IN THE MATTER OF ARBITRATION UNDER THE RULES OF ARBITRATION OF THE INTERNATIONAL CHAMBER OF COMMERCE

ICC CASE NO. 26834/HTG

BETWEEN

SOJITZ-L&T CONSORTIUM

Claimant

-AND

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED

Respondent

WITNESS STATEMENT OF MR. NAVEEN KUMAR (RESPONDENT'S WITNESS NO. RW-3) 30 JUNE 2023



Advocates for the Respondent

AKS Partners

INTRODUCTION

- 1. I, Naveen Kumar, an Indian citizen aged 58 years, R/o 41/B, Joy Lane, Kundan Nagar, Ajmer-302001 working as Deputy Chief Project Manager/Civil/Ajmer (CTP-2) from August-2017 with the Respondent presently in Ajmer, make this witness statement on behalf of the Respondent (also referred to as "DFCCIL") in relation to the ICC Case No. 26834/HTG commenced by Sojitz-L&T Consortium (Claimant) against Dedicated Freight Corridor Corporation of India Limited (Respondent).
- 2. I make this statement based on my personal knowledge and the documents that I have referred to, except where otherwise indicated. Matters referred to herein which are within my direct knowledge are true. Matters referred to herein which are not within my direct knowledge are true to the best of my knowledge and belief. References to "we", "us" and "our" are with regards to DFCCIL. The reference "Parties" is to DFCCIL and Sojitz-L&T Consortium.
- 3. In my witness statement, I refer to the documentation that has been filed by the Parties along with their pleadings and these shall be footnoted with specific reference therein. In addition, I will also be referring to other relevant documents from DFCCIL's records.
- 4. I have also provided a number of documents relevant to this witness statement. Where the document has been exhibited in the arbitral pleadings, it is referred to by the same exhibit number. Where the document has not been exhibited before in the arbitration, it is referenced by a new exhibit number in the format "R-."
- 5. The counsel for the Respondent has assisted me in drafting of this statement based on interviews conducted with me. I have reviewed the text and can confirm that this written statement accurately reflects my testimony based on my own experience and recollections.
- 6. My Witness Statement addresses various matters with respect to:
 - i. My Experience and Role in the Project
 - ii. The delays in the commencement and progress of many activities in the Project works in CTP-1
- 7. I have been asked to give evidence through this witness statement regarding DFCCIL's position in the arbitration between the Parties. I am able and willing to attend a hearing in this matter if required to do so.

A. MY PROFESSIONAL BACKGROUND AND EXPERIENCE

- 8. I am an engineer by qualification with a specialization in Civil Engineering.
- 9. I have experience of over 33 years in the construction industry with exposure to railway projects in India. I started my professional career in 1990 working with Indian

Railways. In 2011, I joined DFCCIL as a Project Manager, Civil and have been working here for about 12 years now in various capacities. My experience and past designations in DFCCIL are listed below:

Name of Organization	Name of Project	Location	Designation	From	То
DFCCIL	CTP-1&	Jaipur (CTP-	Project	April	August
	CTP-2	1)	Manager/Civil	2011	2017
DFCCIL	CTP-1&	Ajmer (CTP-	Chief Project	August	Till date
	CTP-2	2)	Manager/Civil	2017	

10. Overall, I have varied exposure in all stages of implementation of railway projects in India i.e., feasibility study, designing, site execution, commissioning and operation & maintenance. My CV is attached to this witness statement as **Exhibit R-308**.

B. ROLE IN THE PROJECT

- 11. I joined the Project in 2011 as Project Manager/Civil/Jaipur for CTP-1. At that time, the Project was at bidding staging and my involvement in the bid preparation was limited to verification of prices/ rates. By this time, land acquisition for the Project was almost completed and only a few mutation cases were pending. Utility identification for charted utilities was done under my supervision in CTP-1.
- 12. Once the Contract came into force, I became in-charge of Package A (Rewari to Reengus) in CTP-1. However, I was also aware of the status and issues of Package B as common weekly & monthly meetings used to be held for both the packages of CTP-1. Also, the Monthly Progress Reports submitted by the Claimant were common for both the packages.
- 13. I have been in interaction with the Claimant since the commencement of the Project as I used to visit the Site once or twice a week and was involved in communication with the Claimant/ Engineer for CTP-1. Also, I used to be a part of the Monthly Progress Review Meetings held every month to discuss the progress of the works in CTP-1.
- 14. I say that as such I am aware of the facts of the present case as I have been involved in this Project since 2011 till date, both in the pre-execution and the post-execution stages and therefore I am competent to swear the present statement.

C. OVERVIEW OF THE PROJECT

15. The Dedicated Freight Corridor is indeed an important public infrastructure project in India. Its purpose is to establish high-speed rail dedicated to the movement of freight and cargo, aiming to reduce transportation costs, boost the Indian economy, and uplift millions of people out of poverty.

