Sub: Usage of alternative/new materials/technologies in construction of National Highways

India has the second largest road network in the world. To develop and maintain this network in an efficient, environment friendly, safe manner there is need for innovation in the fields of design, planning, construction, maintenance and operation of highways. These long term perspectives would require development of new/alternative materials/technologies for high quality, cost-effective, environmentally friendly, safer and durable road infrastructure.

To encourage use of new/alternative materials/technologies, Ministry initiated the process of accreditation with the assistance from Indian Roads Congress. However, new/alternative materials/technologies are continuing to receive lukewarm response by the Project Engineers, Designers as also the Consultants. Therefore, pro-active steps for their adoption need to be encouraged.

2. World-wide, many new/alternative materials/technologies have emerged, which hold promise for adoption in our country as well. The Ministry of Road Transport & Highways has, accordingly, been issuing guidelines for the usage of the new materials/technologies from time to time. The Manuals of ‘Standards & Specifications for 4/6 laning of National Highways through Public Private Partnership’ (Para 1.12) also stipulate that ‘the Concessionaires will be free to
adopt international practices, alternative specifications, materials and standards to bring in innovation in the design and construction provided they are better or comparable with the Indian standards'. This needs to be further widened.

3. Accordingly, the Ministry has decided that the new/alternative materials/technologies proven in India or abroad shall be deemed to be accredited for adoption in the highway sector, subject to the following:

   i. The developers/promoters of new/alternative materials/technologies shall have to provide the standards & specifications and certified performance reports from the user agencies of major developed countries where the proposed materials/techniques have been successfully used to the executing agency to establish their suitability for adoption.

   ii. The developers/promoters shall strive to establish permanent base in India and show long term commitment to the goal of innovative infrastructure development in India.

4. The new/alternative materials/technologies should be given priority in field trials and the performance evaluated over a period of time to enable formulation of guidelines and codes of practice for their future usage on the National Highways.

5. The contents of this Circular may be brought to the notice of all concerned in your Organization. Feedback on these guidelines is solicited.

6. This issues with the approval of competent authority.

   Yours faithfully,

   (Amiyanshu)

   Assistant Executive Engineer (S,R&T) (Roads)

   For Director General (Road Development) & Spl Secy

Copy to:

1. PS to Hon'ble Minister (RTH&S) – for kind information
2. Sr. PPS to Secretary (RT&H) – for kind information
3. PS to DG (RD) & SS
4. PPS to SS&FA – for kind information
5. All Technical officers in the Ministry of Road Transport & Highways
6. All ROs and ELOs of the Ministry of Road Transport & Highways
7. The Secretary General, Indian Roads Congress
8. The Director, IAHE
9. Technical Circular File of S&R Section
10. NIC for placing on the website under “What’s New”