



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**S.140**

**TELEGRAPHY**

**ALPHABETICAL TELEGRAPH TERMINAL  
EQUIPMENT**

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**DEFINITIONS OF ESSENTIAL TECHNICAL  
TERMS RELATING TO APPARATUS FOR  
ALPHABETIC TELEGRAPHY**

**ITU-T Recommendation S.140**

(Extract from the *Blue Book*)

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## NOTES

1 ITU-T Recommendation S.140 was published in Fascicle VII.1 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

## Recommendation S.140

### DEFINITIONS OF ESSENTIAL TECHNICAL TERMS RELATING TO APPARATUS FOR ALPHABETIC TELEGRAPHY

The definitions given below have been identified as necessary for studies in the field of alphabetic telegraphy apparatus.

Sub-numbers in the 721.XX.YY range signify correspondence with definitions in the International Electrotechnical Vocabulary (IEV) of the International Electrotechnical Commission (IEC).

Sub-numbers in the 34.ZZ range signify definitions derived from the ITU List of Definitions of Essential Telecommunications Terms.

#### 1 function control

*F: commande de fonction*

*S: instrucción de función (mando de función)*

Control of an elementary operation to be performed by a device other than recording or printing a letter, figure, punctuation mark or graphic symbol contained in a *message* or in *data*.

721.32.01

#### 2 function signal

*F: signal de fonction*

*S: señal de función*

A set of *signal elements* used to transmit a *function control*.

721.32.02

#### 3 control character

*F: caractère de commande*

*S: carácter de control (carácter de mando)*

A *character* whose occurrence in a particular context, initiates, modifies or stops an operation.

*Note 1* - A control character may be recorded for use in subsequent action.

*Note 2* - A control character is not a graphic character but may have a graphic representation in some circumstances.

721.32.03

#### 4 translation (in telegraphy and data transmission)

*F: traduction (en télégraphie et transmission de données)*

*S: traducción (en telegrafía y transmisión de datos)*

Function of a telegraph receiver in reestablishing the text of a *message* from the received signal, including the recording of the text.

721.32.04

- 5 selection** (in a telegraph receiver)  
*F: sélection* (en réception télégraphique)  
*S: selección* (en un receptor telegráfico)
- Primary operation of *translation*, by which the *control function* or the symbol to be printed or translated is chosen automatically or not, from the received signal.
- 721.32.05**
- 6 local record**  
*F: contrôle local*  
*S: registro local*
- Display of a transmitted *message* made on a receiver associated with the transmitting apparatus.
- 721.32.06**
- 7 format effector**  
*F: commande de mise en page*  
*S: determinante de formato*
- A *function control* used to insure a final lay-out of *characters* for printing or display.
- 721.32.07**
- 8 carriage return**  
*F: retour du chariot*  
*S: retroceso del carro*
- A *format effector* that returns the printing or display position to the commencement point of the line.
- 721.32.09**
- 9 case shift**  
*F: inversion*  
*S: cambio de posición* (inversión)
- The change over of the translating mechanism of a telegraph receiving apparatus from one case of *character* to the other case of character.
- 721.32.10**
- 10 letters case**  
*F: série des lettres*  
*S: posición letras*
- One of the cases into which the *characters*, predominantly letter characters and functions of a *telegraph code* with *case shift* are grouped.
- 721.32.11**
- 11 letters shift**  
*F: inversion-lettres*  
*S: cambio de letras* (inversión letras)
- A *case shift* resulting in a *translation* of signals as primary *characters* predominantly letter characters, or functions of *letters case*.
- 721.32.12**

**12 letter-shift signal**

*F: signal d'inversion-lettres*

*S: señal de cambio a letras (señal de inversión letras)*

The signal which conditions a telegraph receiver to translate all signals received as primary *characters* or functions or *letters case*.

**721.32.13**

**13 figures case**

*F: série des chiffres*

*S: posición cifras*

One of the cases into which the *characters*, predominantly numerals and signs, and functions of a *telegraph code* with *case shift* are grouped.

**721.32.14**

**14 figures shift**

*F: inversion-chiffres*

*S: cambio a cifras (inversión cifras)*

A *case shift* resulting in the *translation* of signals as secondary *characters*, predominantly figure characters, or functions of *figures case*.