- 16. The DFC is comprised of two parts: The Eastern Dedicated Freight Corridor, which stretches from Ludhiana in Punjab to Dankuni in West Bengal, India, and the Western Dedicated Freight Corridor, which runs from Dadri in Uttar Pradesh to Navi Mumbai in Maharashtra, India.
- 17. This witness statement pertains to one of the contract packages of WDFC, which starts from Rewari in the state of Haryana, passes through the state of Rajasthan, and ends at Iqbalgarh in the state of Gujarat, with the length of approximately 648.575¹ kilometres is the largest civil & track works packages of DFCCIL.
- 18. The Project is bifurcated into two stretches, i.e., CTP-1 & CTP-2, which is further divided into 4 packages (A, B, C, and D), wherein CTP-1 constitutes of Packages A & B and CTP-2 constitutes of Packages C & D. These packages are further sub-divided into 21 sections. The MS-3 (less MS-1) as defined in the Contract Agreement, covers a distance of 569.716 kilometres from Dabla to Iqbalgarh.

D. CLAIMANT'S MISMANAGEMENT OF THE PROJECT: CTP-1

- 19. The Project required the Claimant to take up the works in a planned & defined manner, with following timelines for CTP-1:
 - a) Design The design and engineering phase of the Project to be commenced on 01 October 2013 for CTP-1 and was scheduled to be completed on 16 April 2014.
 - b) Formation works/ Structure works— Commencement from December 2013 onwards till completion.
 - c) *Track Linking works* For CTP-1, the Track linking was to be commenced from 02 January 2015 to 22 February 2016.
- 20. Additionally, I have reviewed the planned vs achieved progress for the works as on 31 August 2016 from the MPRs submitted by the Claimant, which shows that for CTP-1, it had achieved physical progress of 54.9%² only against the planned progress of 98.1%³.
- 21. I say that the various delays attributable to the Claimant can be broadly categorised under the following heads:

a. Delay in Preliminary Works and Site Establishment

22. I recollect that there was indeed a significant delay in the preliminary and temporary works in CTP-1. During the initial stages of the Project, it became evident that the

¹ Original scope as per bid document was 626 km which was later revised as per site conditions.

² This % progress also contains 10% mobilization advance.

³ Exhibit C-96, MPR for August 2016

planning for these activities was not carried out properly, which had a direct impact on the MS-3 timelines, and contributed to the overall delay in CTP-1 execution.

- 23. I recall that the Respondent raised concerns regarding the execution under CTP-1, through its letter dated 20 February 2014⁴, in which it pointed out various shortcomings in the preliminary works of CTP-1. The letter highlighted issues related to:
 - i. Site Huts⁵ required to facilitate proper supervision on the works, have not been provided so far, whereas the stipulated period of 56 days had elapsed long time ago.
 - ii. Test labs for ascertaining the quality and suitability of materials were yet to be set up, though the period of 140 days⁶ was over.
- 24. I refer to a detailed comparison of the actual mobilization and commissioning dates of all six (06) Crushers in CTP-1 with the planned dates, which is attached with this statement as **Exhibit R-309**. It clearly demonstrates the significant delays in the mobilization process, contradicting the Claimant's assertion that there were no delays in the Project execution as a result of the delayed mobilization of Crushers.
- 25. I say that there are two products of a crusher plant:
 - Aggregate for ballast
 - Aggregate for concrete & blanket works

If crushers were timely commissioned, the Claimant could have produced and stacked ballast and also, the by-product of ballast production i.e., coarse/fine aggregates could have been utilized for concreting and blanket works.

- 26. There were severe delays in mobilization and commissioning of various batching plants and casting yards and the same is available in the MPRs and a detailed log compared to the planned dates is attached as **Exhibit R-310**.
- 27. I state that despite the implementation of batching plants, the Claimant encountered significant delays in obtaining the approved Mix Design of concrete. This delay can be attributed to numerous unsuccessful attempts made in pursuit of identifying the "most economical design". The supporting letters are attached and marked as **Exhibit R-311**, which clearly state that first approval to mix design was obtained by the Claimant on 8 August 2014. Last mix-design approval was obtained on 6 April 2018 by the Claimant.
- 28. Further, there were delays in setting up works and sleeper & rail welding plants at Bhagega Depot required for production of sleepers and rails to facilitate smooth execution of track works in the CTP-1.

