GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2017/C&IS/Project/ROMRT/35 **New Delhi, Dated: 17.07.2018**

The General Manager,
Northern Railway,
New Delhi.

Sub:- Sanction for the work of "Route Optimization modelling using Operation Research Tools - Phase-1".

Ref:- 1. CRIS's letter No. 2017/CRIS/NDLS-HQ/CC/Project/WorkPrsal/0277/Pt-1 dated 21.09.2017.
2. Board's letter No. 2018-B-106 dated 18.06.2018.
3. Board's letter No. 2015/C&IS/Project/Executing/32 dated 06.07.2018.

A new work **"Route Optimization modelling using Operation Research Tools - Phase-1" under the Pink Book Item No. 229/2018-19 of Northern Railway (Other Information Technology works on Indian Railways)** has been included in the Pink Book of the year 2018-19 as Item No. 229b of Northern Railway at the abstract cost of Rs. 81,40,00,000/- (Rupees eighty one crore and forty lakh only) under the allocation "DF-3" under the plan Head – 17 (Computerization).

Item-wise break up of cost is appended as "Annexure".

Vinita 17/7/18
(Vinita Narera)
Director Electronics(C&IS)

Copy to :-

1. **The FA & CAO, Northern Railway, New Delhi.**
2. **The Chief Commercial Manager, Northern Railway, New Delhi.**
3. **The Chief Administrative Officer(FOIS), CRIS Complex, Chanakyapuri, New Delhi.**
4. **Managing Director, CRIS, Chanakyapuri, New Delhi.**
5. **F(X)-II and Budget Branches of Railway Board.**

Annexure

No. 2017/C&IS/Project/ROMRT/35 New Delhi, Dated: 17. 07.2018

Item-Wise break up of cost of the work of "Route Optimization modelling using Operation Research Tools - Phase-1"

SN	Items	Cost (Rs.)
1	Application Software - Development (Resources) Costs	65,00,00,000
2	Skills Development Cost (Including Consultancy Costs if any)	2,00,00,000
3	Implementation, Training and Data Mgt. Costs	2,00,00,000
4	System Software (Sys-SW) Costs	2,00,00,000
5	Hardware Systems Costs	1,00,00,000
6	Network Equipment /Infrastructure Costs	50,00,000
7	Facilities (Civil & Electrical) Costs	50,00,000
8	Project Management Establishment	1,00,00,000
9	D & G (CRIS) Charges (10%)	7,40,00,000
	Total Cost of the Project	**81,40,00,000**

Vinita
17/7/18