**721.32.15**

**15 figure-shift signal**

*F: signal d'inversion-chiffres*

*S: señal de cambio a cifras (señal de inversión cifras)*

The signal which conditions a telegraph receiver to translate all signals received as secondary *characters* or functions of *figures case*.

**721.32.16**

**16 space signal**

*F: signal d'espace*

*S: señal de espacio*

Signal corresponding to a *code combination* which causes the printing position to be advanced by the character pitch without printing.

**721.32.17**

**17 erasure signal**

*F: signal d'oblitération*

*S: señal de borrado*

A signal used for the purpose of invalidating a previous signal.

**721.32.19**

**18 "Who are you" signal (function); WRU signal**

*F: signal «qui est là»*

*S: señal «¿con quién comunico?»; señal WRU*

Signal corresponding to a *code combination* which, when received by a *telegraph terminal* or *data station* causes an call-sign device to transmit an *call-sign*.

**721.32.20**

- 19 call-sign; answer-back code**  
*F: signal d'identification; indicatif*  
*S: distintivo de llamada; señal de identificación; indicativo*  
Unique sequence of *characters* identifying a particular *telegraph terminal* or *data station*.  
**721.32.21**
- 20 identification request**  
*F: demande d'identification*  
*S: petición de identificación*  
A *transmission control* used as a request for a response from a remote terminal; the response may include the terminal identification, or the state of the terminal.  
**721.32.28**
- 21 device control**  
*F: commande d'appareil (auxiliaire)*  
*S: instrucción de dispositivo (mando de dispositivo)*  
A *function control* designed to control certain ancillary equipments associated with a *terminal* used in particular to switch such equipments on or off.  
**721.32.35**
- 22 warning signal**  
*F: signal avertisseur*  
*S: señal de aviso*  
A *function signal* which operates an audible or visual calling device with a view to attracting attention.  
**721.32.40**
- 23 switching signal telex-data**  
*F: signal de commutation télex-données*  
*S: señal de conmutación télex-datos*  
A signal which switches a *terminal* from the telex mode to the *data transmission* mode.  
**721.32.47**
- 24 subscriber's installation**  
*F: installation d'abonné*  
*S: instalación de abonado*  
The lines, the terminals and any extension, private exchange, control units and any other equipment located at the subscriber's premises.  
**721.34.01**
- 25 (telegraph) terminal**  
*F: terminal (télégraphique)*  
*S: terminal (telegráfico)*  
Pertaining to or designating equipments connected to the end of the subscriber's line or telegraph circuit, which can either establish or receive calls, or store and retransmit signals, and which can be uniquely identified.  
**721.34.02**

- 26 local end** (with its termination)  
*F: ensemble terminal*  
*S: extremo local* (con su terminación)
- That part of a connection including the apparatus, lines, telegraph repeaters and any control units between the apparatus and the first, or last point in that connection where the transmission quality can be measured.
- 721.34.025**
- 27 start-stop apparatus**  
*F: appareil arythmique*  
*S: aparato arrítmico*
- Telegraph apparatus designed for a start-stop system.
- 721.34.14**  
**34.14**
- 28 teleprinter; teletypewriter (USA)**  
*F: téléimprimeur; télétype* (marque de fabrique, terme à proscrire), *téléscripteur* (terme à proscrire dans ce sens)  
*S: teleimpresor*
- A start-stop apparatus comprising an alphanumeric keyboard transmitter with a printing character receiver.
- 721.34.15**  
**34.15**
- 29 page teleprinter**  
*F: téléimprimeur à (impression sur) page*  
*S: teleimpresor en página*
- A teleprinter which prints characters in page formation.
- 721.34.16**
- 30 tape teleprinter**  
*F: téléimprimeur à (impression sur) bande*  
*S: teleimpresor en cinta*
- A teleprinter which prints characters in a single line on a continuous paper tape.
- 721.34.17**
- 31 alphanumeric keyboard**  
*F: clavier alphanumérique*  
*S: teclado alfanumérico*
- A device comprising an assembly of alphanumeric keys and function keys the operation of which controls the transmitter of a telegraph apparatus.
- 721.34.18**
- 32 storage keyboard**  
*F: clavier à enregistreur*  
*S: teclado con almacenamiento*
- An alphanumeric keyboard in which the combination set up by the depression of a key does not directly control the transmitter but is transferred to one or more sets of storage members for subsequent control of the transmitter.
- 721.34.21**  
**34.51**

**33 tape-reading head; tape-reader**

*F: lecteur de bande*

*S: lector de cinta*

A device which reads a recording tape and produces signals corresponding to the data recorded on the tape.

