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# 1. DESCRIPTION OF ODETTE OPTION

## 1.1. Concepts

The ODETTE (Organisation de Données Echangées par Télé-Transmission en Europe) file transfer protocol has been adopted by all countries within the ODETTE organisation, of which GALIA is a correspondent in France.

This protocol consists of:

- An international standard (X25 native) for the 1<sup>st</sup> three levels of the OSI model,
- A protocol proper to ODETTE for levels 4 to 7 of the OSI model.

The protocol defines the dialogue which is set up between 2 sites, by means of messages which follow a strict sequence:

- Identification for start of session SSID :

The caller states his identification code, his password, the size of his buffer, his transmission or reception mode, his compression and his re-start option. The call is set up when the recipient responds with his own identification.

- Identification for start of session SFID :

The speaker who has issued the request must specify the file which he is going to send with this message, comprising the file name, date & time, final destination, recording format and size, file size and the position for any re-start.

- Positive reply for start of file SFPA :

The recipient indicates his agreement and specifies only the number of the first requested recording (starting with zero).

- Negative reply for start of file SFNA :

If the recipient is not ready to receive the file, he states the encoded reason and the possibility of any re-try.

- Identification for end of session EFID :

Once file transmission is terminated, the transmitting party specifies the number of transmitted recordings and bytes.

- Positive reply for end of file EFPA :

The recipient confirms satisfactory receipt of the file and issues his request together – as appropriate – with the request for change of direction.

- Negative reply for end of file EFNA :

The recipient specifies the encoded reason for the bad reception.

- Identification for end of session ESID :

When one of the speakers is certain that there is nothing further to be transmitted on either side, he terminates the call.

- Request for change of direction CD:

This message makes it possible to take control or to hand over control.

- Acknowledgment of reception EERP:

The function of this message is to confirm to the transmitting party that the transmitted file has actually reached its final destination, which is not always the called correspondent (as, for example, in the case of Value Added Networks). The transmitting party is then given specification of the filename, date & time, the final destination and the recording format.

**TBT/400** makes it possible to exchange files (dispatch and reception) directly with a correspondent or via a Value Added Network (for example GEIS) which has access to the ODETTE protocol.

Depending on the protocol rules, **TBT/400** may be the caller or the call recipient.

**1.2. Additional requirements****1.2.1. MatérielsHardware**

No specific hardware need be envisaged for the ODETTE X25 option.

An X32 modem is needed for the ODETTE X32 option.

**1.2.2. Connections**

For the ODETTE X25 option, naturally you need to have, on your **IBM AS/400**, a connection and subscription with **TRANSPAC**, with a minimum of 1 CVC available for **TBT/400**.

A telephone connection with an X32 modem is needed for the ODETTE X32 option.

If you use an X32 connection, you also have to ask for an identifier ID32 from **TRANSPAC**, by filling in a form which you will have to ask for from your regional Transpac centre.

**1.3. Implementation**

In order to use this option, you therefore have to use the appropriate menus (refer System Administration) to define the X25 or X32 lines, the wanted holding files and applications (if not already done), and the general Odette parameters.

## 2. Administration

System menus as set out in the System Administration manual, are supplemented by the various menus specific to the option, as described below.

### 2.1. System configuration

In configuration of the system on the basis of the parametrisation of the servers, and by selecting the Odette parametrisation option, you obtain the following choices:

TBT/400	V410	Informatique Pour Les Sociétés	00/03/24	10.37.15
IPS0192	T430	Odette configuration	IPLS01	IPLSP
Default initiator partner . . . . . LOCAL001				
SFID acceptance if unknown origin . . Y Y,N				
SFID acceptance if unknown destination Y Y,N				
Application selection . . . . . D U,D,A				
Default application . . . . . ODETTE F4 for list				
Error on 'duplicate' return-code . . . Y Y,N				
'Duplicate file' detection . . . . . N Y,N				
Restart support . . . . . Y Y,N				
Inversed EERP . . . . . N Y,N,A				
light syntax . . . . . N Y,N				
F1=Help F3=Exit F6=Print F9=Cmd				
Copyright Informatique Pour Les Sociétés				IPLS

This menu, which can be used only for the Odette option, makes it possible to define the default options, as proper to the Odette protocol.

#### Call initiator as the default :

Name of initiating correspondent assigned by default upon an Odette transmission, if it is not specified upon the request for transmission. This correspondent name must be defined in the directory.

**SFID acceptance if origin unknown :**

If Y(es), this specifies that we accept input of an SFID message whose origin is unknown.

**SFID acceptance if destination unknown :**

If Y(es), this specifies that we accept input of an SFID message whose destination is unknown.

**Application selection rule :**

Upon reception, this makes it possible to associate an application with the file. Possible values:

- U = application name as taken from the User SFID field,
- D = application name as taken from the File Name field,
- R = logic is applicable to the destination correspondent, which pre-supposes that the original correspondent has been identified
- A = application name as taken from the definition of the correspondent,

**Application as the default :**

Name of application assigned by default upon an incoming Odette message, if application of all rules for application selection has not been completed.

**Error on 'duplicate' return code.**

Once TBT/400 has finished transmitting a file, it sends an EFID frame, and awaits the reply in the form of an EFPA or EFNA frame. If the return is different (as for example in the event of disconnection), then it is impossible to find out the remote file's status. Upon a fresh attempt TBT/400 sends the SFID frame, and may receive an SFNA rejection frame together with a 'duplicate file' as the reason. This parameter specifies the action taken by TBT/400 in this eventuality:

- 'O' - TBT/400 considers that the file has been transmitted
- 'N' - TBT/400 considers that the file has an error.

This parameter exists at global level, and at the level of each correspondent (as the default : the global level providing the value).

**Detection of 'duplicate file' :**

When TBT/400 receives a file (SFID frame), it is able to check that it is unique ( from the following criteria: name, date, time, origin, addressee... of the file. If the file has already been received, then an SFNA justified as a 'duplicate file' will be sent.

- 'Y' - detection is active
- 'N' - detection is inactive

This parameter, which exists here at global level, also exists at the level of each correspondent (as the default : the global level providing the value).

**Support for re-start:**

Odette enables implementation of re-start. The choice will be the result of negotiation during the signature phase (exchange of SSID's)

Where TBT/400 initiated the connection (outgoing call), this text specifies whether or not this function is supported. This information has come from the direct correspondent or from the indirect correspondent if he is present.

Where TBT/400 is receiving the connection (incoming call), this text makes it possible to reject the function if it was requested by the caller.

This parameter, which exists here at global level, also exists at the level of each correspondent (as the default : the global level providing the value).

