a part of the work and allegedly wrongful payment for this part to a subcontractor as a result of the conduct of the

⁴⁴⁰ SoC, paragraph 331.

⁴⁴¹ SoC, paragraph 333.

⁴⁴² Claimant’s Post-Hearing Brief, paragraph 466.

⁴⁴³ First Report Kennedy, paragraph 84.

⁴⁴⁴ SoD, paragraph 111; Rejoinder, paragraph 876.

⁴⁴⁵ SoD, paragraph 118 and Exhibit R-41.

⁴⁴⁶ SoD, paragraphs 117 and 120.

Employer. The dispute is in “in connection with” the execution of the works. The Tribunal has jurisdiction.

716. The Tribunal points out, however, that its jurisdiction does not concern the question as to whether the courts of the Kyrgyz Republic have correctly decided the dispute between Entes and Interakt. This tribunal merely has to decide whether the Respondent wrongfully intervened in the relations between the Contractor and one of his subcontractors and caused damage to the Contractor in the amount claimed.
717. The claim was included in the Statement at Completion and was denied in the Engineer’s Determination on the grounds that it did “not fall within the jurisdiction of the Engineer’s Decision”.⁴⁴⁷
718. However, the claim was included neither in the Notice of Dissatisfaction nor in the Notice of Arbitration. It was raised only in the Statement of Claim of 15 March 2010, more than three years after the claim had been denied by the Engineer’s determination. The claim is time barred.
719. In any event, even if it would not have been time barred, it would have had to be rejected. The Contractor has failed to show that the decision of the courts in Kyrgyzstan were wrong to order the Claimant to make the payments and, if they had been wrong, that this was caused by the Respondent.
720. The Contractor has failed to produce any documents concerning the court proceedings. The only documents which are in the record are English translations of two court orders of 15 January and 2 February 2004 and a decision of 15 January 2004. The decision seems to be the last step in a long sequence of decisions: after decisions by the “Arbitration court of Bishkek” and a “Decree of the Appellate Instance” of this court in 2002 in favour of Interakt, the Supreme Court of the Kyrgyz Republic revoked the decisions and referred the case to the “Bishkek municipal court” which, by a decision of 5 November 2003, seemed to have admitted the claim of Interakt in an amount of US\$169’267.25.
721. The decision produced is made by “the Presidium of the Biskek Municipal Court” and dated 15 January 2004.⁴⁴⁸ It seems to be a decision on appeal against the decision of 5 November 2003. In the decision on appeal, the court examined in some detail the relations between the Contractor and its subcontractor and the obligations in case of defective work and the payment conditions under the subcontract of the Entes with Interakt.

⁴⁴⁷ P. 10, item 4.5.

⁴⁴⁸ Exhibit R-43.

As to the role of Mr Isakov, the representative of the Employer in these proceedings, Mr Alp stated in his witness statement:

*“the Head of PIU, Mr. Erkin Isakov actually went to court and testified that the subcontractor was right and the Contractor was wrong and these amounts should be paid to the Subcontractor. We lost 3 cases because of this faulty witness, Head of PIU”.*⁴⁴⁹

722. Mr Murat Ozkoseoglu gave the following explanations regarding said testimony:

*“Even the Employer's Representative (P IV) gave false testimony in the local courts, denying the evident fact that a Subcontractor had failed to execute works to the satisfaction of the Engineer, and as a result of this false testimony the Contractor was forced to pay for Works that had been rejected by the Engineer”.*⁴⁵⁰

723. At the hearing, the Tribunal enquired whether there was any evidence of what Mr Isakov said. The Claimant explained that the only evidence was a passage in the court decision and Mr Alp's witness statement, just quoted. However, Mr Alp admitted that he was not present in the court proceedings. He was informed by the Contractor's lawyer who had told him the following:

*“The court case was about the executed quantities and we had the reports from the engineer as well. Their report was that they had done the job and Mr Isakov confirmed that he had done that amount, but where we had the engineer's amounts were less.”*⁴⁵¹

724. The relevant passage in the court decision is in the following terms:

“A representative of the Ministry of Transport and Communications of the KR as the third party without independent claims has clarified in respect of the subject-matter of the dispute that the NCW-OO Contract for the reconstruction of the 36 Bishkek-Osh road of 30 August 1999 between the Ministry of Transport and Communications and the Turkish firm "Entes" provided for no protocol of conditional acceptance of works under the section was [sic]. Article 48.1. of the Contract provides for the Acceptance certificate between the customer and the contractor upon completion of all works for the reconstruction of the Bishkek-Osh road. In respect of the section of works performed by the subcontractor "Interact" the payment for the works was effected in

⁴⁴⁹ Witness Statement of Mr Ahmet Alp, § 29, pp. 7-8.