⁴ Refer to Exhibit R-xx (The whole log of letters attached in Anurag Sir's WS)

⁵ Contract Agreement Pt-2. para-5.1.1.3. p-705

⁶ Contract Agreement Pt-II. para 3.6.5. page-701

b. Claimant's delays in execution of Earthwork

- 29. I say that the Claimant in its CCP, planned to simultaneously commence works in all 21 sections⁷, 9 of these were part of CTP-1. However, the Claimant faced delays in initiating the works due to insufficient mobilization of resources to handle the requirements of all 9 sections in parallel. To take up the work at multiple locations as per CCP, planning was inadequate by the Claimant.
- 30. Further, in the CCP submitted by the Claimant on 05 December 2013, it was projected by the Claimant that earthwork was to be commenced on following dates in the following sections of CTP-1 wherein earthwork in the last section of CTP-1 was to be commenced by 19 May 2014 as shown below:

Sections	Planned dates for commencement of Earthwork	Actual dates for commencement of Earthwork	RFI Reference No.
Bhagega to Dabla	23-Dec-13	15-Sep-14	CTP1/A/WS-19/4.4/31846
Dabla to Ateli	15-Jan-14	15-Dec-14	CTP1/A/WS-10/4.4/5828
Ateli to Rewari	04-Feb-14	15-Dec-14	CTP1/A/WS-10/4.4/5828
Bhagega to Shrimadhopur	11-Feb-14	15-Sep-14	CTP1/A/WS-19/4.4/31846
Shrimadhopur to Reengus	05-Mar-14	11-Oct-14	06-11Oct'14 WPR
Reengus to Pachar Malikpur	22-Jan-14	27-Apr-16	CTP-1/B/WS 40/CC 4.4/44762
Pachar Malikpur to Phulera	22-Mar-14	27-Apr-15	CTP-1/B/WS 45/CC 4.4/16130
Phulera to Sakun	28-Mar-14	01-Mar-16	CTP1/B/WS57/CC4.4/35390
Sakun to Kishangarh	05-Apr-14	30-Jun-15	CTP-1/B/WS 59-1/CC 4.4.1.1/10611
Kishangarh to Madar	19-May-14	30-Jun-15	CTP-1/B/WS 59-1/CC 4.4.1.1/10611

- 31. From the above table, it is evident that there was substantial delay in taking up earthwork in all the sections of CTP-1 and there was no/ nil progress until September 2014. Further, the major reasons for the delay in taking up the Earthwork and the formation works which are the pre-requisites to the track works are:
 - a. Insufficient Engagement/ Deployment of Sub Contractors
 - b. Delay in blanketing works over completed embankment/subgrade

a. Insufficient Engagement/ Deployment of Sub Contractors

32. Based on my recollection of events, I can confirm that there was a significant amount of time consumed to mobilize sub-contractors for the Project. The process of mobilizing sub-contractors which involves selecting suitable contractors, negotiating sub-contracts, and ensuring their timely presence at the Project Site, experienced notable delays. These delays in mobilizing sub-contractors resulted in a slower start to certain Project activities, impacting the overall progress of the work. The same could be

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⁷ Also refer Para No. 293 of the Claimant's Rejoinder

inferred from the engagement letters/ LOI of the subcontractors for subletting the earthwork, which shows that the first LOI for CTP-1 was issued on 24 March 2014. A detailed log of LOIs⁸ issued to subcontractors is attached as **Exhibit R-312**.

33. Also, the subcontractors deployed by the Claimant used to stop the works on account of payment issues wherein the Claimant did not make timely payments to them. Such stoppages of work were detrimental to the execution of the Project and are attributable to the Claimant.

b. Delay in blanketing works over completed embankment/subgrade

34. I say that even though the Claimant completed sufficient quantity of embankment (cutting & filling) in many sections, the subgrade and blanket works were either not started or minimal progress was achieved due to inadequate resources mobilized at the Site. Status of Earthwork progress as on 31 August 2016 as per EOT determination dated 24 August 2017⁹ is presented below:

Status of Earthwork Progress as on 31-08-2016

Attachment 7.2

Section Bhagega to Dabla			Dabla to Ateli		Rewari to Ateli (Main Line)			Hisar connecting line				
Description	Scope	Actual work done	%	Scope	Actual work done	%	Scope	Actual work done	%	Scope	Actual work done	%
Cutting	508,847	480,071	94.34%	93,040	93,040	100.00%	58,924	46,069	78.18%	8,476	4,238	50.00%
Embankment	1,584,755	1,584,755	100.00%	442,670	421,000	95.10%	950,352	760,825	80.06%	1,099,838	511,462	46.50%
Subgrade	358,831	358,831	100.00%	527,523	500,000	94.78%	513,817	314,219	61.15%	87,093	45,081	51.76%
Blanket	309,553	212,723	68.72%	420,030	233,400	55.57%	357,883	81,474	22.77%	51,837	12,112	23.37%
Earthwork	2,761,986	2,636,380	95.45%	1,483,263	1,247,440	84.10%	1,880,976	1,202,587	63.93%	1,247,244	572,893	45.93%

Section	Bhageg	a to Shri Madho	o Shri Madhopur Shri Madhopur to Pachar Malikpur Pachar Malikpur to Phulera		3	Phulera to Sakhun						
Description	Scope	Actual work done	%	Scope	Actual work done	%	Scope	Actual work done	%	Scope	Actual work done	%
Cutting	309,692	309,692	100.00%	204,628	178,089	87.03%	543,315	477,519	87.89%	61,086	37,679	61.68%
Embankment	595,542	595,542	100.00%	357,979	352,816	98.56%	2,334,945	1,773,307	75.95%	812,337	409,131	50.36%
Subgrade	295,518	295,518	100.00%	421,512	412,053	97.76%	610,597	363,888	59.60%	190,905	57,630	30.19%
Blanket	253,463	253,463	100.00%	348,020	284,902	81.86%	543,638	244,625	45.00%	152,551	13,791	9.04%
Earthwork	1,454,215	1,454,215	100.00%	1,332,139	1,227,860	92.17%	4,032,495	2,859,339	70.91%	1,216,879	518,231	42.59%

