

Questionnaire for Opinion Survey

Survey on Critical Success Factors for MRTS Projects on PPP framework

November 5th, 2015

Dear Respondent,

I am a researcher scholar in the Infrastructure Management Department of University of Petroleum & Energy Studies, Dehradun. I have more than three decades of industry experience and superannuated from a public sector undertaking. Post retirement I am working as Advisor in a few companies including an Infrastructure Company. I am conducting a research study on **‘Identification of Critical Success Factors and Evaluation of their Impact on the Success of Public Private Partnerships in Rail Based Urban Mass Rapid Transit Systems in Indian Context’**. This research project is self-financed and for the purpose of award of PhD degree.

The objective of this research project is to attempt to identify factors which are critical for the success of public private partnerships in rail based urban mass rapid transit systems in India. Through your participation, I eventually hope to understand the factors that impact the success of a PPP metro project and to develop a conceptual framework that could be useful to both public and private sector in conceiving and executing such projects.

Enclosed with this mail/letter is a brief questionnaire that asks a variety of questions about your opinion based on your experiences in conceiving and executing PPP projects. I am requesting you to look at the questionnaire, spare a few minutes of your valuable time to complete the questionnaire and return it back to me before you leave the conference venue.

Nothing you say on the questionnaire should have influence of me and will in any way influence your present or future relationship with your company. The views will be treated as your own for research purpose only. The official views of the company may be at variance on the subject.

I do hope you will take a few minutes to complete this questionnaire. Without the help of people like you, research on topics of strategic importance cannot be conducted.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me at (91) 9871122298 or at rakeshkul@yahoo.com for any questions that you may have.

It may be noted that your participation is voluntary. Data of the research will only be used for academic presentation, academic papers, published research, and classroom project and will be used broadly in aggregate form only and will be secured throughout the study only by undersigned and my advisor.

Sincerely,

Rakesh Kulshreshtha

Survey Form

Success Criteria for defining the success of a PPP metro project and Critical Success Factors contributing to the success of a metro project developed and executed on PPP framework

Projects in Rail Based Urban Mass Rapid Transit Systems -MRTS (or metro in short) conceived on Public Private Partnerships (PPP) framework are complex. The first stage in the project is the preparatory phase when the project is conceived, techno-commercial study undertaken; contract is developed with proper allocation of risk and with defined roles/ responsibilities of both the public and private sector entity. Contract specifies deliverables and has provisions for monitoring of quality of work executed and that of service delivery. Rfp (Request for proposal) is issued and techno-commercial bids are received from eligible parties. The bidding process culminates in selection of a party/consortium, contract is signed and financial closure achieved to mark the conclusion of first stage termed here as ‘Contract Success’.

The second stage in a PPP MRTS project is implementation phase when the concessionaire or the party which wins the bid implements the project as per the terms of contract. (Implementation success).

The third and final stage in a PPP MRTS project is ‘post implementation phase’ when the concessionaire operates and maintains the MRTS infrastructure for use by public/stake holders. (Post implementation success)

MRTS project involving both infrastructure creation and operation of metro systems and developed and executed on a PPP framework passes through all the above three stages. In the questionnaire certain parameters are given related to one of the three stages of the project. You are to rate them according to your perception of their importance in deciding that a particular MRTS project developed and executed on PPP framework can be called successful.

Two sets of questionnaire are enclosed. In the first set there are 12 parameters and you have to rate them according to your perception of their importance in defining the success of a MRTS project developed and executed on PPP framework.

In the second set 18 Critical Success Factors (CSFs) are given that are key variables that contribute to (or affect/impact) the success of a PPP metro project. You are requested to rate these factors according to your perception of their importance in the success of a PPP metro project.

Last page contains some questions related to your profile.

