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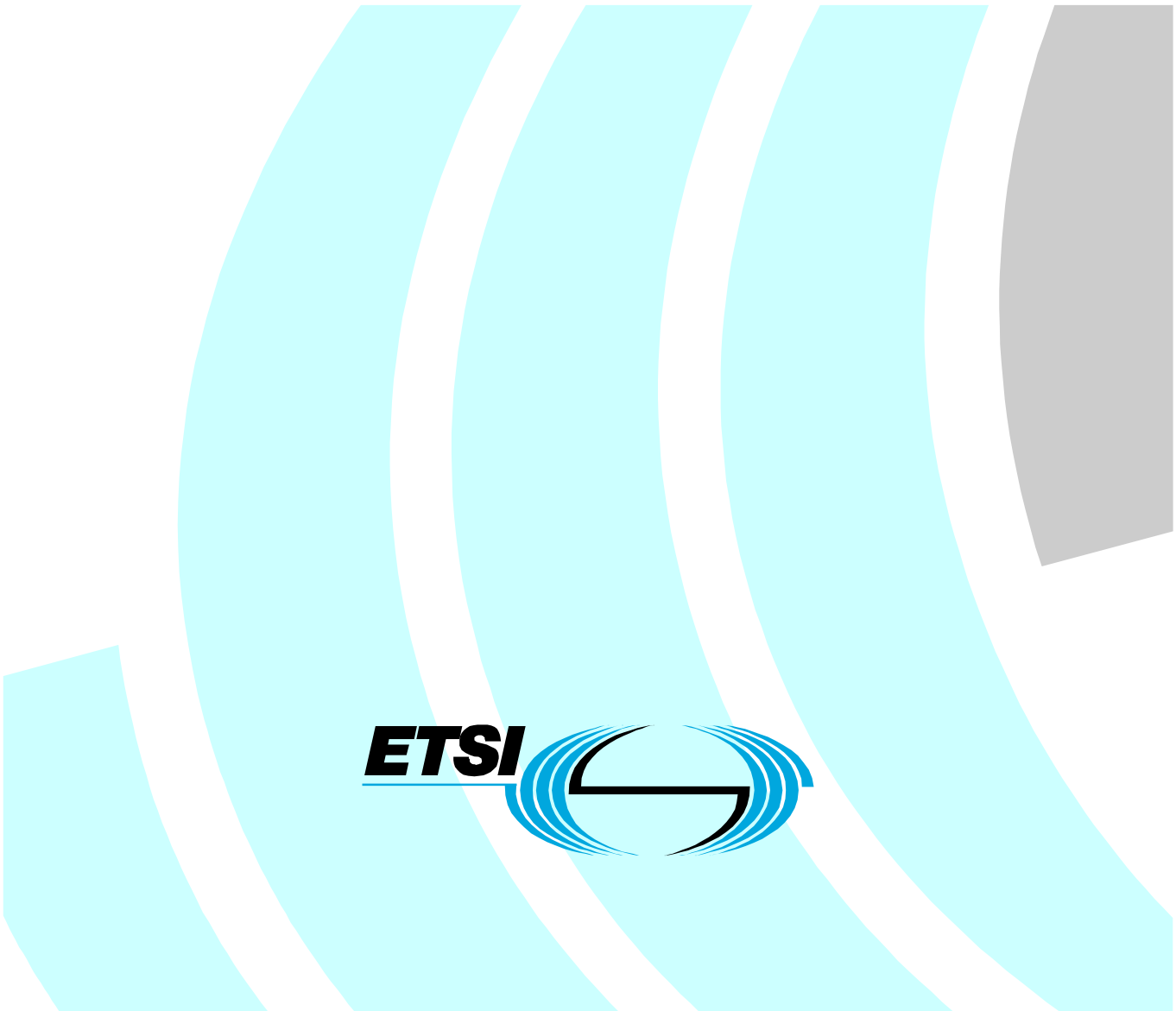
Technical Specification

Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); Network Address Book on fixed network; Part 3: vCard 2.1 profile for contact exchange by SMS/EMS for fixed network



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Contents

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 3 of a multi-part deliverable covering Network Address Book on fixed network, as identified below:

Part 1: "Overview";

Part 2: "Service Description";

Part 3: "vCard 2.1 profile for contact exchange by SMS/EMS for fixed network";

Part 4: "Data Synchronization".

