

## **Using The Transition Curves With Non-Linear Curvature Variation For High Speed Track In The Syrian Railway Net<sup>1</sup>**

**M. Hajem Alwadi<sup>2</sup>**

### **Abstract**

The transition curves are used in horizontal alignment and usually have linear curvature. In the high speed track it is prefaced to use the non-linear curvature transition curves, because they have better dynamic conditions. This paper studies many types of non-linear curvature transition curves and evaluates their elements, and focuses on the lateral jerk (variation of lateral acceleration ) in the evaluation. Also we make suggestion to use this method in the Syrian Railway Net.

<sup>1</sup> For the paper in Arabic see pages (27-49).

<sup>2</sup> Ass. Prof. Department Of Transportation – Faculty Of Civil Eng. –Damascus University.