Section A: Success criteria in defining a PPP project in MRTS as successful

Filling Instruction:

You are requested to rate the importance of each parameter in defining the success of a PPP metro project on a scale of 1 to 5 : (5: Highly Important, 4: Moderately Important, 3: To some extent Important, 2: Low importance, 1: Least Important)

S.No	<i>Please rate following parameters or phases in a project on a scale from 1 to 5 according to your perception of their importance in defining that a MRTS project developed and executed on PPP framework is successful (1=least important and 5=Highly important)</i>	Most Important	Important	Somewhat important Not Disagree	Not so important	Least important
1	Complete clarity on the contract and unambiguous contract terms with respect to Scope, Time, Deliverable, Cost etc.	<input type="radio"/>	<input checked="" type="radio"/> 4	<input checked="" type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
2	Acceptable and manageable risk allocation in the contract to private party	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
3	Selection of concessionaire and finalisation of contract agreement	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
4	Concessionaire achieves financial closure within stipulated time	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
5	Concessionaire delivers the project within stipulated time i.e there is no time over run	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
6	The project is completed within budget i.e there is no cost overrun.	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
7	The delivered project is as per the scope defined in the contract	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
8	Quality of construction of metro system and associated infrastructure	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
9	Ridership recovery in MRTS both in short and long term	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
10	Last mile connectivity available to passengers for travelling by metro	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
11	Service quality in Operation and maintenance of Metro and associated infrastructure	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
12	Overall user satisfaction with the metro system	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
13	Any other (Pl Specify)	<input checked="" type="radio"/> 5	<input checked="" type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1

Section B: Critical Success Factors for the success of a PPP metro project

Critical success factors are key variables that affect the success of a PPP metro project. You are requested to rate the following factors according to your perception of their importance in affecting the success of a PPP MRTS project on a scale of 1 to 5 (5: Highly Important, 4: Moderately Important, 3: To some extent Important, 2: Low importance, 1: Least Important)

S. No	Please rate following critical success factors on a scale of 1 to 5 according to your perception of their importance in impacting the success of a PPP MRTS project(1=least important and 5=most important)	Most Important	Important	To some extent Important	Not so important	Least important
1	Political/social environment/ support	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Stable macro-economic environment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Institutional & Legal Framework	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Financial market availability	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Capable & well organised public agency	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Good governance	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Consultation with stake holders	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Multi benefit objectives for all stake holders from the project	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Thorough Cost-Benefit Analysis of the project	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Techno-economic feasibility of project	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Competitive and transparent procurement process	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Strong consortium – technically, financially competent with experience and project management skills	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Government support and Government Guarantee for the project	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	Risk analysis and proper risk allocation in a PPP project	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	Contract Agreement - completeness with respect to roles and responsibilities of partners, risk allocation and sharing, methods of risk mitigation, provisions for contingency situations etc.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	Contract compliance for results- monitoring by public agency for execution and performance standards in accordance with contract	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	Commitment, responsibility and defined role of partners	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	Shared authority between public and private agency	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	Any other (Please specify)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Section-C. Respondent's Profile

In this section we would like to know about yourself, your job/company/industry

(Please put a tick mark against the reply applicable to you)

C1.Are you working for government/state Government/PSU or a private sector agency?

- a. Government/State Government/Public sector undertaking
- b. Private company

C2.To which of the following domains you or your company/organisation belong to

- a. Consultancy/Transaction Advisor
- b. Infrastructure civil Contractor/Facility Management firm
- c. Rolling stock supplier
- d. Rail/Metro Operator/Concessionaire
- e. Academician

C3.Which level of management you work in your organisation?

- Junior Management/Middle Management - 1-4 levels from entry
- Senior Management Above 4 levels after entry level

C4.Have you been associated with PPP projects during your career YES/NO

C5.What is your experience in dealing with public private sector (PPP) projects?

>5 years

1-5 Years

C6.If yes number of projects you have been associated with

>3

1-3

C7.Have you handled any projects for railways/metro rail?

Yes/No

C8.Was it a PPP project

Yes/No

Name : -----

---(Optional)

e-mail ID------(Optional)

Exhibit-2 Profile of Experts

- Well conversant with PPP framework
- Adequate knowledge of rail/metro systems
- Senior level working professionals
- Well acknowledged by Colleagues for their domain knowledge and clarity of thoughts
- 2 consultants/academicians, 2 private sector executives and 2 government sector senior officials

Exhibit-3 Key Questions for Case Study of Hyderabad Metro

1. Who are the main actors involved in planning and implementation of Hyderabad Metro?
2. Which critical factors have contributed to the success of Hyderabad metro in achieving contract success and financial closure? Have these factors contributed in the same way during implementation?
3. What is your opinion on the concessionaire agreement for Hyderabad Metro with regard to complete clarity on the contract with respect to scope, time, deliverables etc? Do you think the risks in the project have been allotted to the party which is best placed to bear that risk?
4. Please describe the role played by your counterpart in public/private agency. How it has affected the project positively? What in your opinion could have been done more or done differently?
5. What obstacles/problems were faced in the start of the project and during implementation? What are the learning points with respect to concession agreement for PPP metro projects?
6. What are the key learnings from implementation of Hyderabad Metro?

