

### We carry both freight & passenger traffic



Freight carried – 1.165 billion tons/p.a. (4<sup>th</sup> largest in the world)

Passenger carried – 23 million /day (largest passenger carrier in the world)

No. of trains per day -13,000 passenger trains, 8,000 freight trains

No. of stations – 8500

No. of employees – 1.3 million approx

Annual earnings- Rs.1,88,998 cr (BE 2017-18)

Annual Expenditure- Rev - Rs.178,350 cr, Capex Rs.131,000 cr BE 2017-18

Capex-GBS- Rs.55,000 cr, Int. Resources- Rs. 14,000 cr, EBR- Rs.40,000 cr, PPP- Rs 22000 cr

## We transport bulk commodities

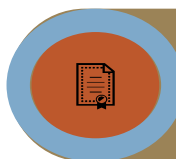
### ➤ Indian Railways carries

- 70% of Coal
- 87% of Fertilizer
- 81% of Iron ore
- 42% of Cement
- 17% of POL
- 20% of Foodgrains

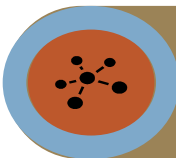


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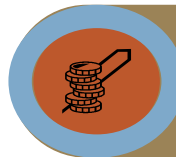
## Need for 'Accounting Reforms'



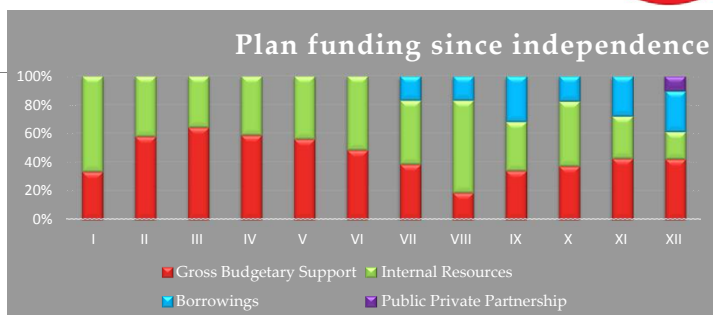
Complete, realistic and current information for managerial and strategic decisions