Section	ection Sakhun to Kishangarh		h	Kishangarh to Madar		Marwar to Chandawall			Chandawal to Haripur			
Description	Scope	Actual work done	%	Scope	Actual work done	%	Scope	Actual work done	%	Scope	Actual work done	%
Cutting	167,802	80,658	48.07%	90,389	32,132	35.55%	11	11	100.00%	10,558	10,558	100.00%
Embankment	355,871	314,024	88.24%	52,034	7,034	13.52%	994,630	706,410	71.02%	449,705	446,580	99.31%
Subgrade	299,669	226,387	75.55%	49,682	10,365	20.86%	787,671	497,465	63.16%	375,555	364,009	96.93%
Blanket	246,407	78,037	31.67%	74,476	2,027	2.72%	358,227	36,387	10.16%	201,743	108,332	53.70%
Earthwork	1,069,749	699,106	65.35%	266,581	51,558	19.34%	2,140,539	1,240,273	57.94%	1,037,561	929,479	89.58%

- 35. I affirm that there was a shortage of blanketing material produced. Additionally, the plants/ crushers/pugmills established by the Claimant could not be relocated in a timely manner, resulting in challenges in transporting the materials over long distances. As a consequence, the execution of the blanket work was adversely affected.
- 36. Based on my recollection, I can confirm that there were delays in the Project due to a long lead time in the supply of blankets and lack of access roads to be built by the

⁸ Documents produced by the Claimant under the Document Production Request No. 12

⁹ Exhibit R-160 (Attachment 7.2)

Claimant. Additionally, the access roads provided by the Claimant were not properly maintained, resulting in difficulties in accessing the Project site, particularly during the monsoon/ rainy season. These access road issues forced a suspension of work for approximately three months, further contributing to the overall delay in the Project.

37. The progress of earthwork in Packages A & B, in the month of September 2015, i.e., during the actual commencement of track-linking works is stated below:

Package A (Km 18-149) – Top layer of the Blanket was completed only about 5 Km out of 131 Km of length.

Package B (Km 149-286)- Top layer of the blanket was completed in about 24 Km only out of 136 km of length.

Sections	Actual Start Dates for commencement of Blanket works	RFI Reference No.	Actual Finish Dates for completion of Blanket works	RFI Reference No. attached as Exhibit R-313
Bhagega to Dabla	18 Feb 2015	CTP1/A/WS21/4.4/53449	24 Jul 2019	CTP1/A/WS27/4.4/162060
Dabla to Ateli	10 Jun 2015	CTP1/A/WS16/4.4/31634	29 Jul 2018	CTP1/A/WS11/3/4.4/143065
Ateli to Rewari	15 Jul 2015	CTP1/A/WS-6/2/4.4/36824	31 Jan 2019	CTP1/A/WS8/4.4/189241
Bhagega to Shrimadhopur	19 Sep 2014	CTP1/A/WS-27/4.4/9677	24 Jul 2019	CTP1/A/WS27/4.4/162060
Shrimadhopur to Reengus	20 Jun 2014	CTP1/B/WS36/CC4.4/118516	15 Apr 2017	CTP1/B/WS40/2/CC4.4/182429
Reengus to Pachar Malikpur	20 Jun 2015	CTP1/B/WS38/CC4.4/26198	14 Apr 2018	CTP1/B/WS63/1/CC4.4/212022
Pachar Malikpur to Phulera	24 Jul 2015	CTP1/B/WS-45/4.4/18790	30 May 2018	CTP1/B/WS50/6/CC4.4/185774
Phulera to Sakun	06 Jul 2015	CTP1/B/WS54-2/4.4/101011	13 Oct 2018	CTP1/B/WS52/4/CC4.4/208336
Sakun to Kishangarh	26 Oct 2015	CTP1/B/WS59- 1/CC4.4/39216	22 Nov 2018	CTP1/B/WS61/1/5/CC4.4/211132
Kishangarh to Madar	16 Jul 2016	CTP1/B/WS63/CC4.4/73219	15 Nov 2018	CTP1/B/WS36/CC4.4/118517

- 38. I would like to confirm that I have been presented with Paragraph 222 of the Claimant's Rejoinder. According to this paragraph, the Claimant had planned to execute earthwork activities in parallel. However, the Claimant asserts that the progress of blanketing after sub-grading is unfeasible due to the higher cost of the blanket material and the need for its protection. I believe that this lacks a reasonable justification. When the blanketing layer is appropriately compacted, the chances of erosion or washout are minimal, thus challenging the need for additional protection.
- 39. Additionally, drawing from my extensive experience in other railway projects, I can confidently state that all the formation related works up to the point of ballast laying can be executed in discontinuous stretches, and it does not necessitate a continuous stretch. There was no impediment preventing the Claimant from protecting the blanket layer by promptly laying ballast. I assert that the Claimant has been unable to make

progress up to the blanket stage in the available stretches. I believe that if lower layers, such as the subgrade, are successfully laid, there should be no hindrance in laying the upper layers, including the blanket. The actual reason behind the sluggish progress of the blanket layer is the insufficient number of pug mills deployed as highlighted in the SOD also vide various letters¹⁰.

