
**Trusted mobile e-document
framework — Requirements,
functionality and criteria for ensuring
reliable and safe mobile e-business**

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Foreword

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This document was prepared by Technical Committee ISO/TC 154, *Processes, data elements and documents in commerce, industry and administration*.

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Introduction

Communication via mobile devices is essential in the modern world, so that most mobile devices are ever used as a passage for the connection of people, business and network. Electronic transactions, information processing and data transmission via the mobile device are common in business area. In addition, electronic documents utilized by mobile devices in the business world are rapidly increasing and its application area is growing also. Mobile electronic document exchange will be used in overall industrial areas including B2C and B2B; the effect will be enormous considering the characteristic of the mobile device.

However, communication using the mobile device always also involves a number of problems. First, the wireless channel could be disconnected unexpectedly even while transmitting data; in that case the data could be lost. This could be a fatal flaw in the transmission and reception of sensitive corporate data. Second, it is possible for anyone to steal easily the mobile device, causing data transmission by a fake user. Third, the mobile communication is relatively vulnerable compared with online communication in the respect of security and reliability. These problems have been an obstacle to the flow of electronic documents and electronic transactions diffusion through the mobile communication. Companies or individuals have increasing demand for data transmission to continue to be safe and reliable enough from the mobile communication. Thus, it is necessary to have a standard way to exchange data with the electronic document in a manner that is safe and reliable over a mobile device.

In the process to distribute electronic documents for electronic transactions using mobile networks, principles and standards different from those in the wired situation need to be suggested in order to maintain the reliability of distribution of electronic documents due to the negative characteristics of mobile network. As mobile networks give lower reliability generally and limit available computing resources, users of mobile electronic documents need to have wide range of options for ensuring the reliability in the distribution of mobile electronic documents. That is, a guide needs to be suggested to find out an appropriate way for distributing mobile electronic documents according to costs or the network environment.

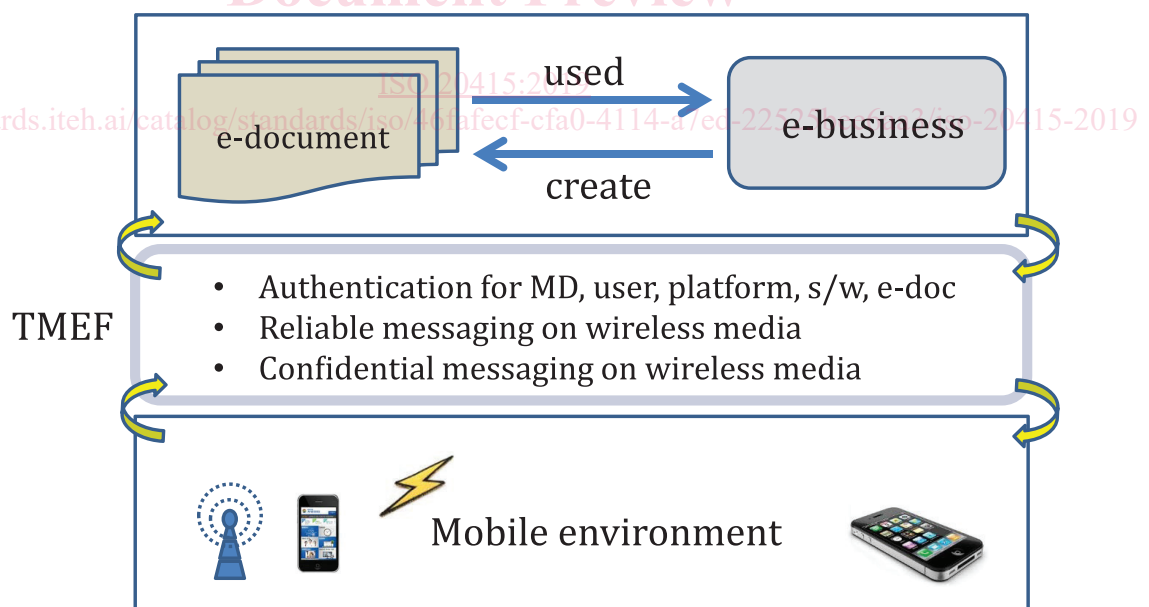


Figure 1 — Concept of a trusted mobile e-document framework (TMEF)

This document is intended to provide a framework standard for creating and transmitting electronic documents for B2B/B2C via a mobile device using a secure and trusted method in an unstable and unreliable mobile environment. The concept of TMEF is illustrated in [Figure 1](#). Businesses or individuals are getting more dependent on mobile devices in terms of handling business as time passes by. Also, the situation is that the demand to handle important duties of businesses is increasing. Therefore, the