Paramount need for responsive and reliable costing framework

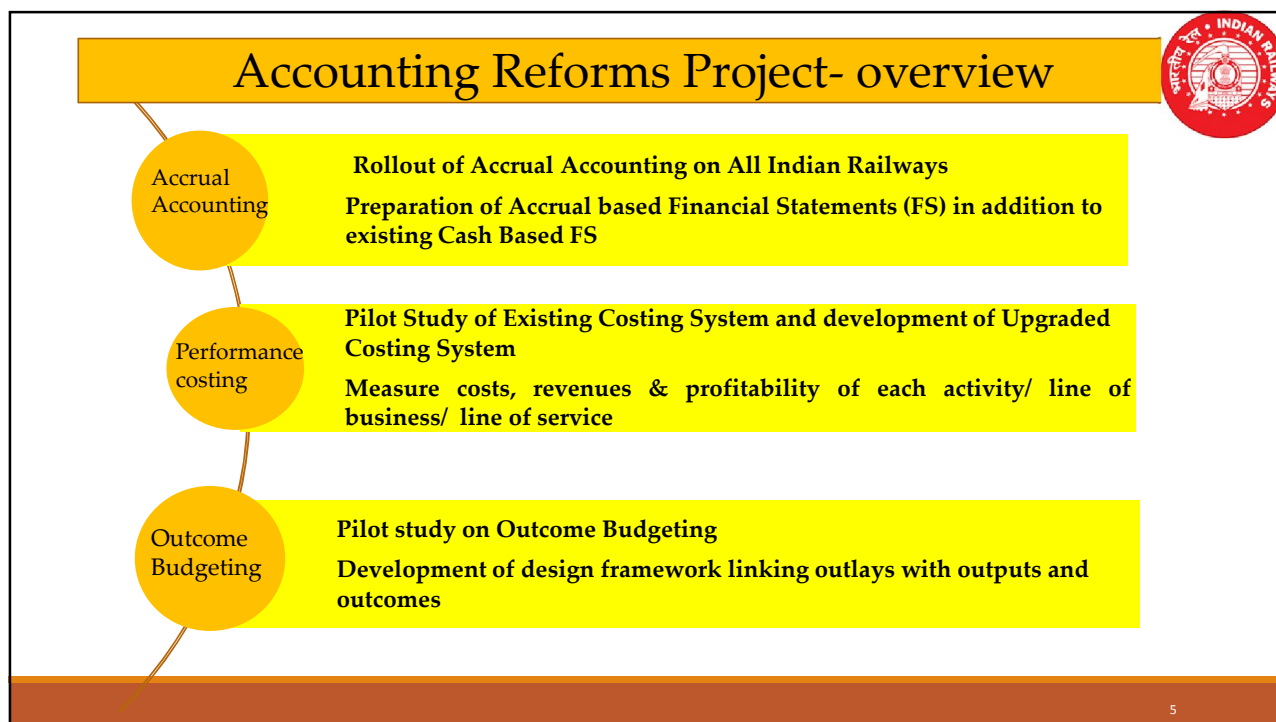


Meeting the funding challenge



From VII Plan onwards, debt has been bridging the funding gap

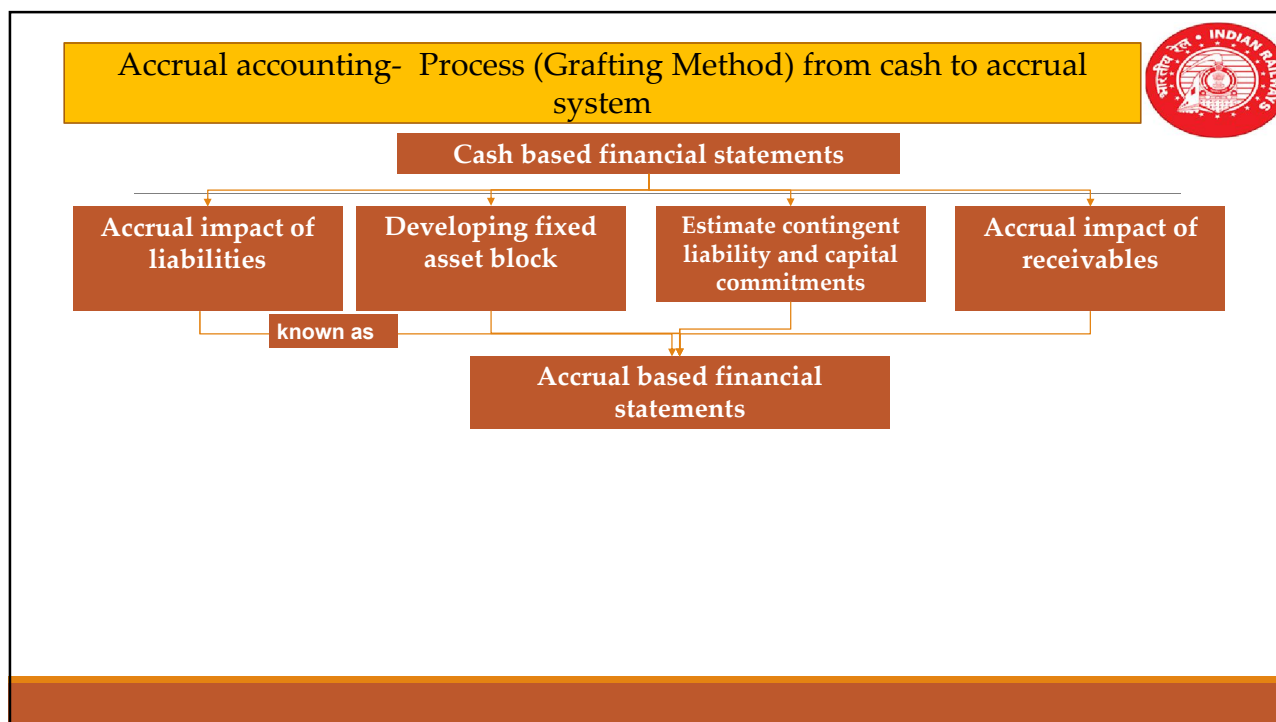
Accounting reforms would help in making Indian Railways' finances self-sustainable