⁴⁵⁰ Witness Statement of Mr Murat Ozkoseoglu, § 26, p. 6.

⁴⁵¹ Tr 542.

full after inspection and approval of the work of the Japanese company by the "Engineer and acceptance by the Contractor".⁴⁵²

725. The passage states that the Employer paid the Contractor after the work had been inspected and approved by the Engineer. Compared to the circumstances as described by the Claimant, the Tribunal cannot see any false testimony in the reported statement; nor does it see a wrongful influence on the court and its decision. The Claimant has failed to show the alleged wrongful interference. If it were not time barred the claim would be unsupported.
726. The Tribunal concludes that **the claim must be dismissed.**

⁴⁵² See R-43, p. 3.

15. DAMAGES ARISING FROM THE ROAD GRADER CASE

727. The Claimant seeks payment of US\$123'936.54. The claim is related to a lease agreement for a grader concluded between the Contractor and Bishkek-Osh Road department. The grader was burnt and destroyed completely on 2 September 2002.⁴⁵³ The Department claimed against the Contractor for the value of the Grader and prevailed.⁴⁵⁴ The Contractor did not pay the amount and the Department seized some of the Contractor's equipment. Eventually, the Contractor paid the amount now claimed and, after some difficulty, recovered the equipment seized.

728. Concerning the quantum of this claim, the joint report of the experts states:

*"Neither expert is able to verify the amount of US\$123'936.54 as we cannot understand the supporting documents."*⁴⁵⁵

729. The Respondent denies that this dispute is covered by the arbitration clause. It argues that the lessor, the Bishkek-Osh Road Department is a different entity. In any event, the Respondent argues that the matter has been decided by the courts of the Kyrgyz Republic and the Claimant may not reopen the case in the arbitration.

730. The claim was presented in the Statement at Completion. In his Determination, the Engineer takes the following position:

*"The Engineer understands that this matter has been settled between the parties separately. Notwithstanding amicability of the settlement between the parties, the engineer assess this is a private matter outside the Contract and should be dealt by the two parties within a court of law as a private matter of [if?] a dispute exists."*⁴⁵⁶

731. The claim was not included in the Notice of Dissatisfaction nor in the Notice of Arbitration. It was introduced in the arbitration only by the Statement of Claim of 15 March 2010. For the reasons explained above, the claim is time barred.

732. In any event, even if the claim had not been time barred, it would have to be dismissed:

⁴⁵³ SoD, paragraph 91, confirmed in the Claimant's Submission on Legal Grounds, paragraph 229.

⁴⁵⁴ Court decision at R-34.

⁴⁵⁵ Joint Report, p. 8 of 16.

⁴⁵⁶ Engineer's Determination, p. 11, item 4.7.

733. The Tribunal has jurisdiction, to the extent to which the claim concerns matters “between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the works”, as provided by Clause 67 GCC.
734. However, the claim has been decided by the courts of the Kyrgyz Republic. The Claimant has not argued that these courts were wrongfully seized and that it raised the arbitration defence in the court proceedings. Therefore, the decision of the Kyrgyz courts are binding.
735. **The claim must be dismissed.**

16. THE CLAIM FOR THE DEBTS OF THE NOMINATED SUBCONTRACTOR JASU

736. The Claimant seeks payment of US\$40'639.23 for losses that arose from the subcontract with JASU, a nominated subcontractor for bridgework at Sargata. JASU performed poorly and the contract was terminated. By the time it was terminated, the Contractor had made payments exceeding the value of the work performed by JASU. The Claimant holds the Respondent liable for the resulting loss. The Claimant's expert is "unable to verify the figure claimed".⁴⁵⁷
737. The Respondent contests jurisdiction and denies liability for the Claimant's subcontractors.
738. The claim was presented in the Statement at Completion. In his Determination, the Engineer stated that he did not "approve this due to lack of substantiation".
739. The claim was included in the Notice of Dissatisfaction and in the Notice of Arbitration. It is not time barred.
740. The Tribunal considered that as a matter of principle, the Contractor is responsible for his subcontractors and cannot claim from the Employer losses caused by their poor performance.
741. The matter may be different to some extent in the case of nominated subcontractors. This may be the case in particular in cases where the employer imposes on a contractor a nominated subcontractor who is not capable to perform the work properly. In the present case, JASU may have not been fully qualified for the work which it had to perform, a matter on which the Tribunal need not make any finding.
742. However, the damage for which the Claimant seeks compensation relates to the amounts by which JASU was overpaid. In the absence of verifiable data, the Tribunal cannot make a finding whether JASU was indeed overpaid; again the matter need not be decided.
743. If indeed JASU was paid more than it had earned by its work and the Contractor was unable to recover the overpayment, this falls in the area of the Contractor's own responsibility. Even in the case of a nominated subcontractor, the main contractor is responsible for the proper management of the subcontractors.