- 40. I further affirm that the overall duration required to complete activities from Clearing & Grubbing (C&G) to ballast laying in a typical stretch is significantly longer compared to the time needed for track laying on the same stretch using the NTC machine. It is important to note that all activities preceding track laying can be executed in disjointed stretches, and it is only during track linking that a continuous stretch is required. Therefore, the Claimant's assertions that it is unable to carry out formation activities unless a continuous stretch is available lack a factual basis.
- 41. Thus, if the Claimant has completed ballast spreading in advance before NTC movement, it would rather have facilitated the NTC movement as more stretches would have been available for track laying.

c. Claimant's delays in execution of Major Structures

- 42. According to the proposed plan, the Claimant represented that the works of Road Over Bridges ("ROBs") and Major Bridges were to be taken up simultaneously and would be completed, independent of formation works, before the commencement of track works in the stretch.
- 43. I say that there was no linkage between handing over of land with the execution of works at the locations of Major Bridges and ROBs as these were generally under the direct control of State Government and hence, do not require land acquisition.
- 44. There were multiple bridges in Bhagega-Rewari section that were delayed in CTP-1 by the Claimant which ultimately delayed the planned sequence of Track-laying. There was also delay in backfilling after completion of bridges and delay in preparation of approach slopes which again hindered the continuous stretch availability for NTC movement.
- 45. For Major Structures, the progress as shown in MPRs constitutes the production of aggregates for concrete and ballast and other various activities, which are not to be accounted for considering the progress of Major Structures.
- 46. As of 31 August 2016, only 06 nos. of GADs of major structures were finalized. Thus, the actual status of major activities of the Major Structures under MS-3 can be inferred from the below table where it is evident that there was no/ nil progress of ballast spreading and track linking was achieved in CTP-1 stretch:

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¹⁰ SOD paragraph number 92, 95, 171

Sl. No.	Activity	Planned %	Completed %
4.2.a	Important Bridges/ Viaducts	100%	74%
4.2.b	Major Bridges	100%	79%
4.2.c	RFO	100%	39%
4.2.d	ROB	100%	5%

d. Claimant's delays in execution of Minor Structures

- 47. I say that as per the approved CCP, the structures work has to be completed prior to the completion of earthwork. The EOT had been granted only for a few RUBs which were having some issues in approval of GADs by IR authorities. Other than this, there were no issues on balance structures which comprises majority of MIBs (800). Neither has the Claimant notified any delay in MIBs nor has it sought any EOT. It was delay by the Claimant in timely submissions of the required designs of the structures which led to gaps due to non-completion of the structures in a timely and orderly manner.
- 48. In the review meeting in November 2014¹¹, the Claimant was instructed to start the works for RUBs where the IR RUBs were already constructed for CTP-1 as planned commencement of the RUB works was on 24 February 2014. It was noted that no hindrances were observed at any of the locations of the said RUBs.
- 49. To this effect, the Respondent in the review meeting dated 21 April 2015¹² highlighted that the Claimant had not started any work on the RUBs and was instructed to take up the work related to RUBs at LC45/1, LC 46/1 and LC 13 on priority. As there were no hindrances or delays at the end of the Respondent, the delays and/or slow progress of the works were attributable to the Claimant due to its poor planning and lack of resources.
- 50. For Minor Structures, the progress as shown in MPRs constitutes the production of aggregates for concrete and ballast, which are not to be accounted for considering the progress of minor structures.
- 51. Thus, the actual status of major activities of the Minor Structures under MS-3 as of 31 August 2016 can be inferred from the below table where it is evident that the actual progress achieved in CTP-1 was not at par with the planned progress:

Sl. No.	Activity	Planned %	Completed %
4.3.1	On completion	100.00%	62.33%
	Excavation	100%	60.82%
	PCC	100%	55.19%

¹¹ Exhibit R-31

¹² Exhibit R-49.