Exhibit-4 : Pilot Analysis Data –Ratings on Performance Indicators by Respondents

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
5	4	5	4	5	3	4	3	3		5	5
5	5	4	4	4	3	5	4			4	4
5	5	4	3	3	5	4	5	5	4	5	5
5	5	5	4	4	4	4	5	4	5	4	5
	5	5	5	5	5	4	5	5	5	4	4
5	5	4	3	5	5	4	4	4	4	4	4
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	5	5	5	4	4	4	4	3	3	3	4
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5	4	4	4	4	4	5	5	4	4	4	4
5	5	4	4	4	4	4	5	4	4	3	4
5	4	4	4	4	5	3	5	4	4	4	4

Exhibit-5 : Pilot Analysis Data –Ratings on CSFs by Respondents

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18
4	5	5	5	5	4	4	3	4	4	5	5	5	5	5	4	4	4
4	4	5	4	4	4	4	3	3	3	5	4	4	5	5	4		3
5	5	4	4	4	3	3	4	5	5	4	4	5	5	5	4	4	5
5	5	5	4	5	5	4	3	4	5	5	5	5	5	5	4	4	4
5	4	4	5	4	4		5	5	5	4	4	4	5	5	4	5	4
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Exhibit-6 : Opinion Survey Data –Ratings on CSFs by Respondents

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18
3	5	4	5	5	5	4	3	4	5	3	4	4	5	3	5	3	5
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5	4	5	5	4	4	5	5	4	5	5	4	4	4	5	4	4	4
5	2	3	4	4	4	5	4	5	5	4	4	5	5	5	4	5	4

**Section A: Success criteria in defining a PPP project in MRTS
as successful**

Filling Instruction:

You are requested to rate the importance of each parameter in defining the success of a PPP metro project on a scale of 1 to 5 : (5: Highly Important, 4: Moderately Important, 3: To some extent Important, 2: Low importance, 1: Least Important)

S.No	<i>Please rate following parameters or phases in a project on a scale from 1 to 5 according to your perception of their importance in defining that a MRTS project developed and executed on PPP framework is successful (1=least important and 5=Highly important)</i>	Most Important	Important	Somewhat important	Not so important	Least important
1	Complete clarity on the contract and unambiguous contract terms with respect to Scope, Time, Deliverable, Cost etc.	○	4	3	2	1
2	Acceptable and manageable risk allocation in the contract to private party	5	4	3	2	1
3	Selection of concessionaire and finalisation of contract agreement	5	4	3	2	1
4	Concessionaire achieves financial closure within stipulated time	5	4	3	2	1
5	Concessionaire delivers the project within stipulated time i.e there is no time over run	5	4	3	2	1
6	The project is completed within budget i.e there is no cost overrun.	5	4	3	2	1
7	The delivered project is as per the scope defined in the contract	5	4	3	2	1
8	Quality of construction of metro system and associated infrastructure	5	4	3	2	1
9	Ridership recovery in MRTS both in short and long term	5	4	3	2	1
10	Last mile connectivity available to passengers for travelling by metro	5	4	3	2	1
11	Service quality in Operation and maintenance of Metro and associated infrastructure	5	4	3	2	1
12	Overall user satisfaction with the metro system	5	4	3	2	1

13	Any other (Pl Specify)	<input type="radio"/> 5 <input type="radio"/> 4 <input type="radio"/> 3 <input type="radio"/> 2 <input type="radio"/> 1
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Section B: Critical Success Factors for the success of a PPP metro project

Critical success factors are key variables that affect the success of a PPP metro project. You are requested to rate the following factors according to your perception of their importance in affecting the success of a PPP MRTS project on a scale of 1 to 5 (5: Highly Important, 4: Moderately Important, 3: To some extent Important, 2: Low importance, 1: Least Important)