⁴⁵⁷ Kennedy I Report, paragraph 72.

744. In the present case the Contractor made payments which exceeded the value of the work performed by JASU. The Contractor may have had good reason for doing so; but this is his risk. The Contractor has not shown that it was required by the Employer to make such overpayments.
745. The Tribunal concludes that the Contractor bore the risk for the overpayment and cannot recover the overpaid amounts from the Employer.
746. **The claim must be dismissed.**

17. INTEREST

747. The Claimant seeks interest on the amounts claimed “for the period between outstanding date and the date of the payment of the amounts claimed, and a fine.” In the Statement of Claim it relied on Article 360 KCC.⁴⁵⁸ In the Final Submission, the Claimant relied on Kyrgyz law and referred to the Submission on Legal Grounds.⁴⁵⁹
748. In the Submission on Legal Grounds the Claimant explained first the position under the Contract, stating that it “maintains that Sub-clause 60.8 of the CPA which provides for the contractual interest shall be applied to the interest on the Claimant’s claim in this arbitration”.⁴⁶⁰ It explained that the rate applicable rate was LIBOR plus 2%. After having discussed the contractual provisions and stating that “under the principle of freedom of contract the contractual rates should be applied, the Claimant went on to state that, nevertheless, it “would like to explain the interest under Article 360”.⁴⁶¹ The relief sought in this submission requested that the “interest rate pursuant to contract or the legal interest rate under Kyrgyz Law (whichever is higher)” be applied, plus “a fine”.
749. With respect to the starting date for the interest calculation, the Claimant relied on the “outstanding date”.⁴⁶² In the Submission on Legal Grounds, the Claimant referred to the provisions of Clause 60.8 CPA. It took the Statement at Completion as the reference date and stated that interest “accrued from the 57th day following this statement. The Statement at Completion having been submitted on 17 March 2006, the Claimant presented 13 May 2006 as starting date for interest.⁴⁶³
750. In the Statement of Defence the Respondent confirmed the terms of Article 360 KCC concerning the requirement of paying interest in case of delay and an additional penalty of 5% in case the payment relates to “entrepreneurial activity”. It denied argued that the Claimant’s claims were unfounded and therefore had to be dismissed as unfounded. The Respondent concluded: “Since the Respondent has no overdue debts towards the Claimant the provisions of Article 360 of the CC KR may not be applicable to the Respondent”.⁴⁶⁴

⁴⁵⁸ C-SoC paragraph Chapter 15, C-PHB paragraph 263.

⁴⁵⁹ C-PHB paragraph 470.

⁴⁶⁰ C Legal Grounds, paragraph 260.

⁴⁶¹ C-Legal Grounds, paragraph 264.

⁴⁶² C-SoC Chapter 16, paragraph 11 and C-PHB paragraph 470.

⁴⁶³ C-Legal Grounds, paragraph 263

⁴⁶⁴ Statement of Defence, paragraph 123.

751. The Respondent did not consider the case in which the Tribunal would find that some amounts were due to the Claimant; nor did it address the contractual basis of the interest claim.
752. In its Final Submission the confirmed this position by referring to the explanations in the Statement of Defence.⁴⁶⁵
753. In Article 360 KCC the law of Kyrgyzstan provides for the payment of interest on debts in default, including a 5% penalty on debts. However, as the Claimant rightly pointed out, the parties to a contract may make different arrangements for the payment of interest and “under the principle of freedom to contract the contractual rates should be applied”.⁴⁶⁶
754. The Tribunal therefore turns to Clause 60.8 CPA, entitled “Time of Payment and Interest”. The relevant passage has been quoted above in Section 9.1. It provides for payment “within 56 days after the Contractor’s monthly statement has been submitted to the Engineer for certification”. Clause 60.10 requires the Engineer to certify payment of amounts in the Statement at Completion in accordance with Clause 60.2, the provision dealing with monthly payment. The Tribunal concludes that the 56 days payment period applies to payment pursuant to the Statement at Completion, as argued by the Claimant.
755. The interest payments under Clause 60.8 are “compounded monthly at the rates stated in the Appendix to Tender upon all sums unpaid from the date upon which the same should have been paid, in the currencies in which the payments are due”.
756. With respect to Clause 60.8 the “Appendix to Bid” provides as “Rate of interest upon unpaid sums”:
- “2 percent above the official rate of commercial payments in interest for daily borrowing as published by the National Bank of the Kyrgyz Republic for local currency; for other currencies refer to the table below.”*
757. The table shows “LIBOR + 2%”. This is indeed the rate to which the Claimant referred when explaining the contractual interest rate.⁴⁶⁷ The provision quoted does not specify which LIBOR rate is applicable; and the Claimant does not do so either. Since Clause 60.8 provides for monthly compounding, the Tribunal concludes that the appropriate interest rate is the monthly LIBOR rate plus 2%.

