An Outline of IEC 62280 - International Standard for Safety Related Transmission Systems Kunihiro KAWASAKI IEC 62280-1 and IEC 62280-2 are international standard documents that were published by International Electrotechnical Commission (IEC) in 2002. These standards define requirements for safety related transmission systems in railway systems. This paper describes the purpose and the structure of these standards, and the outlines of IEC 62280-2 which is a very important and useful standard for designing or building up radio communication networks intended to use for train control systems. And this paper also gives some information about maintenance work on IEC 62280-1 and IEC 62280-2.