## Accrual Accounting

- Implementation of Accrual Accounts undertaken in association with ICAI-ARF.
- Modus Operandi:
  - Pilot scale implementation at one ZR and Production Unit under Grafting method
  - Scaling up to transaction based accrual accounting
- ICAI- ARF team with **CA Atul Gupta** as Project Mentor steered pilot implementation at North Western Railway, Jaipur
- Pilot scale implementation of Accrual Accounting started on Ajmer Division Jan/2015- subsequently scaled up to entire North Western Railway Mar/2016.
- Under pilot project Accrual Based Fixed Assets Register and Financial Statements of NWR prepared for 2014-15.

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## Accrual Accounting

- **Documents released in National Conference held on 20-12-2016 at Vigyan Bhawan by Hon'ble FM and MR:**
- Opening Balance Sheet of NWR as on 31-03-2014; Financial Statements for year ended 2014-15 – Balance sheet, Statement of Profit and Loss, Cash Flow Statement, Accounting Policies and Notes to Accounts
- Another Pilot Study on RCF, study completed and Accrual Based FS finalized.
- ICAI- ARF team with **CA Sanjay Vasudeva** as Project Mentor steered pilot implementation at Rail Coach Factory, Kapurthala.

**Accounting Policies:**

- Expert Group under **CA Amarjit Chopra, Chairman, National Advisory Committee on Accounting Standards (NACAS)**, eminent professionals and senior Railways officials, guided and monitored the studies and finalised standard Accounting Policies.

## Accrual Accounting



### Accounting Policies contd-- :

- Position in various countries and industry viz National Rail Road Passenger Corporation (Amtrak)/US, Australian Rail Track Corporation, Kiwi Rail Holdings Ltd, China Railway DMRC and KRCL referred in the process
- **Following Accounting Policies framed for Indian Railways**
  - Basis of Preparation of Financial Statements Purpose/Objectives,
  - Use of Estimates,
  - Fixed Assets Accounting,
  - Capital work in progress,
  - Depreciation, Provisions,
  - Contingent Liabilities and Contingent Assets,
  - Valuation of Inventories,
  - Revenue Recognition,
  - Lease Accounting,
  - Investments,
  - Retirement Benefits
- **These policies are being reviewed in line with IGFRS/ IPSAS**

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## Accrual Accounting



- **Rollout of Accrual Accounting on all Indian Railways :**
  - ICAI-ARF is the channel partner with **CA Atul Gupta** as Project Mentor.
  - Up-dated CSER and Implementation Manual circulated to Rlys to assist in Roll out.
  - 130+ CAs assisting Railways to prepare Fixed Assets Register(FAR), Current Assets, Current Liabilities and Financial Statements for 2105-16 and 2016-17 under grafting method.
  - Details of approx 20 lakhs fixed assets being captured in **FARs**.
  - Actuarial based assessment of Staff Benefit liabilities towards 13 lakh+ employees and 15 lakh + pensioners is being done through an Actuarial firm.
  - A concept paper is also being developed in association with ICAI on creation of a self-sustaining Pension Fund, including funding model thereof, to meet with the long-term staff liabilities.
  - **CA S.B.Zaware** has been nominated by ICAI to prepare the required Concept Paper bringing out administrative/ legal /procedural issues besides the practice in Industry locally and abroad in Govt./ Public Sector.