⁴⁶⁵ R-PHB, paragraph 4.9.1.

⁴⁶⁶ C-Legal Grounds, paragraph 264.

⁴⁶⁷ C-Legal Grounds, paragraph 262.

758. The claims considered in this arbitration and awarded have been submitted in the Statement at Completion. To the extent to which the where justified, they had to be paid within 56 days. As from the 57th day, i.e. 13 May 2007, the Employer is in default according to Clause 60.8 CPA and must pay interest at the contractual rate of LIBOR one month plus 2%.
759. This contractual interest provision replaces the legal regime under Kyrgyz law, as the Claimant rightly pointed out.⁴⁶⁸ The fine of additional 5%, as provided by Article 360 (3) KCC, does not apply.

⁴⁶⁸ C-Legal Grounds, paragraph 264.

18. THE COSTS OF THE ARBITRATION AND THEIR ALLOCATION

760. Under Article 38 of the 1976 UNCITRAL Arbitration Rules, the “arbitral tribunal shall fix the costs of arbitration in its award”. These costs include in particular the arbitrators’ costs and expenses, cost and expenses of any experts appointed by the Tribunal and the costs for legal representation and assistance. Article 40 then provides for the allocation of these costs.

18.1 The Arbitral Tribunal’s fees and expenses

761. In the Procedural Calendar and Directions, the Arbitral Tribunal assessed the volume of work required for dealing with the case and the corresponding fees at US\$420’000 and the required costs at US\$30’000. The Tribunal invited the Parties to pay in equal shares and at successive stages of the arbitration the amount of US\$450’000. The Respondent failed to pay its share and the Claimant alone paid the full amount of the deposit.

762. As can be seen from this award, the issues that had to be decided were complex and required extensive work from the Tribunal. The Presiding Arbitrator spent in total 410 hours; the other arbitrators spent time of a comparable importance. Despite a scope of work which exceeded the estimated amount of work, the Tribunal decided not to increase the fees beyond the original estimate.

763. The Tribunal therefore fixed the fees at US\$420’000, of which US\$ 126’000 for each of the co-arbitrators and US\$168’000 to the Presiding Arbitrator.

764. The cost and expenses of the Tribunal consisted primarily of the costs of the hearing in Bishkek, including travel, accommodation, transcript, shipment of documents, the cost and fees of the Tribunal’s expert and its administrative secretary. These costs and expenses have been accounted for in a separate procedural order and amount to a total of US\$175’000.

765. This amount falls short of the deposited amount by US\$ 145’000. The Tribunal ordered the payment of this amount by the Parties in equal shares.

18.2 The Parties’ costs

766. At the invitation of the Tribunal the Parties submitted their claims for costs and fees engaged in this arbitration.

767. In its submission of 6 February 2015 the **Claimant sought** in total an amount of US\$1'335'068.37, consisting of the following positions, all expressed in US Dollars converted at the exchange rate prevailing at the day of the respective invoices:
- (i) 450'000 deposit paid to the Arbitral Tribunal;
 - (ii) 170'061.47 fees of its Turkish counsel (Akıncı Law Firm), not including a 5% success fee;
 - (iii) 11'413.80 fees of its Kyrgyz lawyers (Kalikova & Associates);
 - (iv) 600 fees for Onik Financial Law Company;
 - (v) 169'451.58 Expert Report of Navigant Consulting;
 - (vi) 505'609.37 Expert report of Hill International;
 - (vii) 4'403.32 travel expenses of the experts;
 - (viii) 5'302.77 travel expenses of counsel;
 - (ix) 2'385.00 accommodation of the experts;
 - (x) 8'540.69 accommodation of counsel;
 - (xi) 2'500 charges for the teleconference during the hearing;
 - (xii) 4'800.37 courier service (DHL).
768. The Respondent objected that the submission was not supported by “primary documentation” and stated that only those costs of the Claimant may be accepted that were supported by such documentation.⁴⁶⁹
769. In its submission of 3 February 2015 the **Respondent claimed** a total amount of US\$ 487'238 for expenses incurred during the course of the arbitration, composed of the following positions, expressed in the US\$ equivalent:
- (i) 130'000 for legal advisors (Partner LLC and Professor Vilкова N.G.);
 - (ii) 313'000 for expert reports and attendance at the hearing (EC Harris);
 - (iii) 2'642 expenses at the hearing;
 - (iv) 41'596 taxes.
770. The Respondent argued that it had spent US\$165'000 and US\$26'000, included in the above claim, on fees to its experts, responding to the initial claim by the Claimant. Since the initial case of the Claimant was modified at the hearing, these initial expenses had become “redundant”. Therefore, it should be reimbursed for these fees, irrespective of the outcome of the case.⁴⁷⁰ In the cost submission of 3 February 2015, the Respondent confirmed this request.
771. In its response of 20 February 2015 the Claimant did not object to the claim for arbitration costs by the Respondent. It did, however, contest

