TRACK: INFORMATION TECHNOLOGY

Presentation: Telecom standards

F.L. VAN NES. On telecom standards and gerontechnology. Gerontechnology 2012;11(2):331; doi:10.4017/gt.2012.11.02.264.00 Purpose Telecommunication, also across national borders, is essential for modern society. This international telecommunication requires international agreements that embody standards. Some of these agreements and standards are indispensable, such as the technical ones that are directed at the use of the system. Some of them, however, aim to ensure ease of use of the products or systems concerned; these are the so-called human factors standards. Method In a predecessor to this conference I argued that gerontechnologists can benefit from knowledge of international standards. That paper¹ focused on ISO-standards, mainly having to do with visual ergonomics. The present paper deals with international telecom standards. These can be regional, such as those made by the European Telecommunication Standards Institute (ETSI), or global, such as are made by ITU-T, the 'telecommunication standardization sector of the International Telecommunication Union'. This paper will focus on the latter. Results & Discussion There are already specific Recommendations (as the ITU-standards of the are called), for older users: E.138, 'Human factors aspects of public telephones to improve their usability for older people', and F.790, 'Telecommunications accessibility guidelines for older persons and persons with disabilities'. Recent developments in the ITU-T are important for gerontechnology, such as the establishment of a 'Joint Coordination Activity on Accessibility and Human Factors', or JCA-AHF. Its task is to coordinate and stimulate work in these two, different but related areas in all of ITU-T and beyond. The efforts of the JCA-AHF, for instance, led in October 2010 to the first ITU plenipotentiary resolution on accessibility: 'Telecommunication or information and communication technology accessibility for persons with disabilities, including age-related disabilities'. The human factors-oriented standardization work of ITU-T is now concentrated in one of the so-called Questions of ITU-T Study Group 2: 'Operational aspects of service provision, networks and performance', viz. Question 4/2: 'Human factors related issues for improvement of the quality of life through international telecommunications'. This paper will include two examples of studies undertaken by the predecessors of Question 4/2 to find and validate standard solutions: for a set of symbols for new telecom functions, and for tactile identifiers on ID-1 cards2. Figure 1 shows the result of the second of these studies. It contributed to Recommendation E.136, 'Specification of a tactile identifier for use with telecommunication cards', that is also of interest to gerontechnology.

References

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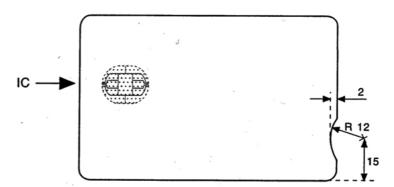


Figure 1. Position and geometry of tactile identifier for ID-1 machine readable cards, front side; IC = integrated circuit; ID-1 cards can be applied in telecommunications and as banking cards, to operate ATMs or for transactions in shops, as well as for other purposes; They are specified by yet another standard, ISO/IEC 7810