

## **Application of General-Purpose Mobile Devices for High Safety Required Use**

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We organized a method and requirements for using a general-purpose mobile devices for safety related applications. First, we classified applications of mobile devices in maintenance work into three types and defined hazards. Secondly, we extracted hazards of input, output and processing functions, arranged safety requirements, and proposed a system configuration method and feedback diagnosis method. We defined a feedback type approaching train alarm that applies proposal methods and confirmed the prototype system ensuring safety when the terminal fails or the handling error.