<b>2.2. Directory management</b>
----------------------------------

In the definition of a correspondent from a correspondent's details menu, the R/H F20 function key makes it possible to obtain the first details menu of an Odette correspondent:

TBT/400	V410	Informatique Pour Les Sociétés	00/03/24	10.38.47
IPS9950	T430	Odette partner items	IPLS01	IPLSP
Directory type	. . . .	\$\$\$\$ODETTE	Reach	. . . . *GLOBAL
Partner's name	. . . .	IPLS	Network type	. \$\$\$\$\$ODETTE
Partner's narrative	. .	IPLS - TBT	Protocol	. X
X25 TCP/IP addresses	. .	17822030392		
Initial partner	. . . .	*TBT	Origin	*TBT
Indirect partner	. . . .	*TBT	Partner type	. D
Odette identification	. .	OIPLS		
Initiator password	. .	Dynamic . N Int	To change	Date
SSID userfield	. . . .		SFID userfield	
Default dsname	. . . .	/(TBT)/		
File format	. . . . .	F	F,V,U,T	
Exchange buffer size	. . . .	4096	128 - 16384	
Window size	. . . . .	32	1 - 999	
Special logic flag	. . .	N	Y,N	
Compression flag	. . .	Y	Y,N	
Error on 'duplicate'	. . .		Y,N	
'Duplicate' detection	. . .		Y,N	Syntax . . Y,N
Restart support	. . . .		Y,N	inver. EERP Y,N,A
Application selection	. . .	A	U,D,A	Application \$TRANSMI
F1=Help F3=Exit F6=Print F7=Up F8=Down F9=Cmd F13=Up F19=Left F20=Righ				
F21=Default F24=Down Copyright Informatique Pour Les Sociétés IPLS				

The first 5 fields contain information already logged. Only the name and text of the correspondent can be modified here.

The following fields specify the parameters exchanged with this correspondent.

**X25 address :**

X25 address of Odette (*Direct*) correspondent.

**Initial correspondent :**

Name of correspondent responsible for contacting the *Direct correspondent* on behalf of an *Original correspondent*.

**Initial correspondent :**

Name of correspondent seeking to contact an *Addressee* (who may be *Direct*, *Indirect* or *Remote*) via an *Initial correspondent*.

**Indirect correspondent :**

Name of intermediate correspondent, where the Odette correspondent is not accessible directly , but – for example – via an *RVA*. This name must be defined in the directory, but must be *direct*, with **TBT/400** indirectness at a single level.

**Type of Odette subscriber:**

Specifies, in reply, the **TBT/400** type Odette subscriber:

- L = local type, i.e. the subscriber for your site (X25 and Indirect Correspondent not filled in),
- D = direct type, i.e. the external subscriber which can be contacted directly, as the RVA's are of that type (X25 address filled in, Indirect Correspondent not filled in),
- L = indirect type, i.e. external subscriber not directly accessible (X25 address not filled in and Indirect Correspondent filled in).

**Odette identification :**

Odette identification for your correspondent.

**Initiator password :**

Initiator password by which you are recognised by your correspondent.

**Dynamic password :**

Request for generation by TBT/400 of a password.

**Int (interval for dynamic password):**

Specifies the duration of validity of the dynamic password before TBT/400 generates a new password within that time frame.

**To be changed :**

If "Yes", request to TBT/400 for generation of a new password with effect from the next connection, without waiting for the timescale specified in **Int**

**Date :**

Specifies the date of last generation of a password by TBT/400.

**User field SSID :**

User type information which is employed if not filled in upon the request for transmission, and which is transmitted upon initial exchange SSID:

- Blank = default value utilised within the initiating correspondent,
- \*DEST = default value utilised within the recipient correspondent,
- \*ORIG = default value utilised within the originating correspondent,
- \*INDI = default value utilised within the indirect correspondent (or direct, if absent).

**User field SFID :**

User type information which is employed if not filled in upon the request for transmission, and which is transmitted upon announcement of an SFID file:

- Blank = default value utilised within the recipient correspondent,
- \*INDI = default value utilised within the indirect correspondent (or *blank*, if absent).

**Name of file (default) :**

Name of exchanged file used as the default if not filled in upon exchange.

This field can be filled in with the following special values:

- \*KEY = request for generation by TBT/400 of a unique name (default value)
- \*SPACE = makes it possible to generate a blank name.

**Format of file :**

Format of exchanged file used as the default if not filled in upon the request for transmission.

- Blank = default value utilised within the recipient correspondent (or type F if not filled in),
- F = fixed binary type file (default value),
- V = fixed binary type variable file,
- U = fixed binary type unstructured file,
- T = fixed text type file.

**Size of exchange buffer :**

Exchange buffer size negotiated upon initial SSID exchange. The adopted value originated from the order of the direct correspondent or from the indirect correspondent, or 4096 as the default.

It is highly inadvisable to increase this value too much, as 16384 appears to be the maximum value to be adhered to (in the current version, this ceiling is imposed). Size is rounded up to the nearest multiple of 128.

**Window size:**

Exchange window size negotiated upon initial SSID exchange. The adopted value originated from the order of the direct correspondent or from the indirect correspondent, or is assumed to be 32 as the default.

**Special logic indication :**

Indicator of activation of the special logic which makes it possible to achieve reliability in transmissions, negotiated upon initial SSID exchange. The adopted value originated from the order of the direct correspondent or from the indirect correspondent, or is assumed to be N as the default.

- Y = Yes, special logic is active,
- N = No.

**Compression indication :**

Specifies utilisation of compression (implemented in the Odette protocol).

The choice will be the result of negotiation during the signature phase (exchange of SSID)

Where **TBT/400** is receiving the connection (incoming call), this text makes it possible to reject the function if it was requested by the caller.

**Error on 'duplicate'.**

Once **TBT/400** has finished transmitting a file, it sends an EFID frame, and awaits the reply in the form of an EFPA or EFNA frame. If the return is different (as for example in the event of disconnection), then it is impossible to find out the remote file's status. Upon a fresh attempt **TBT/400** sends the SFID frame, and may receive an SFNA rejection frame together with a 'duplicate file' as the reason. This parameter specifies the action taken by **TBT/400** in this eventuality:

- 'Y' - **TBT/400** considers that the file has been transmitted
- 'N' - **TBT/400** considers that the file has an error.

**Detection of 'duplicate file' :**

When **TBT/400** receives a file (SFID frame), it is able to check that it is unique (from the following criteria: name, date, time, origin, addressee... of the file. If the file has already been received, then an SFNA justified as a 'duplicate file' will be sent.

- 'Y' - detection is active
- 'N' - detection is inactive

**Support for re-start:**

Odette enables implementation of re-start. The choice will be the result of negotiation during the signature phase (exchange of SSID's)

Where **TBT/400** initiated the connection (outgoing call), this text specifies whether or not this function is supported. This information has come from the direct correspondent or from the indirect correspondent if he is present.

Where **TBT/400** is receiving the connection (incoming call), this text makes it possible to reject the function if it was requested by the caller.

**Application selection :**

Upon reception, this makes it possible to associate an application with the file. Possible values:

- U = application name as taken from the User SFID field,
- D = application name as taken from the File Name field,
- R = logic is applied to the recipient correspondent,
- A = default application name for this correspondent,
- Blank = application name as taken from the global **Odette** parametrisation,

**Application :**

Name of application assigned by default upon an incoming **Odette** message, if application of all rules for application selection has not been completed.

The **F20 right** function key makes it possible to obtain the detailed menu of the correspondent's X25 parameters:

```

TBT/400  V410          Informatique Pour Les Sociétés          00/03/24  10.39.55
IPS9951  T430          Acces parameters items              IPLS01    IPLSP
Directory type . . . . $$$ODETTE                          Reach . . . . *GLOBAL
Partner's name . . . . IPLS                                Network type . $$$ODETTE
Partner's narrative . . IPLS - TBT                          Protocol . X

Calling password . . . .                                   Ctrl. if caller Y  Y,N
Old password . . . . .
Confirmation password .
Default application . . $TRANSMI
Allowed X25 subaddress
Allowed calling number
Allowed calling number
Allowed calling number
Allowed calling number
Allowed reversed charge N                                  Y,N
IP address .
IP address .
IP address .
IP address .

F1=Help F3=Exit F6=Print F7=Up F8=Down F9=Cmd F13=Up F19=Left F20=Right
F21=Default F24=Down          Copyright Informatique Pour Les Sociétés          IPLS

```

The first 5 fields contain information already logged. Only the name and text of the correspondent can be modified here.