**721.34.22**  
**34.29**

**34 (teleprinter) control unit**

*F: coffret de commande (d'un téléimprimeur)*

*S: unidad de control (de un teleimpresor)*

Unit associated with a teleprinter and containing the necessary auxiliary equipment for operating this instrument on a switched network.

**721.34.23**

**35 direct printer**

*F: récepteur traducteur imprimeur*

*S: impresor directo*

Telegraph printer used in systems employing unequal length codes such as morse-code, two-condition cable code, in which printing is performed directly from the incoming signals.

**721.34.24**

**36 (tape) perforator**

*F: perforateur (de bande); perforatrice*

*S: perforador (de cinta); perforadora*

An apparatus which records telegraph signals on a paper tape by combination of holes punched in accordance with a predetermined code.

**721.34.25**  
**34.35**

**37 keyboard perforator**

*F: perforateur à clavier*

*S: perforador de teclado*

A perforator in which the punching is controlled by an alphanumeric keyboard.

**721.34.26**  
**34.34**

**38 printing perforator**

*F: perforateur imprimeur*

*S: perforador impresor*

A tape perforator which, when perforating, also prints on the tape the corresponding character or the symbol representing the function control.

**721.34.27**  
**34.36**



**39 reperforator; receiving perforator**

*F: récepteur-perforateur*

*S: reperforador; receptor-perforador*

A receiver comprising essentially a tape perforator controlled by the received telegraph signals or data signals.

**721.34.28**  
**34.35**

**40 printing-reperforator**

*F: récepteur-perforateur imprimeur*

*S: reperforador impresor*

A reperforator which, when perforating, also prints on the tape the corresponding character or the symbol representing the function control.

**721.34.29**  
**34.37**

**41 telegraph transmitter**

*F: émetteur (télégraphique); transmetteur (terme déconseillé)*

*S: transmisor telegráfico*

A device for the transmitting telegraph signals over a telegraph channel.

**721.34.33**  
**34.23**

**42 keyboard transmitter**

*F: émetteur à clavier*

*S: transmisor de teclado*

A telegraph transmitter controlled by an alphanumeric keyboard.

**721.34.34**

**43 automatic transmitter**

*F: émetteur automatique; transmetteur automatique (terme déconseillé)*

*S: transmisor automático*

Telegraph transmitter in which the forming of the signals is not controlled by any operator, but is actuated from a signal recording medium.

**721.34.35**  
**34.27**

**44 automatic numbering transmitter**

*F: émetteur à numérotation automatique (des messages)*

*S: transmisor de numeración automática*

An automatic transmitter in which provision is made for automatically transmitting a serial number before each message.

**721.34.36**  
**34.30**

- 45 automatic retransmitter**  
*F: réémetteur (télégraphique); retransmetteur (terme déconseillé)*  
*S: retransmisor automático*  
 An apparatus which automatically retransmits telegraph signals in accordance with recorded incoming signals.  
 721.34.37  
 34.42
- 46 perforated-tape retransmitter**  
*F: réémetteur à bande perforée; retransmetteur à bande perforée (terme déconseillé)*  
*S: retransmisor de cinta perforada*  
 An automatic retransmitter comprising a reperforator feeding a tape directly into an automatic transmitter.  
 721.34.38
- 47 coupled reperforator and tape reader; fully automatic reperforator transmitter distributor (USA) (FXRD)**  
*F: réémetteur à bande perforée (à lecture complète); réémetteur FRXD*  
*S: reperforador y lector de cinta acoplados*  
 A perforated tape retransmitter which ensures the retransmission of all the signals recorded by perforation including the last one.  
 721.34.39  
 34.39
- 48 automatic retransmitter with controlled tape-feed mechanism**  
*F: émetteur automatique à commande par impulsions*  
*S: retransmisor automático controlado por impulsos*  
 An automatic transmitter in which the movement of the perforated tape is controlled by pulses from an external synchronizing device, for example in the case of a time-division multiplex system.  
 721.34.40  
 34.28
- 49 answerback unit**  
*F: émetteur automatique d'indicatif*  
*S: transmisor automático de indicativo*  
 That part of a telegraph terminal which transmits automatically its answerback code on receipt of the "Who are you" signal.  
 721.34.41  
 34.26
- 50 answerback unit simulator**  
*F: simulateur d'émetteur d'indicatif*  
*S: simulador de transmisor automático de indicativo*  
 A device or program routing, not a part of a teleprinter, but which performs the same function as the answerback unit on receipt of a specific "Who are you" signal.  
 721.34.42

