

ballast to compensate for sagging. Yet here, too, another error lurks. Maintaining a hundred metres of track that is unevenly and actively settling, is more expensive than to keep up a kilometre of track with a stable earthen bed, a situation that has prompted a radical review of railroad design and construction policy as it now exists under similar conditions in, among other places, Yamal, Yakutsk and Yamburg.

The proposed changes amount essentially to the following. In areas with icy, sagging soils found during engineering surveys, the permafrost must be protected, and thawing avoided, or these soils must be changed during construction. Three or four years after a line has been built, in places where embankments have sagged noticeably and unevenly (and such substances cannot be guessed in advance, owing to sparse engineering/geological sampling), builders conduct repeat surveys and then develop a design to overcome the sagging, using structures to counteract deformation.

Stabilizing materials suitable for use include peat, screened stone and foam plastic. Where, and to what extent, sags are to be eliminated, is obvious. The task, however, is clearly beyond the strength of the operating staff: the total length of the track sections needing repairs to uneven sagging, is over two hundred kilometres! The Ministry of Railways must therefore enlist subsidiary design and construction units of Mintransstroi [The Ministry of Transportation Construction USSR] to address the problem. Only in this way will we be able to achieve stable embankments on the Central and Eastern sections of the Baikal-Amur Main Line.