The following fields specify the call number of the correspondent and the X25 parameters which he would like to implement.

**X25 address :**

Correspondent's X25 address.

**Line logic name :**

Logic name of **TBT/400** line employed for this correspondent. Must be defined in the line definition menu.

**Length of Cud field :**

Length of Common User Data field if used by this correspondent.

**Employed Cud :**

Common User Data (user zone of X25 call packet), if used by this correspondent.

**Length of facilities field :**

Length of Additional Services field if used by this correspondent.

**X25 facilities employed :**

Additional Services if used by this correspondent.

**Charge to call recipient :**

Utilisation of charge to call recipient, if authorised by this correspondent.

**Utilisation of Delivery Bit :**

Specifies if we are using the Delivery Bit within the X25 connection with this correspondent.

The **F20 right** function key makes it possible to obtain the detailed menu of the correspondent's access parameters:

```
TBT/400 V410 Informatique Pour Les Sociétés 00/03/24 10.39.27
IPS9946 T430 X25 items IPLS01 IPLSP
Directory type . . . . $$$ODETTE Reach . . . . *GLOBAL
Partner's name . . . . IPLS Network type . $$$ODETTE
Partner's narrative . . IPLS - TBT

X25 address . . . . . 1782203032

Line's name . . . . . *TBT

Cud length . . . . . 1
Cud . . . . . 08
Facilities length . . .
Facilities . . . . .
Reversing charge . . . Y,N
Delivery bit . . . . . Y,N
Packet size . . . . .
Window size . . . . .

F1=Help F3=Exit F6=Print F7=Up F8=Down F9=Cmd F13=Up F19=Left F20=Right
F21=Default F24=Down Copyright Informatique Pour Les Sociétés IPLS
```

The first 5 fields contain information already logged. Only the name and text of the correspondent can be modified here.

The following fields specify the correspondent's call authorisations:

**Access password :**

Password for all exchanges with this correspondent, obligatory if filled in here.

**Old password :**

In the context of utilisation of a dynamic password, old password stored until next successful connection with the new password.

**Password confirm :**

Confirmation password (employed only in server ETEBAC3).

**Caller's number permitted .**

One to four numbers compulsorily used by this correspondent for all exchanges. If all are not filled in, then there is no caller number check, nor **TRANSPAC** or switched access monitoring.

**Application as the default :**

Default application for this correspondent (if application selected at A).

**Tad accepted :**

Acceptance of charge to call recipient for this correspondent. If 'yes', then your **TRANSPAC** subscription must take it into account.

## 2.3. Transmission of a message or of a file

In transmission of a file or in the user menus, on the basis of the transmission menu, and by selecting the Odette output, you obtain the following choices:

```
TBT/400 V410          Informatique Pour Les Sociétés          00/03/24  10.41.31
IPS9912 T430          Odette sending          IPLS01    IPLSP
Directory type . . . . $$$ODETTE          Reach . . . . *GLOBAL
Partner's name . . . . IPLS          Network type . $$$ODETTE
Partner's narrative . . IPLS - TBT
Dsname . . . . . . . . / (TBT) /
Dsname date . . . . . . 000324
Dsname time . . . . . . 104130
File format . . . . . . F          F, V, U, T
SSID userfield . . . .
SFID userfield . . . .
Initial partner . . . . LOCAL001
Origin partner . . . . LOCAL001
Destin partner . . . . IPLS
Initial Odette code . . OIPLS
Origin Odette code . . OIPLS
Destinat Odette code . OIPLS
Odette partner type . . D
Special logic flag . . N
Indirect partner . . . IPLS
X25 TCP/IP addresses . 17822030392
F1=Help F3=Exit F9=Cmd F11=Send F12=Cancel F19=Left F20=Righ
          Copyright Informatique Pour Les Sociétés          IPLS
```

This menu enables you to log the address information of your Odette correspondent, for transmission of your file.

After the fields have been filled in, the **F11 Transmit** function key enables release of file transmission as indicated by an information message at the bottom of your screen.

**Name of file :**

Logic name of transmitted file.

**Date of file :**

Date of transmitted file.

**Time of file :**

Time of transmitted file.

**Format of file :**

Format of transmitted file :

- Blank = default value utilised within the recipient correspondent (or type F if not filled in),
- F = fixed binary type file,
- V = fixed binary type variable file,
- U = fixed binary type unstructured file,
- T = fixed text type file.

**User field SSID :**

User type information used upon initial SSID exchange:

- Blank = default value utilised within the initiating correspondent,
- \*DEST = default value utilised within the recipient correspondent,
- \*ORIG = default value utilised within the originating correspondent,
- \*INDI = default value utilised within the indirect correspondent (or direct, if absent).

**User field SFID :**

User type information used upon announcement of an SFID file :

- Blank = default value utilised within the recipient correspondent,
- \*INDI = default value utilised within the indirect correspondent (or *blank*, if absent).

**Initial correspondent :**

Name of correspondent initiating the transfer. By default, this is the value specified in the Odette parametrisation menu.

**Initial correspondent :**

Name of original correspondent in the transfer. By default, this is the initiating correspondent.

**Recipient correspondent :**

Name of recipient correspondent in the transfer.

The last 7 fields are returned for informational purposes.

**Initial subscriber code :**

Odette subscriber code associated with correspondent initiating the transfer.

**Original subscriber code :**

Odette subscriber code associated with original correspondent in the transfer.

**Recipient subscriber code :**

Odette subscriber code associated with recipient correspondent in the transfer.

**Type of Odette subscriber:**

Specifies, in reply, the **TBT/400** type Odette subscriber:

- L = local type, i.e. the subscriber for your site (X25 and Indirect Correspondent not filled in),
- D = direct type, i.e. the external subscriber which can be contacted directly, as the RVA's are of that type (X25 address filled in, Indirect Correspondent not filled in),
- L = indirect type, i.e. external subscriber not directly accessible (X25 address not filled in and Indirect Correspondent filled in),

**Special logic indication :**

Indicator of activation of the special logic which makes it possible to achieve reliability in transmissions, negotiated upon initial SSID exchange. The adopted value originated from the order of the direct correspondent or from the indirect correspondent, or is assumed to be N as the default.

- Y = Yes, special logic is active,
- N = No.

**Indirect correspondent :**

Name of intermediate correspondent, where the Odette correspondent is not accessible directly, but – for example – via an RVA. This name must be defined. This name must be defined in the directory, but must be direct, with **TBT/400** supporting the indirectness at a single level.

**X25 address :**

Odette correspondent's X25 address.