- 51 tape printer**  
*F: lecteur imprimeur*  
*S: lector impresor*
- Apparatus which reads the signals recorded, for instance, on perforated tape and prints the corresponding characters on a paper tape or page without the intervention of transmission.
- For example, a Morse printer or a five-unit printer.
- 721.34.43**
- 52 half-duplex apparatus**  
*F: appareil (fonctionnant) à l'alternat*  
*S: aparato semidúplex*
- Apparatus comprising a transmitter and receiving part, the arrangement of which allows for transmission in both directions but not simultaneously.
- 721.34.49**
- 53 code converter**  
*F: transcodeur; convertisseur de code*  
*S: convertidor de código; transcodificador*
- Equipment which accomplishes a code conversion.
- 721.34.52**  
**32.08**
- 54 telegraph modulator**  
*F: modulateur télégraphique*  
*S: modulador telegráfico*
- A modulator controlled by a telegraph signal.
- 721.34.53**
- 55 telegraph demodulator**  
*F: démodulateur télégraphique*  
*S: demodulador telegráfico*
- A demodulator controlled by a telegraph signal.
- 721.34.54**
- 56 telegraph discriminator**  
*F: discriminateur télégraphique*  
*S: discriminador telegráfico*
- A discriminator for converting frequency shift telegraphy signals into direct current transmission signals.
- 721.34.55**
- 57 telegraph radioconverter**  
*F: convertisseur de signaux radiotélégraphiques; détecteur de signaux (radiotélégraphiques)*  
*S: convertidor de señales radiotelegráficas*
- A device which accepts telegraph signals at audio frequency or intermediate frequency and converts them into signal elements capable of operating a telegraph recorder.
- 721.34.56**

- 58 margin** (of a receiver or terminal)
- F: marge (d'un récepteur ou terminal)*
- S: margen (de un receptor o terminal)*
- The maximum value of a degree of individual distortion compatible with correct translation by a printer receiver or terminal, when the signals arrive at the input under specified conditions.
- 721.26.22**  
**34.03**
- 59 net margin**
- F: marge nette*
- S: margen neto*
- The margin when the modulation rate at the input of the apparatus has its nominal value.
- 721.26.23**  
**34.031**
- 60 effective margin** (of a given apparatus)
- F: marge effective (d'un appareil donné)*
- S: margen efectivo (de un aparato dado)*
- The margin measured on a specified receiver under actual operating conditions.
- 721.26.24**  
**34.04**
- 61 nominal margin** (of a type of apparatus)
- F: marge nominale (d'un type d'appareil)*
- S: margen nominal (de un tipo de aparato)*
- The minimum value specified for the effective margin of equipment of a given type when working under standard operating and adjustment conditions.
- 721.26.25**  
**34.05**
- 62 theoretical margin**
- F: marge théorique*
- S: margen teórico*
- The margin that could be evaluated from the manufacturing data of the equipment, assuming that it is working under perfect conditions.
- 721.26.26**  
**34.06**
- 63 margin** (of a start-stop apparatus)
- F: marge (d'un appareil arythmique)*
- S: margen (de un aparato arrítmico)*
- The maximum value of the degree of gross start-stop distortion compatible with the correct translation by a start-stop apparatus of all the character signals appearing either singly, or at the maximum rapidity corresponding to the standard modulation rate.
- 721.26.27**  
**34.07**

**64 synchronous (start-stop) margin**

*F: marge au synchronisme (d'un appareil arythmique)*

*S: margen de sincronismo (de un aparato arrítmico)*

The maximum value of the margin of a start-stop apparatus obtained by adjusting the modulation rate of the input signals to the most favourable value with respect to the time-base characteristics of the receiver.

**721.26.28**

**34.09**

**65 margin of a synchronous receiver**

*F: marge d'un récepteur synchrone*

*S: margen de un receptor síncrono*

The margin of a synchronous receiver determined by the degree of isochronous distortion.

**721.26.29**

**34.091**