1 Scope

The present document provides some recommendations for implementation of vCard in fixed networks.

The present document defines a way to transfer personal information between a fixed line phone and either an other fixed line phone or a server in fixed networks. Furthermore, interoperability with other terminals (e.g. mobile phones) is made possible. The present document defines the data model, format and transport used to perform this operation.

The present document uses for the data model and format a profile of vCard 2.1.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

[1] "vCard - The Electronic Business Card" The Internet Mail Consortium (IMC) version 2.1 - September 18th, 1996 (URL:http://www.imc.org/pdi/vcard-21.doc).

NOTE: vCard is a trademark of the Internet Mail Consortium. vCard documents are available on http://www.imc.org/pdi/.

[2] IETF RFC 2425: "A MIME Content-Type for Directory Information".

[3] IETF RFC 2426: "vCard MIME Directory Profile".

[4] ETSI TS 123 040: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Technical realization of Short Message Service (SMS) (3GPP TS 23.040)".

[5] ETSI ES 201 986: "Services and Protocols for Advanced Networks (SPAN); Short Message Service (SMS) for PSTN/ISDN; Service description".

[6] ETSI ES 201 912: "Access and Terminals (AT); Short Message Service (SMS) for PSTN/ISDN; Short Message Communication between a fixed network Short Message Terminal Equipment and a Short Message Service Centre".

[7] ISO 8601: "Data elements and interchange formats - Information interchange - Representation of dates and times".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

vCard: used in the present document to refer to electronic business card description format

NOTE: It is implied that the format is vCard 2.1 as a base.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

EMS	Enhanced Messaging Service
IMC	Internet Mail Consortium (http://www.imc.org/)
ISDN	Integrated Services Digital Network
PSTN	Public Switched Telephone Network
SMS	Short Message Service

4 Description

vCard should be used by PSTN/ISDN terminals to exchange personal information (as contact card). This exchange can be made between two terminals or between a terminal and a server.

vCard uses EMS as transport mechanism according to ES 201 912 [6] (SMS for PSTN/ISDN and TS 123 040 [4] (3GPP; Technical realization of SMS; Release 5).

A contact exchange may need a concatenated EMS, i.e. more than one SMS segment is transmitted. If a terminal supporting vCard exchange is not supporting concatenation, it should be able to receive and read at least the vCard information contained in the first segment.

Terminals supporting vCard exchange shall be compliant to vCard version 2.1 as defined in "vCard" [1]:

- Emitting an EMS containing a vCard object, PSTN/ISDN terminals or servers supporting vCard exchange shall use vCard version 2.1, with the following supplementary recommendations:
  - The mandatory properties which are defining a contact in a vCard exchange are Version **VERSION** and Name **N**.
  - The Telephone Number **TEL** property is strictly recommended to be used, since it is seen as an essential property for vCard exchange.
  - As addressed terminals may not support concatenation, it is recommended to put essential information of a contact in the first segment. Therefore, the order of the mandatory properties should be Version **VERSION**, Telephone Number **TEL** and Name **N**.
  - Additional properties should be other Telephone Number **TEL** values, Last Revision **REV**, Electronic Mail **EMAIL**, Categories **X-ETSI-CATEGORIES,** Class **X-ETSI-CLASS** and Nickname **X-ETSI-NICKNAME** which are defined below.
- Receiving an EMS containing a vCard object, terminals or servers supporting vCard exchange should meet the following recommendations:
  - According to references [4], [5] and [6], if a terminal is not supporting concatenated messages, it will receive and read independently each segment. In this case, terminals should extract from the first segment of the concatenated messages the main properties of the received contact. The main properties are Version **VERSION**, Telephone Number **TEL** and Name **N**.
  - The following additional properties should be read: other Telephone Number **TEL** values, Electronic Mail **EMAIL**, Categories **X-ETSI-CATEGORIES**, Class **X-ETSI-CLASS, N**ickname **X-ETSI-NICKNAME** and Last Revision **REV** which are defined below.