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## Fixed Assets Registers- 18 categories of fixed assets



- Land
- Building
- Bridge/Tunnel/flyover/Subways
- Roads/Streets Railways Tracks
- Furniture & Fixtures,
- Office Equipment,
- Computer & Peripherals
- Vehicles
- Plant, Machinery & Equipment
- Medical Equipment
- Loco/Coach/Wagon
- Capital Work-in-Progress
- Plant, Machinery & Equipment (Signal)
- Plant, Machinery & Equipment (Telecom)
- Electric Equipment& Fittings
- Intangible Assets
- OHE Assets (4 sub categories)
- **20 column in each FAR, about 20 lakh fixed assets, hand holding by CAs in capturing data**

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## Accrual Accounting



- **Dash Board:**
  - Web enabled IT Dashboard developed for collation and progress monitoring.
- **Up-gradation of existing accounting system**
  - Up-gradation of existing accounting system for transaction based accrual accounting also under process.
  - Changes in Chart of Accounts.
- An **expert group** headed by **CA Amarjit Chopra**, Chairman NACAS & ex - President, ICAI, eminent professionals, sr. officers from Railways formed to steer Rollout process.
- **Capacity Building :**
  - Webinars;
  - Field training to staff by CA Firms and Central team of ICAI-ARF;
  - Training of Officers and Staff at NAIR/ Vadodara and C-TARA, Secunderabad.

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## Performance Costing



### Objectives:

- Design an information system with different access levels for categories of users to:
- Provide information about various costs in key performance areas viz. construction, augmentation, operations and maintenance.
- Measure performance of each activity/line of business and line of service.
- Measure costs, revenue & profitability of the following, but not limited to:
  - Passenger and freight traffic [for each class and each commodity]
  - Train, section, gauge, traction, route etc. including sub-urban train, EMUs, special trains, tourist/luxury trains etc.
  - Production Units, service units, utilities etc.
  - Zone, Division, field units etc.
  - Locomotive, coach, wagon etc.
  - Rail accidents & other abnormalities

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## Performance Costing



### Current Status:

- Pilot study on Performance Costing started on Northern Railway in association with Institute of Cost & Works Accountants- Management Accounting Research Foundation (ICWAI-MARF).
- Draft As-is-Report detailing existing costing system and gap analysis submitted by consultants.
- Next stage is designing and developing an improved activity based costing system.
- Three- tier Advisory Body formed on Northern Railway to guide and assist the study:
  - o PHOD committee to guide and monitor study.
  - o SAG Officers Committee to assist consultants.
  - o A team of JAG officers to coordinate with the Consultants for field study.

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## Performance costing- an integrated system



Step I

### Budget formulation

- Preparation of revenue and capital budget allocations

Step II

### Expenditure accounting

- Correlate detailed head of expenditure to activities/ functions

Step III

### ABC analysis

- Cost centre/ profit centre (line of business/ services) wise detail of expenditure, development of 'measurable' indices of performance

Step IV

### Costing per unit of output

- Unit cost of delivery of services, variance analysis, identification of cost cuts, money makers (or losers) and non value-adding activities