Sl. No.	Activity	Planned %	Completed %
	Foundation & Wall / Precast Box	100%	80.96%
	Slab Casting / Precast Erection	100%	57.90%
	Backfilling	100%	28.47%
	Miscellaneous	100%	17.34%

e. Claimant's delays in execution of Track works

- 52. I assert that the successful installation and linking of tracks require the completion of several critical activities and the availability of adequate materials and equipment. These activities encompass various stages and processes that contribute to the overall track construction process.
 - i. Firstly, the establishment of Sleeper and Flash Butt Welding Plants is essential. These plants serve as key facilities for the production and preparation of sleepers and welded rail panels, which are integral components of the track infrastructure.
 - ii. Secondly, the procurement of track materials is vital to support construction activities. Additionally, the production of track materials, such as ordinary sleepers, bridge & approach sleepers, point & crossing sleepers, and welded rail panels, P-way fittings like ERC, rubber pads, liners, rails skews play a significant role. The manufacturing process must be in line with the required specifications and standards to ensure the quality and reliability of the track components.
 - iii. Furthermore, the design of track works must be completed accurately and in accordance with the Project requirements.
 - iv. Before the actual track installation, various preparatory activities, such as spreading ballast and completing predecessor tasks like blanketing and concreting of structures up to a certain level are necessary to have the formation bed ready in continuous stretches.
 - v. The availability of an adequate number of NTC machines is critical for efficient and timely track installation.
 - vi. Finally, the execution of track linking works with the NTC machines is a crucial step in the overall track construction timeline.
- 53. Considering these factors, it is evident that the installation and linking of tracks are complex and multifaceted processes that require careful planning, coordination, and the availability of necessary resources.
- 54. For Track works, the progress as shown in MPRs constitutes production of aggregates for concrete and ballast and other various activities such as order of rails, set up &

- commissioning of sleeper plant at Bhagega, which are not to be accounted for considering the progress of track works.
- 55. Thus, the actual status of major activities of the Track works under MS-3 as of 31 August 2016, can be inferred from the below table wherein it is shown that there was no/nil progress of ballast spreading and track linking was achieved in CTP-1 stretch:

Sl. No.	Activity	Planned %	Completed %							
Suppl	Supply of Rails for Main Line & Yards									
2	Delivery - HH Rails	97%	83%							
4	Delivery - 60 Kg UIC Rails	98%	23%							
6	Delivery - Points & Crossings	95%	0%							
8	Delivery - Track Fittings (GRSP, Metal Liner, ERC Clips)	89%	7%							
Suppl	y of Sleepers for Main Line & Yards									
1	Construction of sleeper plant at Bhagega	100%	100%							
2	Commissioning of sleeper plant at Bhagega	100%	100%							
3	Production of Sleepers at Bhagega	100%	30%							
Layin	g initial Ballast Layer and Track for Main Line									
1	Production of Welded Rail Panels	100%	146%							
2	Initial Ballast Spreading and Rolling	100%	18%							
3	Skeleton track laying	100%	14%							
Layin	g initial Ballast Layer and Track for Loop Line									
1	Production of Rail Panels	100%	0%							
2	Ballast Spreading and Rolling	100%	0%							
3	Skeleton track laying, Welding & Tamping	100%	0%							

- 56. From the above table, it is evident that the progress of track works was minimal and no/ negligible progress was achieved for certain activities such as delivery of points & crossings, track fittings, etc. which are unrelated to alleged events such as delay in site access and design approvals.
- 57. I affirm that the Claimant's failure to comply with these essential factors significantly impacted the progress of the track works and subsequently led to delays in the overall project timeline. The following paragraphs outline specific instances where the Claimant's actions or inactions contributed to these delays.

f. Delay in Production/Procurement of Track Materials

- 58. I say that the Claimant in its Narrative to the CCP had represented that the manufacturing and procurement phase shall be taken up prior to the commencement of the works. The Claimant had also represented that it shall commence the Sleeper and Rail Welding Plants at Bhagega Depot as detailed in the table attached herewith as **Exhibit R-314**.
- 59. In terms of the CCP submitted along with the letter dated 05 December 2013 (C-6), the Claimant had planned to procure and/ or produce materials for both CTP-1 and CTP-2, respectively. The sleepers were planned to be produced between May 2014 to January 2016 for CTP-1. The Rails were to be procured between May 2014 to September 2016. Further, the Rails were planned to be welded between August 2014 to September 2015 for CTP-1. The P-way fittings were to be procured between December 2014 to November 2016. The major Track Machines were to be delivered to the site by December 2014.
- 60. It is submitted that there were enormous delays in procurement and production of the above materials which is attributable to the Claimant.
- 61. As per the planned production rate of the sleepers, it was envisaged that in CTP-1, it was to be commenced from 31 May 2014 at Bhagega Depot, i.e., seven (07) months prior to the commencement of the track works.
- 62. I note from Exhibit R-26, which includes RFIs dated 25 September 2014 and 19 November 2014 raised by the Claimant, that the production of sleepers for the design qualification test had not been initiated by the Claimant because the Claimant was not geared up to progress the work at the Bhagega sleeper plant.
- 63. I state that there was considerable delay in the commissioning of the Sleeper Plants at the Bhagega Depot, which was commissioned and validated by RDSO on 13 July 2015.
- 64. I affirm that the average production of the PSC sleepers per day at the Bhagega Plant was significantly lower than the monthly production of 55,000 sleepers proposed by the Claimant in its CCP. This low production rate had a significant effect on the progress of the track works.
- 65. I observed that the production of sleepers was hindered by two significant factors: one was poor availability of skilled workers and the second was inadequate availability of tractor trolleys. These factors had a notable impact on the production rate of sleepers.
- 66. Furthermore, the rails were to be procured and welded at the Flash Butt Welding (FBW) plant which was to be set up at Bhagega Depot as per the timeline specified in the Narrative to CCP. However, there was a significant delay in the setting-up of the FBW plants, i.e., the FBW plant at Bhagega was commissioned and approved by RDSO in