5 Properties

5.1 Mandatory properties

The Version **VERSION** and Name **N** properties are mandatory for devices compliant to vCard version 2.1.

The following information should be the minimum handled by terminals supporting vCard exchange (can be completed by other properties).

5.1.1 Version **VERSION**

To specify the version of the vCard specification used to format this vCard.

This property is mandatory for vCard writers conforming to the specification of vCard version 2.1 [1].

Terminals supporting vCard exchange shall support the property Version **VERSION**.

EXAMPLE: VERSION:2.1.

5.1.2 Name **N**

To specify the components of the name of the object the vCard represents.

This property is mandatory for vCard writers conforming to the specification of vCard version 2.1 [1].
The property value consists of the components of the name specified as positional fields separated by the Field Delimiter character (ASCII decimal 59). The property value is a concatenation of the Family Name (first field), Given Name (second field), Additional Names (third field), Name Prefix (fourth field) and Name Suffix (fifth field).

Terminals supporting vCard exchange shall support the property Name **N** as defined in vCard version 2.1 [1].

It is strongly recommended to support at least 16 characters (excluding the semicolon ";") as property value for the property **N**.

EXAMPLE: N:Dawson;Franck.

5.2 Strongly recommended properties

5.2.1 Telephone Number **TEL**

This property specifies the Telephone Number for telephony communication with the object the vCard represents.

Support for this property is optional for vCard writers conforming to the specification of vCard version 2.1 [1].

In addition to the vCard version 2.1 specification of this property, the following recommendations are given for vCard exchange in fixed networks for PSTN/ISDN:

- The property Telephone Number **TEL** should be supported by terminals implementing vCard exchange.
- The supported length of the canonical number string used for the telephone number should be at least 20 characters.
- In case the terminal supports **TEL** types, the following values should be supported for the Telephone Type:
  - HOME;
  - WORK; and
  - CELL.

This means that such PSTN/ISDN terminals or servers supporting vCard exchange should be able to send, to receive and to store a contact with at least one of these values for the Telephone Type.

When sending a vCard, the terminal should:

- specify the most significant type (e.g. WORK, HOME or CELL) as first parameter in **TEL** properties;
- provide additional type information (e.g. PREF, VOICE) as further parameters in **TEL** properties. These parameters may however be ignored by the receiving terminal.

When receiving a vCard, the terminal should:

- treat a received number contained in a **TEL** property according to the first type specified. In case that the terminal does not support the type specified, it should evaluate the second parameter (if present). If this type is also not supported, the terminal may evaluate further type information (if present) or treat it as default type (terminal specific) or discard the whole **TEL** property.

In any case, the device shall be able parse and store correctly the information in the appropriate fields.

EXAMPLE: Receiving TEL;HOME:0123456789, the information should be stored in the corresponding structure.

5.3 Optional properties

5.3.1 Electronic Mail **EMAIL**

This property specifies the address for electronic mail communication with the vCard object.

Support for this property is optional for vCard writers conforming to the specification of vCard version 2.1 [1].

Terminals supporting vCard exchange and additionally the sending of SMS messages to email addresses may support the property **EMAIL** (Electronic Mail).

The supported length for the electronic mail address should be at least 50 characters.

EXAMPLE: EMAIL;INTERNET:john.public@abc.com.

5.3.2 Categories **X-ETSI-CATEGORIES**

To specify application category information about the vCard.

The Categories property may be used to form groups of contacts to make easier management and consultation of the terminal's phonebook or of the network contact book. As far as possible, a same contact may not be duplicated in two different categories. This last category may be used to store specific services numbers such as school, garage, doctor, etc. Special services or functionalities may be associated to a category (messaging, call forward, ringing tone, etc.).

The Categories property does not exist in the specification of vCard version 2.1 [1].

The Categories property may be implemented in a vCard version 2.1 object by using the EXTENSION property. Conforming to the vCard version 2.1 specification of the EXTENSION properties, the initial sub-string **X-** of the EXTENSION property shall be followed by the property parameter name **ETSI-CATEGORIES**.