S. No	Please rate following critical success factors on a scale of 1 to 5 according to your perception of their importance in impacting the success of a PPP MRTS project(1=least important and 5=most important)	Most Important	Important	To some extent Important	Not so important	Least important
1	Political/social environment/ support	<input type="radio"/>	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
2	Stable macro-economic environment	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
3	Institutional & Legal Framework	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
4	Financial market availability	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
5	Capable & well organised public agency	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
6	Good governance	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
7	Consultation with stake holders	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
8	Multi benefit objectives for all stake holders from the project	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
9	Thorough Cost-Benefit Analysis of the project	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
10	Techno-economic feasibility of project	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
11	Competitive and transparent procurement process	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
12	Strong consortium – technically, financially competent with experience and project management skills	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
13	Government support and Government Guarantee for the project	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
14	Risk analysis and proper risk allocation in a PPP project	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
15	Contract Agreement - completeness with respect to roles and responsibilities of partners, risk allocation and sharing, methods of risk mitigation, provisions for contingency situations etc.	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
16	Contract compliance for results- monitoring by public agency for execution and performance standards in accordance with contract	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
17	Commitment, responsibility and defined role of partners	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1

18	Shared authority between public and private agency					
19	Any other (Please specify)	<input type="radio"/>	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1

Section-C. Respondent's Profile

In this section we would like to know about yourself, your job/company/industry

(Please put a tick mark against the reply applicable to you)

C9. Are you working for government/state Government/PSU or a private sector agency?

- c. Government/State Government/Public sector undertaking
- d. Private company

C10. To which of the following domains you or your company/organisation belong to

- f. Consultancy/Transaction Advisor
- g. Infrastructure civil Contractor/Facility Management firm
- h. Rolling stock supplier
- i. Rail/Metro Operator/Concessionaire
- j. Academician

C11. Which level of management you work in your organisation?

- Junior Management/Middle Management - 1-4 levels from entry
- Senior Management Above 4 levels after entry level

C12. Have you been associated with PPP projects during your career YES/NO

C13. What is your experience in dealing with public private sector (PPP) projects?

- >5 years
- 1-5 Years

C14. If yes number of projects you have been associated with

- >3
- 1-3

C15. Have you handled any projects for railways/metro rail? Yes/No

C16. Was it a PPP project Yes/No

Name : -----

---(Optional)

e-mail ID------(Optional)

Exhibit-2 Profile of Experts

- Well conversant with PPP framework
- Adequate knowledge of rail/metro systems
- Senior level working professionals
- Well acknowledged by Colleagues for their domain knowledge and clarity of thoughts
- 2 consultants/academicians, 2 private sector executives and 2 government sector senior officials

Exhibit-3 Key Questions for Case Study of Hyderabad Metro

7. Who are the main actors involved in planning and implementation of Hyderabad Metro?
8. Which critical factors have contributed to the success of Hyderabad metro in achieving contract success and financial closure? Have these factors contributed in the same way during implementation?
9. What is your opinion on the concessionaire agreement for Hyderabad Metro with regard to complete clarity on the contract with respect to scope, time, deliverables etc? Do you think the risks in the project have been allotted to the party which is best placed to bear that risk?
10. Please describe the role played by your counterpart in public/private agency. How it has affected the project positively? What in your opinion could have been done more or done differently?
11. What obstacles/problems were faced in the start of the project and during implementation? What are the learning points with respect to concession agreement for PPP metro projects?
12. What are the key learnings from implementation of Hyderabad Metro?

Exhibit-4 : Pilot Analysis Data –Ratings on Performance Indicators by Respondents

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
5	4	5	4	5	3	4	3	3		5	5
5	5	4	4	4	3	5	4			4	4
5	5	4	3	3	5	4	5	5	4	5	5
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5	4	4	4	4	4	4	5	4	4	4	4
5	5	4	4	4	4	4	5	4	4	3	4
5	4	4	4	4	5	3	5	4	4	4	4

Exhibit-5 : Pilot Analysis Data –Ratings on CSFs by Respondents

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18
4	5	5	5	5	4	4	3	4	4	5	5	5	5	5	4	4	4
4	4	5	4	4	4	4	3	3	3	5	4	4	5	5	4		3
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5	4	3	4	5	5	5	5	5	4	5	5	4	4	5	5	5	5

Exhibit-6 : Opinion Survey Data –Ratings on CSFs by Respondents

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18
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