The **F20 left** function key makes it possible to obtain the additional options menu for the Odette transmission:

<b>TBT/400</b>	V340	SOCIETE CLIENTE	97/04/01	09.53.50
IPS9941	PROD	<b>Paramètres d'émission</b>	Userpref	*USER
Type d'annuaire . . . .	\$\$\$\$ODETTE	Portée . . . .	*GLOBAL—	
Nom du correspondant		Type de réseau	_____	
Libellé correspondant .				
Commentaire utilisateur_____				
Auteur . . . . . _____				
Objet . . . . . _____				
A l'attention de . . . .	_____	Page . . . .	_____	
Référence du message .	_____	Scrut . . . .	- O,N	
Emission mode puits . .	- O,N	Impression demandée . .	- -	
O,N,C,B				
Accusé demandé . . . .	- O,N,C	Avis de distribution . .	- O,N	
Mode transparent . . . .	N O,N	Ajout caractères CR/LF .	- O - O,N	
Suppression des blancs	O O,N	Traduction ASCII . . . .	O O,N	
Priorité réseau . . . .	- N,U,H	Enreg par segment . . . .	_____ O -	
255				
F1=Aide F3=Exit F6=Impr F7=Avant F8=Après F9=Commande F13=Haut F19=Gauche				
F20=Droite F21=Défaut F24=Bas				
Copyright Informatique Pour Les Sociétés				
<b>IPLS</b>				

Thus, this menu can make it possible to fill in the preceding menu with the additional fields shown below.

After the fields have been filled in, the **F11 Transmit** function key enables release of message transmission as indicated by an information message at the bottom of your screen.

The following fields qualify the message to be dispatched, and if they are filled in (i.e. other than blank), they will automatically feed into the relevant zones upon transmission of a message:

User comments :

COMMENTS CAN BE MADE.:

Author:

NAME OF AUTHOR OF MESSAGE.

Subject :

PURPOSE OF MESSAGE, I.E. OPPORTUNITY FOR BRIEF INDICATION OF MESSAGE CONTENT.

For attention of :

SPECIFIES 'FOR ATTENTION OF...', DESIGNATING THE TARGET USER FOR THE MESSAGE.

PAGE :

TRANSMISSION PARAMETER USED EXCLUSIVELY FOR THE FAX; SPECIFIES THE NUMBER OF LINES CONTAINED IN ONE PAGE.

REFERENCE OF MESSAGE :

REFERENCE OF MESSAGE PROPER TO THE USER.

SCAN :

SCANNING IMPLICIT UPON A TRANSMISSION:

- Y = YES (DEFAULT VALUE)
- N = NO, NO SCANNING IS IMPLICIT.

Source mode transmission :

SPECIFIES UTILISATION OF THE SOURCE FUNCTION FOR TRANSMISSION OF MESSAGES TO THIS CORRESPONDENT

- Y = IF SEVERAL MESSAGES FOR THE SAME RECIPIENT, WITH CHAINING – AS APPROPRIATE – OF MESSAGES UPON THE SAME CALL (DEFAULT VALUE).
- N = NO CHAINING, AND THE MESSAGE WILL BE TRANSMITTED IN ISOLATION. EFFECTIVE UTILISATION OF THIS FUNCTION DEPENDS ON THE EMPLOYED NETWORK.

Print-out requested :

REQUEST FOR MESSAGE PRINT-OUT AFTER PROCESSING. POSSIBLE VALUES:

- Y = SYSTEMATIC PRINT-OUT (DEFAULT VALUE FOR TELEXES AND FAXES),
- N = NO PRINT-OUT (DEFAULT VALUE FOR OTHER NETWORKS),
- C = CONDITIONAL, I.E. ONLY IN THE EVENT OF ERROR,
- B = GOOD, , I.E. ONLY IN THE EVENT OF CORRECT ROUTING.

THE SECOND FIELD MAKES IT POSSIBLE TO REQUEST A BREAK MESSAGE AFTER PROCESSING OF THE MESSAGE.

Acknowledge is requested :

REQUEST FOR RECEPTION OF ACKNOWLEDGMENT OF ROUTING BY TBT/400 ;

- Y = YES IN ALL CASES,
- N = NO IN ALL CASES (DEFAULT VALUE),,
- C = YES ONLY IN CASE OF ERROR.

Distribution notice :

SYSTEMATICALLY REQUESTS – OR OTHERWISE – DISTRIBUTION NOTICE (' NO ' BY DEFAULT, HENCE NOTICE IS RECEIVED ONLY IN THE EVENT OF FAILURE).

Transparent mode :

REQUESTS TRANSMISSION OF A MESSAGE IN TRANSPARENT MODE (YES), OR IN NORMAL MODE OR TEXT MODE (DEFAULT = 'NO').

Addition of CR/LF characters:

REQUESTS ADDITION OF CR/LF LINE SEPARATION CHARACTERS. THE DEFAULT VALUE WILL DEPEND ON THE REQUESTED TRANSMISSION MODE: IF TEXT MODE, THEN THE DEFAULT VALUE IS YES; IF TRANSPARENT MODE, THEN THE DEFAULT ANSWER IS NO

THE SECOND FIELD – IF THE FIRST ONE IS ON YES – MAKES IT POSSIBLE TO ADD – OR OTHERWISE – A CR/LF AFTER THE LAST RECORDING.

Suppression of blanks :

REQUEST FOR SUPPRESSION OF BLANK CHARACTERS AT END OF LINE. THE DEFAULT VALUE WILL DEPEND ON THE REQUESTED TRANSMISSION MODE: IF TEXT MODE, THEN THE DEFAULT VALUE IS YES; IF TRANSPARENT MODE, THEN THE DEFAULT ANSWER IS NO

ASCII translation :

REQUEST FOR CONVERSION OF EBCDIC CHARACTERS INTO ASCII CHARACTERS. THE DEFAULT VALUE WILL DEPEND ON THE REQUESTED TRANSMISSION MODE: IF TEXT MODE, THEN THE DEFAULT VALUE IS YES; IF TRANSPARENT MODE, THEN THE DEFAULT ANSWER IS NO

Network priority :

MESSAGE PRIORITY (IF MANAGED BY THE NETWORK, E.G. : ATLAS).

- U = URGENT,

- N = NORMAL (DEFAULT VALUE)

- H = NETWORK OFF-PEAK TIMES.

Recordings per segment :

REQUEST FOR LOGICAL RE-GROUPING OF N RECORDINGS BEFORE TRANSFER. PARTICULARLY USED IN ODETTE PROTOCOL. PARTICULAR VALUE 255 MEANS THAT THE WHOLE FILE IS IN A SEGMENT (CASE OF U IN ODETTE)

**2.4. Supervision of traffic**

In the supervision of messages from a message's details menu, the **F20 Right** function key makes it possible to obtain the following menu :

```

TBT/400 V340          SOCIETE CLIENTE          97/04/01  10.14.50
IPS9985  PROD          Détail d'un message Odette  Userpref  *USER

Fa          Em          De          Bi          Fi          Mb
Annu          Rés          Cl uti          Util          Ack
Typ          Cl TBT

-----
Nom du correspondant .
Nom du fichier . . . .
Format du fichier . . .
Champ utilisateur SSID
Mot de passe d'accès .
Code abonné initiateur.
Code abonné origine . .
Code abonné destinatai.
Correspondant indirect -----> Corr
Adresse X25 . . . . .
Code retour transfert .
Longueur enregistrement
Taille buffer d'échange
Erreur sur duplicate .
Date          Spéc          Comp          Rest
Type          SFID
Corr          Corr          Corr          Détect duplic.
F6=Impr F7=Après F8=Avant F10=Texte F16=Edition F19=Gauche F20=Droite F13=Haut
F24=Bas F14=Activ F15=Spoules          Copyright IPLS Informatique Pour Les
Sociétés
  