Step V

### Outcome budgeting

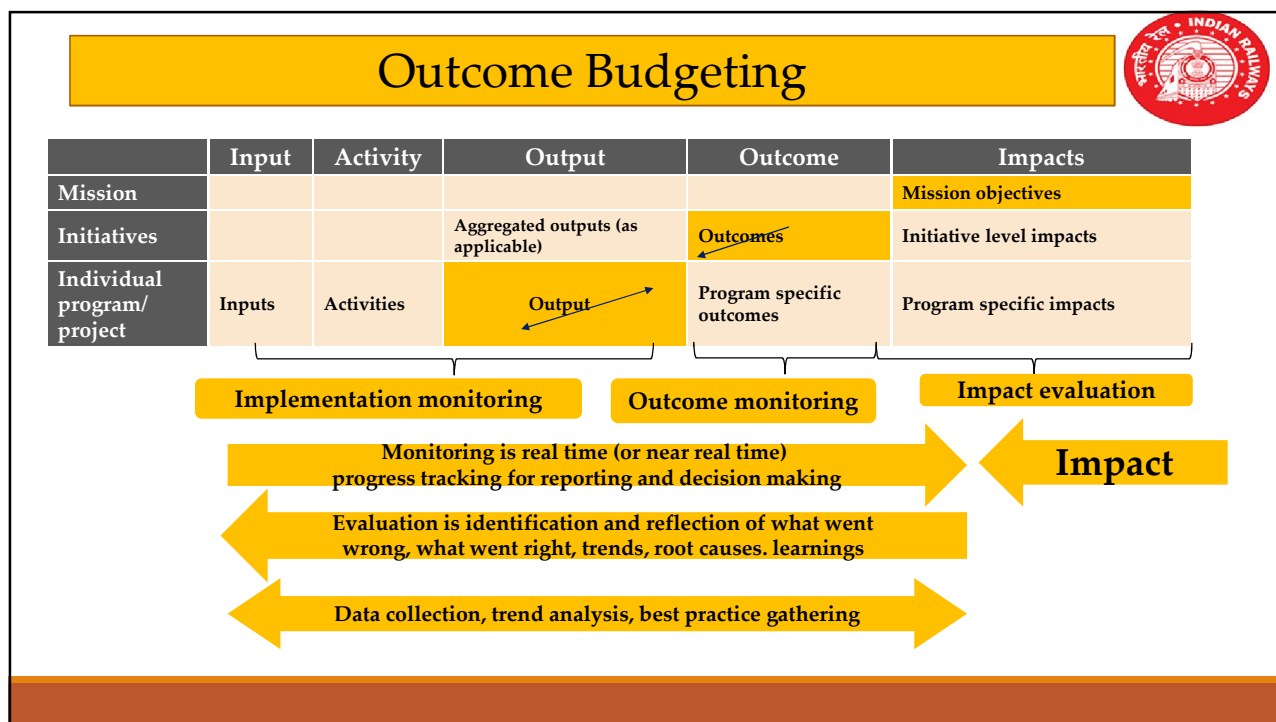
- Measurable outcome to ensure accountability

## Outcome Budgeting



- **Objectives:**
- Outcome Budgeting aims at developing a design framework linking outlays with outputs and well defined outcomes in the areas of operation, maintenance, safety, throughput enhancement, route decongestion, productivity gains, asset optimization etc.
- **Pilot Studies:**
- Pilot Studies initiated on NR and SCR.
- Interaction with Niti Ayog for refinements to the OB framework of Ministry of Railways Outcomes.
- A team of three Central Council Members namely **CA Atul Gupta, CA M.P. Vijay Kumar and CA K. Sripriya** nominated by ICAI for assisting in the Pilot Study.





## Accrual Accounting-Pilot Project Journey



- ICAI-ARF team was stationed at Jaipur for 5 months to compile the information received from Divisions, Workshops and HQ.
- Deliverables:
  - Comprehensive Scope Evaluation Report detailing “AS IS”, “TO BE”, Way forward methodology for preparation of Financial Statements.
  - Fixed Asset Register for the year ending 31.03.2014 and 31.03.2015
  - Opening and Closing Balance Sheet as on 31.03.2014 and 31.03.2015 respectively.
  - Accrual Accounting Implementation Manual.



## Key Outcomes of the Pilot Project- NWR

- CWIP of Rs. 2,102 Crore segregated
- Assets Count of 63000 – of which for 13000 values not available – taken at Nominal Value of Re. 1
- Depreciation – Rs. 499 Crores (Whereas appropriation was only Rs. 291 Crore)
- Outstanding Lease Liability of Rs. 2,271 Crore identified
- Capital commitment of Rs. 11,274.70 Crore identified
- Actuarial liability of Rs. 28253 Crore identified
- Findings and Way Forward shared with C&AG and CGA also.

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## Cash Vs Accrual – Major Difference in Fixed Assets



S. No.	Particular	Fixed Assets Register on accrual basis on 31.03.2015 (in Crores)	Block Account – Existing on 31.03.2015 (in Crores)	Remarks
1.	Gross Assets including CWIP	14,789	13,258	FAR includes assets worth Rs. 35 Crores which were charged to revenue and not part of Block Account like Computers, F&E, etc.
2.	Accumulated Depreciation	3,845	NIL	No Depreciation was charged in Cash based Accounting
3.	Net Fixed Assets	10,944	13,258	Shows difference due to Accumulated Depreciation
4	Lease Assets	2,271	NIL	Were not recognized in Cash based Accounting

26/10/2018

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## Cash Vs Accrual – Major Difference (Rs. in Crore)