⁴⁶⁹ Letter of 18 February 2015.

⁴⁷⁰ R-PHB, paragraph 5.2.

the Respondent's argument that the two amounts presented as redundant expert costs should be awarded in any event. In particular it pointed out that the initial report of Mr Wiseman to which the Respondent's experts had responded, was not withdrawn so that there is no basis for awarding in any event the costs for responding to this initial report.

18.3 The allocation of the costs of the arbitration

772.

Article 40 (1) of the UNCITRAL Arbitration Rules provides that the costs of arbitration shall in principle be borne by the unsuccessful party.

773. In the present case, the Claimant obtained approximately two thirds of the amounts claimed. From a purely financial point of view, this might lead to a cost decision in which the Respondent must bear two thirds of the arbitration costs.

774. However, the situation presents itself differently if one considers the claims individually. Apart from the claim for prolongation costs, the Claimant presented eight individual claims of which six were rejected and two were admitted partially. The claim for prolongation costs, by far the most important one, was composed of claims for the five EOTs, for Winter Breaks, Lost Days and Head Office Overheads. One of these claim components was rejected and all the others were accepted only in reduced amounts.

775. The Tribunal also takes into consideration that the Claimant substantially modified its position at the hearing, which rendered "redundant" some of the earlier submissions and expert reports of both Parties. Such changes in a party's position are not unusual in arbitration proceedings and may well be considered reactions to the evolution of the case. In the present instance, the change in the Claimant's position brought some simplification for the case as it had to be addressed both by the Respondent and the Tribunal. Nevertheless, the Tribunal is sympathetic to the argument raised by the Respondent according to which the costs for its experts could have been less had their assignment been from the outset to respond to the Claimant's case as it was eventually made.

776. In view of these considerations, the Tribunal reduces the share of the costs to be borne by the Respondent and decides that the Parties shall bear the cost of the arbitration in equal shares.

777. Consequently, the Parties shall bear their own costs and each of the Parties shall bear one half of the costs and fees of the Arbitral Tribunal.

778. Since the Claimant has advanced the full amount of the deposit for the Arbitral Tribunal in an amount of US\$ 450'000, the Respondent shall pay to the Claimant one half of this amount, i.e. US\$225'000. Concerning the additional amount requested by the Tribunal in the Procedural Order concerning the Tribunal's costs not covered by the deposit, the Parties were ordered to pay this amount in equal shares. If one of the Parties pays the share of the other, it shall be entitled to recover that share from the other.

19. THE DECISION

779. On the basis of the considerations set out above, the Arbitral Tribunal renders the following decision:

- (i) The Respondent must pay to the Claimant
 - (a) US\$16'275'156.88 on account of the claim for Prolongation Costs;
 - (b) US\$59'506 on account of the claim for interest on late payment;
 - (c) US\$53'968.71 on account of the claim for Guardrails;
- (ii) The claims on account of (a) Value Added Tax, (b) Road and Emergency Tax, (c) Equipment Damaged During Political Unrest, (d) the Interakt case, (e) the Road Grader Case and (f) debts of the Nominated Subcontractor JASU are dismissed;
- (iii) The amounts awarded bear interest at one month LIBOR plus 2% from 13 May 2006 until full settlement;
- (iv) The Respondent shall pay US\$225'000 to the Claimant on account of the share of the Tribunal's costs and fees advanced by the Claimant plus interest as per above (iii) from the date of this award;
- (v) A party that pays the share of the other Party in the additional amount ordered by the Tribunal in the Procedural Order on Cost shall be entitled to reimbursement of this payment.
- (vi) Each Party shall bear its own costs of the arbitration.

Done at Bishkek on 29 September 2015

Professor Turgut Öz
Arbitrator

Professor Sergei Lebedev
Arbitrator

Michael E. Schneider
Presiding Arbitrator