```

The **F20 Right** function key makes it possible to obtain continuation with the following menu:

```

TBT/400 V410          Informatique Pour Les Sociétés          00/03/24  10.43.36
IPS9981  T430          Message view - X25 items          IPLS01  IPLSP

Qu M$EXTERNA Sn $$$$TBT Rc $EXTERNA Li RACHEZ          Fi QCLSRC          Mb EMIPESIT
Dir. $$$$ODETTE *GLOBAL          AS400R          Net $$$$ODETTE User IPLS05
Typ M M Ke TBT 000B24580066ADA5F1F1F2F3F0F20033 Ke USR TESTIPLS          Ack

-----
X25 address . . . . . 17822030393
X25 called subaddress .
Cud length . . . . . 1
Cud . . . . . 08
Facilities length . . .
Facilities . . . . .
Reversing charge . . .
Delivery bit . . . . .
Packet size . . . . . 128
Window size . . . . . 2
  
```

```
Logical channel number 0008
```

```
F1=Help F3=Exit F6=Print F7=Up F8=Down F9=Cmd F10=Text F11=Edit F13=Up  
F14=Activ F15=Spools F19=Left F20=Righ F21=Dsp F22=Pdm F23=Obj F24=Down      IPLS
```

Edited fields are defined and commented on in the Help sections associated with the menu and in the Programming Guide.

### 3. PROGRAMMING GUIDE

For exchanges with your applications, recourse is had to general communication blocks P0 and P1 and ODETTE blocks P2 and P3. P1 block TYPRES – network type – must then be filled in with the value \$\$\$\$ODETTE.

Message routing and API function correspond to the general principles of **TBT/400**. Refer to the Programming Guide for more detailed information.

#### 3.1. ODETTE communications block

This block relates only to the ODETTE option.

Communication blocks are supplied as standard in the IPLSP library, file IPSSAMPLES (see Appendix).

##### FIELD PRESENTATION CONVENTIONS:

1. Field presentation sequence corresponds to the sequence of structures. An alphabetical index is provided in the Appendix.
2. In the following lists, each field is referenced by its name, followed by the feed mode (A for a field to be fed by the application programme, R for a field returned by API), followed by its length, and finally a qualifier specifying whether it is obligatory (O), optional (F) or whether it has a default value (D).
3. In no case may recourse be had to fields existing in the supplied structures or copy clauses but not documented in the following pages.
4. For programming in RPG, in order to avoid name duplication for fields common to P1 and P2 or P3, common names are modified in P2 and P3, by replacing the 6<sup>th</sup> character in the name with the block number. However, this neither complicates nor changes programming, as the correct names of the P1 block can be used.

##### 3.1.1. ODETTE dialogue block P2

<b>ODABIN</b>	AR	20 alphanumerical characters	D
Specifies the correspondent initiating the transfer. By default, this is the value specified in the Odette parametrisation menu.			
<b>ODCODE</b>	R	25 alphanumerical characters	
Contains the Odette subscriber code associated with correspondent initiating the transfer, as searched for in the directory.			
<b>ODPSWD</b>	R	8 alphanumerical characters	
Contains the password needed for transfer. This information is searched for in the directory within the direct correspondent or from the indirect correspondent if it is filled in.			
<b>ODCMPR</b>	AR	1 alphanumerical character	D
Specifies if compression is used for this transfer. Always N for No in this version.			

<b>ODSPEC</b>	AR	1 alphanumerical character	D
---------------	----	----------------------------	---

Specifies if special logic is used for this transfer. As the default, this information is searched for in the directory within the indirect correspondent if it is filled in, or within the **indirect correspondent [sic]** if it is filled in, or is otherwise assumed as the default to be No. Possible values:

- N = no, no special logic,
- Y = yes, special logic used.

<b>ODSDEB</b>	AR	1 binary word	D
---------------	----	---------------	---

Specifies the size of the exchange buffer for the transfer, in binary. As the default, this information is searched for in the directory within the indirect correspondent if it is filled in, or within the direct correspondent if it is filled in, or is otherwise assumed as the default to be 4096. **TBT/400** automatically aligns the value to the nearest multiple of 128. The maximum value is currently 16384.

<b>ODCRED</b>	AR	1 binary word	D
---------------	----	---------------	---

Specifies the size of the transfer window, in binary. As the default, this information is searched for in the directory within the indirect correspondent if it is filled in, or within the direct correspondent if it is filled in, or is otherwise assumed as the default to be 32.

<b>ODUSES</b>	AR	8 alphanumerical characters	D
---------------	----	-----------------------------	---

Specifies the SSID user field for the transfer. By default, this information is searched for in the directory within the initiating correspondent. Possible special values:

- \*DEST = value taken from the directory within the recipient correspondent,
- \*ORIG = value taken from the directory within the originating correspondent,
- \*INDI = value taken from the directory within the indirect correspondent, (or, if he is absent, from the direct correspondent).

### 3.1.2. ODETTE dialogue block P3

<b>ODABTY</b>	R	1 alphanumerical character	
---------------	---	----------------------------	--

Contains the type of subscriber receiving the transfer. Possible values:

- L = local , i.e. the subscriber for the site (**TRANSPAC** and Indirect Subscriber Number field),  
not filled in),
- D = direct , i.e. the external subscriber is directly accessible (**TRANSPAC** Number field is filled in),
- I = indirect , i.e. the external subscriber is not directly accessible, for example subscriber accessible via a GEIS type Value Added Network (Indirect Subscriber field filled in).

<b>ODABOR</b>	AR	20 alphanumerical characters	D
---------------	----	------------------------------	---

Specifies the original correspondent in the transfer. By default, this is the initiating correspondent.

<b>ODABDE</b>	R	20 alphanumerical characters	
---------------	---	------------------------------	--

Contains the correspondent receiving the transfer, as searched for in the directory. This is identified totally by the correspondent's logic name (NOMLOG).

<b>ODABID</b>	R	20 alphanumerical characters	
---------------	---	------------------------------	--

Contains the indirect correspondent in the transfer, where the correspondent cannot be contacted directly.

<b>ODDSN</b>	AR	26 alphanumerical characters	D
--------------	----	------------------------------	---

Specifies the logic name of the file being the subject of transfer. By default, this information is searched for in the directory within the receiving correspondent or – if absent – within the originating correspondent. Possible special values:  
 - \*SPACE (in col 1) = blanking of field,  
 - \*KEY (in col n) = generation from character *n* of an additional key providing uniqueness.

<b>ODDATE</b>	AR	6 alphanumerical characters	D
---------------	----	-----------------------------	---

Specifies the date of the file being the subject of transfer. By default, it is the date of placing in the hold queue which is utilised.

<b>ODTIME</b>	AR	6 alphanumerical characters	D
---------------	----	-----------------------------	---

Specifies the time of the file being the subject of transfer. By default, it is the time of placing in the hold queue which is utilised.

<b>ODUSEF</b>	AR	8 alphanumerical characters	D
---------------	----	-----------------------------	---

Specifies the SFID user field for the transfer. By default, this information is searched for in the directory within the receiving correspondent. Possible special value:  
 - \*INDI = value taken from the directory within the indirect correspondent, (or, if he is absent, from the direct correspondent).

