

PROJECT MONITORING: NEED FOR COMPUTERISATION

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PROJECT MONITORING: NEED FOR COMPUTERISATION

- *India poised for tremendous growth*
- *Railways – integral part of transport infrastructure*
- *Railways- need to add to capacity at a fast pace to meet the transport requirement in the country*
- *Railways and Road are both competitors and complementary to each other*

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- INDIAN RAILWAYS: VISION

STATEMENT 2000

	Target as per VS 2020, kms	Target p.a. to meet VS targets, kms	Av prog achieved 2007-9, kms	%age capacity enhancement reqd
New Lines	25000	2500	256	846
Doubling	12000	1200	345	248
GC	17000	1700	1306	30
RE	14000	1400	650	115
TOTAL	68000	6800	2557	166

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- The previous slide gives an idea of the seemingly impossible task of capacity enhancement facing Indian Railways' Civil Engineers

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- If figures of RE and GC are discounted on account of RE being largely non-civil engg, and GC being the easiest :

	Target as per VS 2020, kms	Target p.a. to meet VS targets, kms	Av prog achieved 2007-9, kms	%age capacity enhancement reqd
New Lines	25000	2500	256	846
Doubling	12000	1200	345	248
TOTAL	37000	3700	601	515

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- Some of the reasons for non-delivery can be enumerated as:
 - *Unassured and erratic fund flow*
 - *Too many works , little fund and changing priorities*
 - *Cumbersome systems*
 - *Vigilance fear psychosis-process oriented*
 - *Inaccurate estimation*
 - *Late sanction of work*

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- To enhance capacity six fold, apart from other important measures like
 - *timely sanction,*
 - *Assured funds*
 - *Use of new construction technologies*
 - *Improvements in contractual matters*
 - *More emphasis on results than on process etc....*

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- ... intensive and extensive use of computerisation is required in the field of Project Monitoring
- Intensive:- all aspects
- Extensive:- all stages

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- But on date no such programmes are in use, even by RVNL (although provision exists in contracts)

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- How computerisation helps:-
 - *Better familiarity with work components*
 - *Better resource planning*
 - *Better sequencing (Critical Path)*
 - *Conflict resolution*
 - *Quality Assurance*
 - *Dynamic Adjustment*
 - *Cost effective*

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- To achieve all such benefits:- an integrated Project Monitoring Software needs to be developed and adopted by IR, although readymade packages are available:-

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- Propriety programmes:
 - *MS Project*
 - *Primavera*
 - *Easyproject.net*
- Open source programmes
 - *Dotproject*
 - *Ganttproject*
 - *Openproject*

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- A customised integrated programme may have the following modules:-
 - *Detailed estimate*
 - *Bidding documents*
 - *Scheduling of activities*
 - *Scheduling of resources*
 - *Scheduling of finance*
 - *Quality*

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- Continued
 - *Measurement and billing*
 - *Dispute resolution*
 - *Completion report*

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- Such programmes should be universally adopted on IR
- All construction personnel should be made well conversant with use of such software.
- A beginning is to be made

THANK YOU