- August 2015¹³ which resulted in a delay of nearly a year in the commissioning of the plant compared to the planned date.
- 67. The laying of tracks is a dependent process which necessitates the presence of sleepers and welded rails to be positioned on the prepared ballast formation.
- 68. The actual progress of Sleepers, Ballast Rail supply and Track Linking is provided in Weekly Progress Report ("WPR"). The WPRs as maintained by Engineer for last week of each month from April 2015 to August 2016 are enclosed as S. No. 19 of Exhibit R-269.
- 69. Further, the Claimant's slow progress in the production of sleepers remained consistent and was discussed in various Monthly Review Meetings.
- 70. The correspondences, progress reports, and documented discussions between the Parties clearly highlight the Claimant's slow progress and resource deployment issues. It is evident that the Claimant's failure to adhere to the planned procurement and production timelines for track materials, specifically sleepers and welded rails, has had a significant impact on the progress of the Project, which are solely attributable to the Claimant.
- 71. The availability of an adequate sleeper plant was a significant issue during the Project. Initially, only ordinary sleepers were manufactured, and these were used for both bridge and approach sleepers. The sleeper plant was not sufficient to cater the requirement. Bridge & approach sleepers were manufactured later. Additionally, there were issues related to the availability of switches for track linking. Thus, it is clear that the Claimant was not adequately prepared for track linking, even when a continuous stretch was available for installation. These factors further contributed to delays in the Project timelines and hindered the smooth progress of track installation activities.

g. Poor Planning of predecessor activities

- 72. I say that the Claimant has delayed in carrying out predecessor activity such as blanket, earthwork, etc. thus subsequently delaying the track works.
- 73. I say that the NTC machine was scheduled to start its operations after the completion of the formation works in the Bhagega to Dabla section. According to CCP, the assembling of the NTC machine was to be done by 19 December 2014, along with the other major equipment was to be completed by 23 December 2014, and the commencement of track installation was planned from 02 January 2015.
- 74. However, due to substantial delays in the completion of the major bridges by the Claimant in this particular section, and due to poor planning and decision making on its

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¹³ Refer Exhibit C-96, Part-4, Pg. 95915

- part, the track laying activity ultimately commenced on 24 September 2015 that too in a different section, i.e., Bhagega to ShriMadhopur.
- 75. Further, as per CCP, the NTC movement was planned to commence from 02 January 2015 and be completed by 05 August 2015 for the track linking of MS-1 stretch.

h. Delay in Production & Spreading of Ballast (a prerequisite for laying of tracks)

- 76. I affirm that the Claimant delayed the procurement of ballast as the Claimant was unable to identify the quarries in a timely manner and even the approved quarries could not meet the requirements.
- 77. I say that stacking of ballast was never recorded at site which would have ensured availability of ballast as and when the front was ready. Also, the Claimant did not maintain any ballast stacking registers as also confirmed by the Claimant in the Respondent's Request for Production of Documents¹⁴.
- 78. I say that as of 31 August 2016, there were discontinuities in the sections of the Project mainly due to structures gap. The major cause of this delay can be attributed to the initial delays on the Claimant's part in submission of design of these structures. The same could be referred to from **Exhibit R-304**¹⁵.

i. Delay in the mobilization of NTC & other Track Machines

- 79. I understand that the Claimant was required to deploy the NTC machine at the Site by December 2014. While the NTC machine was physically present at the site by the end of December 2014, it was not fully functional and ready for use. The installation of track required additional auxiliary parts, locomotives, wagons, and hoppers which were not available at that time. As a result, the completion and readiness of the NTC machine for track installation were delayed due to the unavailability of these essential components.
- 80. The NTC machine is just one of the elements for mechanized linking of track; other major elements required for track installation are:
 - a) Locomotive to haul wagons carrying rails, sleepers, etc to the site,
 - b) BLC and Hopper wagons required to carry ballast, etc, and
 - c) Tamping machines to initially insert ballast under the sleepers, etc.
- 81. The Project required BLC and Hopper wagons for transporting ballast and other materials. However, the Claimant was not able to procure these wagons in a timely