<b>ODRCNT</b>	R	1 binary word	
---------------	---	---------------	--

Specifies the number of recordings transmitted or received. This field in the EFID frame is of zero value for 'Text' or 'Unstructured' type format files

<b>ODUCNT</b>	R	1 binary word	
---------------	---	---------------	--

Specifies the number of bytes transmitted or received.

<b>ODDPEM</b>	AR	1 alphanumerical character	D
---------------	----	----------------------------	---

Specifies whether **TBT/400** must regard the file as having been transmitted erroneously on reception of the 'duplicate' return code. Once **TBT/400** has finished transmitting a file, it sends an EFID frame, and awaits the reply in the form of an EFPA or EFNA frame. If the return is different (as for example in the event of disconnection), then it is impossible to find out the remote file's status. Upon a fresh attempt TBT/400 sends the SFID frame, and may receive an SFNA rejection frame together with a 'duplicate file' as the reason. This parameter specifies the action taken by **TBT/400** in this eventuality:

- 'Y' - **TBT/400** considers that the file has been transmitted
- 'N' - **TBT/400** considers that the file has an error.

<b>ODDPRE</b>	AR	1 alphanumerical character	D
<p>Specifies whether TBT/400 should detect duplicates concerning received files. When <b>TBT/400</b> receives a file (SFID frame), it is able to check that it is unique ( from the following criteria: name, date, time, origin, addressee... of the file. If the file has already been received, then an SFNA justified as a 'duplicate file' will be sent.</p> <ul style="list-style-type: none"> <li>- 'Y' - detection is active</li> <li>- 'N' - detection is inactive</li> </ul>			
<b>ODREST</b>	AR	1 alphanumerical character	D
<p>Requests support – or not – by <b>TBT/400</b> for re-start.</p>			
<b>ODDPSP</b>	AR	1 alphanumerical character	D
<p>Request for generation by <b>TBT/400</b> of a password.</p>			
<b>ODDPIN</b>	AR	1 binary word	D
<p>Specifies the duration of validity of the dynamic password before <b>TBT/400</b> generates a new password within that time frame.</p>			
<b>ODDPRQ</b>	AR	1 alphanumerical character	D
<p>If 'Yes', request to <b>TBT/400</b> for generation of a new password with effect from the next connection, without waiting for the timescale specified in <b>Int</b></p>			
<b>ODDPDT</b>	R	8 alphanumerical characters	D
<p>Specifies the date of last generation of a password by <b>TBT/400</b>.</p>			
<b>ODORIG</b>	R	25 alphanumerical characters	
<p>Contains the <b>Odette</b> subscriber code associated with original correspondent in the transfer.</p>			
<b>ODDEST</b>	R	25 alphanumerical characters	
<p>Contains the <b>Odette</b> subscriber code associated with correspondent receiving the transfer, as searched for in the directory.</p>			
<b>ODLREC</b>	R	1 binary word	
<p>Contains the actual value of recording for the file being the subject of transfer, in binary (same as LNGREC).</p>			
<b>ODFSIZ</b>	R	1 binary word	
<p>Contains the actual value of recording for the file being the subject of transfer, in binary (same as FILSIZ).</p>			

<b>ODREAS</b>	R	1 binary word
---------------	---	---------------

Contains the reason for rejection of transfer by the correspondent, in binary. Possible values:

- 01 = invalid file name,
- 02 = destination invalid,
- 03 = origin invalid,
- 04 = recording format invalid,
- 05 = recording size not supported,
- 06 = file size too great,
- 07 = number of recordings invalid,
- 08 = number of announced characters invalid,
- 09 = incident in the access method,
- 10 = file already transmitted,
- 99 = reason not specified.

<b>ODFMT</b>	AR	1 alphanumerical character	D
--------------	----	----------------------------	---

Specifies the format of the file being the subject of transfer. By default, this information is searched for in the directory within the receiving correspondent or else it is assumed to be at value F. Possible values :

- F = fixed binary type file,
- V = fixed binary type variable file,
- U = fixed binary type unstructured file,
- T = fixed text type file.

### **3.2. ODETTE commands**

Certain commands are made available to you for file transmission by **TRANSPAC** according to the **ODETTE** protocol to a recipient server (for example **GEIS**) or direct, and a file reception command.

**Dynamic directory** : The transmission mode offers the possibility of automatic feed to the **TBT/400** directory. Provided that the directory comprises the **IPLSMODEL** station, then a new correspondent can be set up in the directory by filling in its **OFTP** code and its **X25** address ; and by assigning a logic name to it. Thus, following execution of the command, not only is a request for transmission set up but also the **TBT/400** directory is augmented with another station.

**3.2.1. Transmission command**

The IPSNODETT command enables transmission of a file by **TRANSPAC** according to the **ODETTE** protocol. This command is made up of a main menu which is adequate for conventional transmission supplemented by a range of menus for utilisation of additional parameters.

Odette send (IPENDODETT)

```

Logical partner's name . . . . . NOMLOG
User key . . . . . KEYUSR      ' '
Object to process: File . . . . . OBJFIL
Object to process: Library . . . . . OBJLIB      *LIBL
Object to process: Member . . . . . OBJMBR      *FIRST
Spool name . . . . . SPLNAM      TBT400
Spool creating job . . . . . SPLJOB      *
  User . . . . .
  Number . . . . .
Spool number . . . . . SPLNUM      0
Spool suppress . . . . . SPLSUP      ' '
IFS - Directory . . . . . IFSDIR      *CURDIR
IFS - Object . . . . . IFSOBJ
Author . . . . . AUTHOR
Object . . . . . OBJECT
Attention . . . . . ATTENT
Message reference . . . . . REFMSG
File : Name . . . . . ODDSN
File : YYMMDD . . . . . ODDATE
File : HHMMSS . . . . . ODTIME
File : YYYYMMDD . . . . . O2DATE
File : HHMMSSCCCC . . . . . O2TIME
File : Description . . . . . ODDESC
File : Fmt . . . . . ODFMT      ' '
SSID userfield . . . . . ODUSES
SFID userfield . . . . . ODUSEF
Required function . . . . . FNCDEM      S
Begin function required . . . . . DEBDEM      O
End function required . . . . . FINDEM      O
Escape function required . . . . . EXCDDEM      O
Trace function required . . . . . TRADEM      0
Duplication required . . . . . DUPDEM      ' '
Sending application . . . . . APPEME      $INTERNA
Receiving application . . . . . APPDES      $EXTERNA
TBT Line . . . . . LIGTBT      *TBT
Deffered sending date . . . . . DATDIF      ' '
Deffered sending time . . . . . HORDIF      ' '
Send limit date . . . . . DATPER      ' '
Send limit time . . . . . HORPER      ' '
Ack required . . . . . ACKDEM      ' '
File suppress . . . . . SUPDEM      ' '
Continuous sending . . . . . PUIDEM      ' '
Print required . . . . . IMPDEM      ' '
Break message required . . . . . BRKDEM      ' '
Implicit mailbox scan . . . . . SCRDEM      ' '
User's comment . . . . . COMUSR
Fax Page height . . . . . HAUPAG      0
Required Environment . . . . . SETENV      *TBT
Distribution Ack . . . . . AVIDIS      ' '
Wished usrprf . . . . . USRDDEM      *CURRENT
Synchronous mode . . . . . SYNDEM      ' '
Partner's Oftp code . . . . . ODCODE
Initiator partner . . . . . ODABIN
Orgin partner . . . . . ODABOR
File format . . . . . FMTFIC      *NONE
File Size . . . . . SIZFIC      0
Add CR/LF . . . . . CRLDEM      ' '
Add CR/LF at end . . . . . CRLFEN      ' '
Space suppress . . . . . SPADEM      ' '
ASCII required . . . . . ASCDEM      ' '
Ccsid required . . . . . CCSID      0
Record length . . . . . LNGREC      0
Records by segment . . . . . RECSEG      0