The Categories **X-ETSI-CATEGORIES** property is optional for terminals supporting vCard exchange.

At a minimum, sending/receiving of 8 characters of **X-ETSI-CATEGORIES** property value should be supported.

When implemented, the values supported for the Categories **X-ETSI-CATEGORIES** property should be at least:

- FAMILY, FRIENDS, WORK and SERVICE.

To ease user approach and avoid multiple definition of the same phonebook directory, some restrictions will apply to the value for this property: The value for **X-ETSI-CATEGORIES** should consist of only one word. It should always be written in uppercase, accentuated characters should be converted to their non accentuated equivalent. While received, the value for **X-ETSI-CATEGORIES** should be converted to uppercase without accentuated characters before storage.

EXAMPLE: X-ETSI-CATEGORIES:FAMILY.

5.3.3 Class **X-ETSI-CLASS**

To specify the access classification for a vCard object.

The Class property may be used to define different levels of access for management and consultation of contacts in the terminal's phonebook or in the network contact book. Contacts with Class property's value equal to PUBLIC are accessible to any user of the phonebook. Contacts with Class property's value equal to PRIVATE require an identification of the user to be accessible.

The Class property does not exist in the specification of vCard version 2.1 [1].

The Class property may be implemented in a vCard version 2.1 object by using the EXTENSION property. Conforming to the vCard version 2.1 specification of the EXTENSION properties, the initial sub-string **X-** of the EXTENSION property shall be followed by the property parameter name **ETSI-CLASS**.

The Class **X-ETSI-CLASS** property is optional for terminals supporting vCard exchange.

At a minimum, sending/receiving of 8 characters of **X-ETSI-CLASS** property value should be supported.

When implemented, the values supported for the Class **X-ETSI-CLASS** property should be at least:

- PUBLIC, PRIVATE.

To ease user approach and avoid multiple definition of the same phonebook directory, some restrictions will apply to the value for this property: The value for **X-ETSI-CLASS** should consist of only one word. It should always be written in uppercase, accentuated characters should be converted to their non accentuated equivalent. While received, the value for **X-ETSI-CLASS** should be converted to uppercase without accentuated characters before storage.

EXAMPLE: X-ETSI-CLASS:PRIVATE.

5.3.4 Nickname X-ETSI-NICKNAME

The nickname is the descriptive name given instead of or in addition to the one belonging to a person, place, or thing. It can also be used to specify a familiar form of a proper name specified by the FN or N types.

The Nickname property does not exist in the specification of vCard version 2.1 [1].

The property value is a concatenation of one or more text values separated by a COMMA character (ASCII decimal 44).

The Nickname property may be implemented in a vCard version 2.1 object by using the EXTENSION property. Conforming to the vCard version 2.1 specification of the EXTENSION properties, the initial sub-string **X-** of the EXTENSION property shall be followed by the property parameter name **ETSI-NICKNAME**.

The Nickname **X-ETSI-NICKNAME** property is optional for terminals supporting vCard exchange.

It is strongly recommended to support at least 16 characters (excluding the semicolon ";") as property value for the property **X-ETSI-NICKNAME**.

EXAMPLE: X-ETSI-NICKNAME:Robbie.

5.3.5 Last Revision **REV**

To specify the combination of the calendar date and time of day of the last update to the vCard object.

In addition to the vCard version 2.1 specification of this property, the following recommendations are given for vCard exchange in fixed networks for PSTN/ISDN:

- The property Last Revision **REV** should be supported by terminals implementing vCard exchange.
- The property value should be a character string conforming to the basic format of ISO 8601 [7].
  The value should be in local time of ISO 8601 [7].

EXAMPLE: REV:19951031T222710.

5.4 Example for a minimal contact exchange

```
BEGIN:VCARD
VERSION:2.1
N:Dawson;Franck
TEL;HOME:0123456789
END:VCARD
```

History

Document history		
V1.1.1	May 2004	Publication as TR 102 334
V1.2.1	August 2005	Publication