S. No.	Particular	Accrual Basis on 31.03.2015 (Rs. In Crores)	Cash Basis on 31.03.2015 (Rs. In Crores)	Remarks
1.	Depreciation	499	NIL	No Depreciation is charged in Cash based Accounting
2.	Appropriation to Depreciation Reserve Fund	291	291	Appropriation made to DRF also over and above Depreciation
3.	Appropriation to Pension Fund	1,246	1246	Actuarial based assessment not provided in FS
4.	Net Profit after Depreciation and Appropriation	59	565	Difference due to Depreciation

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## Actuarial Liability and Net Worth



### Actuarial Liability as on 31.03.2015

S. No.	PARTICULAR	AMOUNT (IN CRORES)
1.	GRATUITY	1,707
2.	EARNED LEAVE	1,250
3.	MEDICAL	1,277
4.	PENSION	23,907
5.	COMPOSITE TRANSFER GRANT	111
	<b>TOTAL</b>	<b>28253</b>

### Net Worth of North Western Railway (NWR) as on 31.03.2015

S. No.	PARTICULAR	AMOUNT (IN CRORES)
1.	TOTAL ASSETS	23,648
2.	CURRENT LIABILITIES	(9,961)
3.	NON-CURRENT LIABILITIES	(3,912)
4.	NET WORTH	9,775

\*Actuarial Liability is not provided in the Financial Statements as on 31<sup>st</sup> March 2015

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## Challenges/ Solutions

Challenges	Solutions
Non- availability of cost	Where the cost data not available, assets were valued at Re. One.
Non- availability of Date/Year of acquisition	<ul style="list-style-type: none"> <li>Where only year of acquisition was available then 1<sup>st</sup> April of that year was considered as date of acquisition.</li> <li>Where neither date nor year was available in this case it was considered that life of that has been expired.</li> </ul>
Non- availability of useful life/codal life of Buildings, Railway track, Roads/streets and furniture & fixtures	Codal life of Building, Tracks, Roads, Furniture and Fixtures were determined by AR directorate in due consultation with ICAI ARF.
Administrative issues	Resistance to Change

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## Special solutions

Category of Assets	Challenges	Way Forward
LAND	<ul style="list-style-type: none"> <li>Historical data was not available in respect of Date of acquisition;</li> <li>Non existence of record for financial data of land.</li> </ul>	<ul style="list-style-type: none"> <li>As land is a non depreciable assets, therefore for the preparation of financial statements cumulative value of the land taken from the Block Account of Railway.</li> </ul>
RAILWAY TRACKS	<ul style="list-style-type: none"> <li>Consisting of several component having different useful life;</li> <li>Cost data of each and every component was not available;</li> </ul>	<ul style="list-style-type: none"> <li>A track valuation methodology developed based on Track Estimates;</li> <li>Track classified into 4 part for the purpose of FAR</li> <li>Physical data obtained from the Track Management System;</li> <li>Cost data obtained from the Railway Board (For Rails and Sleeper) and Divisions (For Ballast)</li> <li>Codal life of Rail, Sleeper and ballast is taken route wise.</li> </ul>
ROLLING STOCK	<ul style="list-style-type: none"> <li>Rolling stock consisting of owned assets and Leased Assets;</li> <li>Non existence of bifurcation of owned assets and leased assets;</li> </ul>	<ul style="list-style-type: none"> <li>Data of leased Rolling Stock obtained from the IRFC to compute the lease liability;</li> <li>Data of Rolling stock obtained from the Zonal Railways to prepare Fixed Assets Register.</li> <li>Life of rolling stock obtained from Railway Codal Provisions ( Finance code volume I).</li> </ul>

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## Way Ahead



- Grafting method to Transaction based accrual accounting
- IT integration
- Actuarial based assessment of Staff benefit liabilities
- Assessment of accounting depreciation based on useful life of assets
- Capacity building & Hand holding
- Improved Costing
- Line of Business/ Line of service wise costing
- Outcome Budgeting
- Optimal Capital Budgeting, prioritisation of projects
- Right Accounting – Right Costing – Right Pricing – Right Outcomes

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***THANK YOU***

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