```

The proposed fields correspond to the names of the fields following the communication blocks (refer to the index for the corresponding pages of this manual for their meaning and content):

<u>NAME OF FIELD FOR THE COMMAND</u>	<u>BLOCK NUMBER:</u>	<u>NAME OF FIELD IN THE BLOCK</u>
<u>TRANSMITTING APPLICATION</u>	P1	<u>APPEME</u>
<u>IDENTIFICATION OF MAIL</u>	P1	<u>KEYUSR</u>
<u>LIBRARY</u>	P1	<u>OBJLIB</u>
<u>FILE</u>	P1	<u>OBJFIL</u>
<u>MEMBER</u>	P1	<u>OBJMBR</u>
<u>NAME OF SPOOL TO BE TRANSMITTED</u>	P0	<u>SPLNAM</u>
<u>THE WORK WHICH CREATED THE SPOOL</u>	P0	<u>SPLJOB</u>
<u>THE NUMBER WHICH CREATED THE SPOOL</u>	P0	<u>SPLNUM</u>
<u>LOGIC NAME OF CORRESPONDENT</u>	P1	<u>NOMLOG</u>
<u>REFERENCE OF MAIL</u>	P1	<u>REFMSG</u>
<u>FILE : NAME</u>	P3ODT	<u>ODDSN</u>
<u>FILE : DATE</u>	P3ODT	<u>ODDATE</u>
<u>FILE : TIME</u>	P3ODT	<u>ODTIME</u>
<u>FILE : FORMAT</u>	P3ODT	<u>ODFMT</u>
<u>USER FIELD SSID</u>	P2ODT	<u>ODUSES</u>
<u>USER FIELD SFID</u>	P3ODT	<u>ODUSEF</u>
<u>START OF FUNCTION REQUESTED</u>	P0	<u>DEBDEM</u>
<u>END OF FUNCTION REQUESTED</u>	P0	<u>FINDEM</u>
<u>EXCEPTION FUNCTION REQUESTED</u>	P0	<u>EXCDEM</u>
<u>HARDCOPY FUNCTION REQUESTED</u>	P0	<u>TRADEM</u>
<u>DUPLICATE FILE REQUESTED</u>	P0	<u>DUPDEM</u>
<u>RECEIVING APPLICATION</u>	P1	<u>APPDES</u>
<u>TBT LINE</u>	P1	<u>LIGTBT</u>
<u>DATE OF TRANSMISSION DEFERRED</u>	P1	<u>DATDIF</u>
<u>TIME OF TRANSMISSION DEFERRED</u>	P1	<u>HORDIF</u>
<u>LIMIT DATE FOR TRANSMISSION</u>	P1	<u>DATPER</u>
<u>LIMIT TIME FOR TRANSMISSION</u>	P1	<u>HORPER</u>

**IMPORTANT NOTE :** In order to obtain information in reply from your transmission (return code, TBT key,...) use the following values on transmission: FNCDEM=S, FINDEM=N and EXCDEM=N, then use the reception command with FNCDEM=L, FINDEM=O and EXCDEM=N.

<u>NAME OF FIELD FOR THE COMMAND</u>	<u>BLOCK NUMBER:</u>	<u>NAME OF FIELD IN THE BLOCK</u>
<u>ACKNOWLEDGE IS REQUESTED</u>	P1	<u>ACKDEM</u>
<u>FILE SUPPRESSION REQUESTED</u>	P1	<u>SUPDEM</u>
<u>SOURCE MODE TRANSMISSION</u>	P1	<u>PUIDEM</u>
<u>PRINT-OUT REQUESTED</u>	P1	<u>IMPDEM</u>
<u>BREAK MESSAGE REQUESTED</u>	P1	<u>BRKDEM</u>
<u>SCANNING IMPLICIT</u>	P1	<u>SCRDEM</u>
<u>USER COMMENT</u>	P1	<u>COMUSR</u>
<u>SUPPRESSION OF SPOOLFILE</u>	P0	<u>SPLSUP</u>
<u>PAGE HEIGHT FOR FAX</u>	P1	<u>HAUPAG</u>
<u>AUTHOR OF MAIL</u>	P1	<u>AUTHOR</u>

SUBJECT OF MAIL

P1

OBJECT

The proposed fields correspond to the names of the fields following the communication blocks (refer to the index for the corresponding pages of this manual for their meaning and content):

<u>NAME OF FIELD FOR THE COMMAND</u>	<u>BLOCK NUMBER:</u>	<u>NAME OF FIELD IN THE BLOCK</u>
<u>FOR ATTENTION OF</u>	<u>P1</u>	<u>ATTENT</u>
<u>DISTRIBUTION NOTICE REQUESTED</u>	<u>P1</u>	<u>AVIDIS</u>
<u>SYNCHRONOUS MODE</u>	<u>P1</u>	<u>SYNDEM</u>
<u>OFTP CODE OF CORRESPONDENT</u>	<u>P2ODT</u>	<u>ODCODE</u>
<u>INITIATING CORRESPONDENT</u>	<u>P2ODT</u>	<u>ODABIN</u>
<u>ORIGINATING CORRESPONDENT</u>	<u>P3ODT</u>	<u>ODABOR</u>
<u>ADDITION OF CR/LF</u>	<u>P1</u>	<u>CRLDEM</u>
<u>ADDITION OF CR/LF END</u>	<u>P1</u>	<u>CRLFEN</u>
<u>SUPPRESSION OF BLANKS</u>	<u>P1</u>	<u>SPADEM</u>
<u>ASCII TRANSLATION</u>	<u>P1</u>	<u>ASCDEM</u>
<u>RECORDINGS / SEGMENT</u>	<u>P1</u>	<u>RECSEG</u>

**4. APPENDIX: ODETTE P2 AND P3 communications blocks**

All structures, copy, and clause copy which follow are found in the IPSSAMPLES file of the IPLSP professional software library under the member name specified for each object.

These blocks relate only to the **ODETTE** option.