¹⁴ Request No. 10 of Production of Documents as ordered by the Tribunal

¹⁵ Page No. 2-3

- manner. As a result, the Respondent had to provide these wagons from the Indian Railways (IR) to ensure that the required equipment was available for the Project.
- 82. Further, I state that the NTC machine was imported and received in a knock-down condition which was required to be assembled, tried, and tested before commissioning.
- 83. The Claimant has showcased the delayed receipt of such parts in the MPRs, i.e., only 1 locomotive out of 2 in July 2015, BLC wagons in August 2015, and Hoppers in September 2015 as referred from Exhibit C-96. Further, the assembly and commissioning of NTC with associated plant/equipment could be done by the Claimant only on 24 September 2015 for the commencement of the track-linking activity. I have also noted that the Claimant laid the first track on 24 September 2015¹⁶ without submitting the work method statement, i.e., Inspection and Testing Plan (ITP), which was later submitted on 13 October 2015 for approval as could be referred from letter attached in S. No. 18 of Exhibit R-269.
- 84. As per my experience, keeping in mind the status and progress of NTC machine in other similar Projects, even if there was no deviation in the pre-track works envisaged in the CCP, a single NTC machine could not have completed the track works within the stipulated timelines.
- 85. The Respondent issued various letters and/or notices to the Claimant for deployment of the 2nd NTC machine. It was evident that the assumed output mentioned by the Claimant was unrealistic and the Claimant was far from achieving the desired progress. Furthermore, the deployment of the 2nd NTC machine was also delayed by the Claimant.
- 86. Moreover, as I recall we directed the Claimant to construct temporary level crossings to facilitate the movement of NTC machine and accordingly granted them variation for the construction of these crossings.
- 87. I was shown Para No. 353 of the Rejoinder which indicates that the Claimant has provided information on the days where track linking of 1.5 TKM or more without disclosing the details where the NTC was idle or when track laying was less than 1.5 TKM was not provided. To have a clearer picture of the day-wise track laid up to 31 August 2016, the NTC register may be referred to from Exhibit R-251.

j. Poor Productivity of NTC machine

88. The rate of progress of the NTC machine from 24 September 2015 was very low and hindered compared to the output rate envisaged/ planned in the CCP. The average output rate of NTC machine throughout the period from 24 September 2015 to 31

¹⁶ Exhibit R-251

- August 2016, i.e., for almost a year is calculated to be 0.24 km/day. The same may be referred to from the table attached in Exhibit R-305.
- 89. There is only one instance, i.e., on 31 July 2017 when the Claimant had laid track for a length of 3.25 TKM between Pacharmalikpur and Phulera sections. However, after achieving 3.25 TKM on 31 July 2017, the NTC machine went under maintenance and no track was laid till 13 August 2017 as referred from Exhibit R-251.
- 90. I affirm that despite the delayed commissioning of the NTC machine, it went through frequent breakdowns and repairs leading to prolonged periods of no progress in the track works. The recorded summary of NTC breakdowns, as documented by the Engineer at the site is referred to from Exhibit R-304¹⁷.
- 91. Furthermore, it is important to highlight that the smooth operation of the NTC machine required the availability of at least two rakes to support the track works without idling the NTC machine.
- 92. However, due to insufficiency of rakes (as the Claimant had deployed only one locomotive out of 2), the NTC machine remained idle almost for a day after completion of the 1.5 km of stretch. This was because the rake needed to be loaded with sleepers and rails, and then unloaded at the designated site, with each process taking approximately 12 to 13 hours to complete. This resulted in significant downtime for the NTC machine, further contributing to delays in the Project.
- 93. I affirm that as per status and progress of NTC machine in other similar projects, even if there was no deviation in the pre-track works envisaged in the CCP, a single NTC machine could not have completed the track works within the stipulated timelines.
- 94. Later, when it became evident that the output assumed was unrealistic and the Claimant was far from achieving the same, the Respondent issued various letters¹⁸ and/ or notices for deployment of the 2nd NTC machine.
- 95. I recall that in the Claimant's bid, they had proposed the inclusion of two NTC machines under 'Methodology for Track works' as part of their Technical Proposal¹⁹. Further, the Respondent approved the CCP based on the assumption that if the Claimant is proposing a higher output rate, it would be ready and capable to achieve the same.

¹⁷ Page No. 1

¹⁸ Para Nos. 160 to 162 of the SOD

¹⁹ Part-5 of the Contract

I affirm that the statements made hereinabove are based upon my own knowledge, including my review of documents and records maintained by the Respondent and the Engineer in regular course of the Project. Although I have been assisted by counsel of the Respondent in preparing this witness statement, I confirm that it contains my true testimony as to the matters addressed herein. I am able and willing to testify to the matters stated in this witness statement if required to do so.

VERIFICATION

I, the Deponent above named, do hereby verify that the contents of the foregoing affidavit are true and correct. Paragraphs 1 to ____ of the affidavit are based on my personal knowledge and knowledge as derived from the records of the Project. No part of the present affidavit is false and nothing material has been concealed.

Verified at Ajmer on this 30 day of June 2023.