## 4.1. Structure C (IPSILCOD)

```
#ifndef IPSILCOD
#define IPSILCOD
/*****
/* Partie Definition du Message type ODETTE --> SSID dit P2 */
*****/

typedef struct ODET S
{
    char    odabin[20];        /* Abonné initiateur */
    char    odcode[25];       /* Initiator's code */
    char    odpswd[8];        /* Initiator's psw */

    char    fil01[1];         /* -- Réserve IPLS -- */
    char    odcmpr;           /* Compression */
    char    odspec;           /* Spécial logic */
    long    odsdeb;           /* Exchange buffer size */
    long    odcred;           /* Exchange buffer credit*/
    char    oduses[8];        /* Champs user */

    long    odrcnt;           /* Record count */
    long    oducnt;           /* User count */

    char    oddpem;           /* Emission 'duplicate' */
    char    oddpre;           /* Détection 'duplicate' */

    char    odrest;           /* Support du restart */

    char    oddpsp;           /* dynamic password */
    long    oddpin;           /* intervalle */
    char    oddprq;           /* requis */
    char    oddpdt[8];        /* Date derniere modif */

    char    odsfid;           /* Attente SFPA ou SFNA */
    /* (Réserve IPLS) */
    char    odefid;           /* Attente EFPA ou EFNA */
    /* (Réserve IPLS) */

    char    fil02[925];       /* -- Réserve IPLS -- */
} ODET;

/*****
/* Partie Definition du destinataire type ODETTE --> SFID dit P3 */
*****/

typedef Packed struct ODET DEST S
{
    char    odabty;           /* Type d'abonné destin.*/
#define ODABTY LOC    'L'
#define ODABTY DIR    'D'
#define ODABTY IND    'I'
#define ODABTY REM    'R'

    char    odabor[20];       /* Abonné initiateur */
    char    odabde[20];       /* Abonné destinataire */
    char    odabid[20];       /* Abonné indirect */
}
```

```

        char        oddsn[26];          /* File dataset name */
        char        oddate[6];          /* Date */
        char        odttime[6];        /* Time */
        char        odusef[8];          /* Champ user */
        char        odorig[25];         /* Originator */
        char        oddest[25];         /* Destination */

        char        fil01[3];           /* -- Réservé IPLS -- */

        long        odlrec;              /* File lrecl */
        long        odfsiz;              /* File size */
        long        odreas;              /* Answer reason */
        char        odfmt;               /* File format */
#define ODFMT FIX      'F'
#define ODFMT VAR      'V'
#define ODFMT UNS      'U'
#define ODFMT TXT      'T'

        char        fil02[1363];        /* -- Réservé IPLS -- */
    } ODET DEST;

/*****
/* Macro d'implantation des blocs TBT */
/*****

#undef          TBTBLODT
#define         TBTBLODT()              \
TBT DIAL  wtbt p0;                       \
TBT API   wtbt p1;                       \
ODET      wtbt p2;                       \
ODET DEST wtbt p3;

/*****
/* Macro d'initialisation des blocs TBT */
/*****

#undef          TBTINIT
#define         TBTINIT()                \
(memset(&wtbt p0,0,sizeof(wtbt p0)),    \
memset(&wtbt p1,0,sizeof(wtbt p1)),    \
memset(&wtbt p2,0,sizeof(wtbt p2)),    \
memset(&wtbt p3,0,sizeof(wtbt p3)))

#endif

```



**4.2. Copy RPG (IPSIRPOD)**



I	'I'	C	ABTIND
* Type abonné remote			
I	'R'	C	ABTREM
*			
* Format fixe			
I	'F'	C	FMTFIX
* Format variable			
I	'V'	C	FMTVAR
* Format unstructured			
I	'U'	C	FMTUNS
* Format texte			
I	'T'	C	FMTTXT
*			
IWP3	DS		1536
*			
* Type d'abonné destin			
I		1	1 ODABTY
*			
* Abonné origine			
I		2	21 ODABOR
*			
* Abonné destinataire			
I		22	41 ODABDE
*			
* Abonné indirect			
I		42	61 ODABID
*			
* File dataset name			
I		62	87 ODDSN
* Date			
I		88	93 ODDATE
* Time			
I		94	99 ODTIME
* Champ user			
I		100	107 ODUSEF
* Originator			
I		108	132 ODORIG
* Destination			
I		133	157 ODDEST
*			
* Filler			
I		158	160 FIL301
*			
* File lrecl			
I		B 161	1640ODLREC
* File size			
I		B 165	1680ODFSIZ
* Answer reason			
I		B 169	1720ODREAS
* File format			
I		173	173 ODFMT
*			
* Filler			
	*		1741536 FIL302

**4.3. Clause copy Cobol (IPSICBOD)**

```

*****
* Partie Definition du Message type ODETTE --> SSID      dit P2 *
*****
*
* 01 WP2.
*
* Abonné initiateur
*   02 P2-ODABIN          PIC X(0020).
*
* Initiator's code
*   02 P2-ODCODE          PIC X(0025).
* Initiator's psw
*   02 P2-ODPSWD          PIC X(0008).
*
* Filler
*   02 P2-FIL201          PIC X(0001).
*
* Compression
*   02 P2-ODCMPR          PIC X(0001).
* Spécial logic
*   02 P2-ODSPEC          PIC X(0001).
* Exchange buffer size
*   02 P2-ODSDEB          PIC 9(008) BINARY.
* Exchange buffer credit
*   02 P2-ODCRED          PIC 9(008) BINARY.
* Champ user
*   02 P2-ODUSES          PIC X(0008).
* Emissio 'duplicate'
*   02 P2-ODDPEM          PIC X(0001).
* Détection 'duplicate'
*   02 P2-ODDPRE          PIC X(0001).
* Support du restart
*   02 P2-ODREST          PIC X(0001).
* Dynamic password
*   02 P2-ODDPSP          PIC X(0001).
* Intervalle
*   02 P2-ODDPIN          PIC 9(0008) BINARY.
* Requis
*   02 P2-ODDPRQ          PIC X(0001).
* Date dernière modif
*   02 P2-ODDPDT          PIC X(0008).
* Attente SFPA ou SFNA
*   02 P2-ODSFID          PIC X(0001).
* Attente EFPA ou EFNA
*   02 P2-ODEFID          PIC X(0001).
* Filler
*   02 P2-FIL202          PIC X(0925).
*
*
*****
* Partie Definition du Destinataire type ODETTE --> SFID dit P3*
*****
*
* Constantes
*
* Type abonné local
* 77 ABTLOC
*   PIC X VALUE "L".
* Type abonné direct

```

```

77      ABTDIR
          PIC X VALUE "D".
* Type abonné indirect
77      ABTIND
          PIC X VALUE "I".
* Type abonné remote
77      ABTREM
          PIC X VALUE "R".
*
* Format fixe
77      FMTFIX
          PIC X VALUE "F".
* Format variable
77      FMTVAR
          PIC X VALUE "V".
* Format unstructured
77      FMTUNS
          PIC X VALUE "U".
* Format texte
77      FMTTXT
          PIC X VALUE "T".
*
*
01  WP3.
*
* Type d'abonné destin.
      02 P3-ODABTY          PIC X(0001).
*
* Abonné origine
      02 P3-ODABOR        PIC X(0020).
*
* Abonné destinataire
      02 P3-ODABDE        PIC X(0020).
*
* Abonné indirect
      02 P3-ODABID        PIC X(0020).
*
* File dataset name
      02 P3-ODDSN          PIC X(0026).
* Date
      02 P3-ODDATE        PIC X(0006).
* Time
      02 P3-ODTIME        PIC X(0006).
* Champ user
      02 P3-ODUSEF        PIC X(0008).
* Originator
      02 P3-ODORIG        PIC X(0025).
* Destination
      02 P3-ODDEST        PIC X(0025).
*
* Filler
      02 P3-FIL301        PIC X(0003).
*
* File lrecl
      02 P3-ODLREC        PIC 9(008) BINARY.
* File size
      02 P3-ODFSIZ        PIC 9(008) BINARY.
* Answer reason
      02 P3-ODREAS        PIC 9(008) BINARY.
* File format
      02 P3-ODFMT         PIC X(0001).

```

```
*  
* Filler  
* 02 P3-FIL302 PIC X(1363).  
*  
*
```

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