

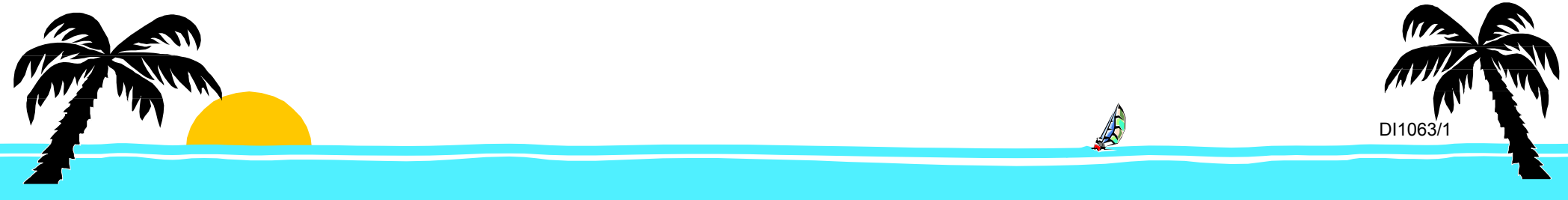
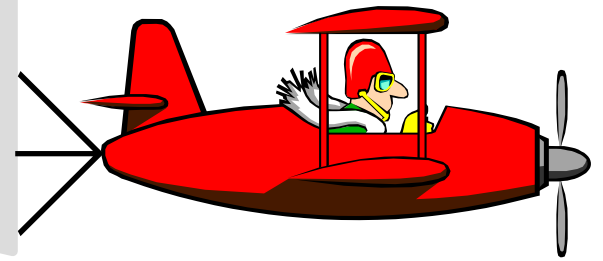
1998 DI USERS GROUP

DataInterchange Implementation of the ISO 8583

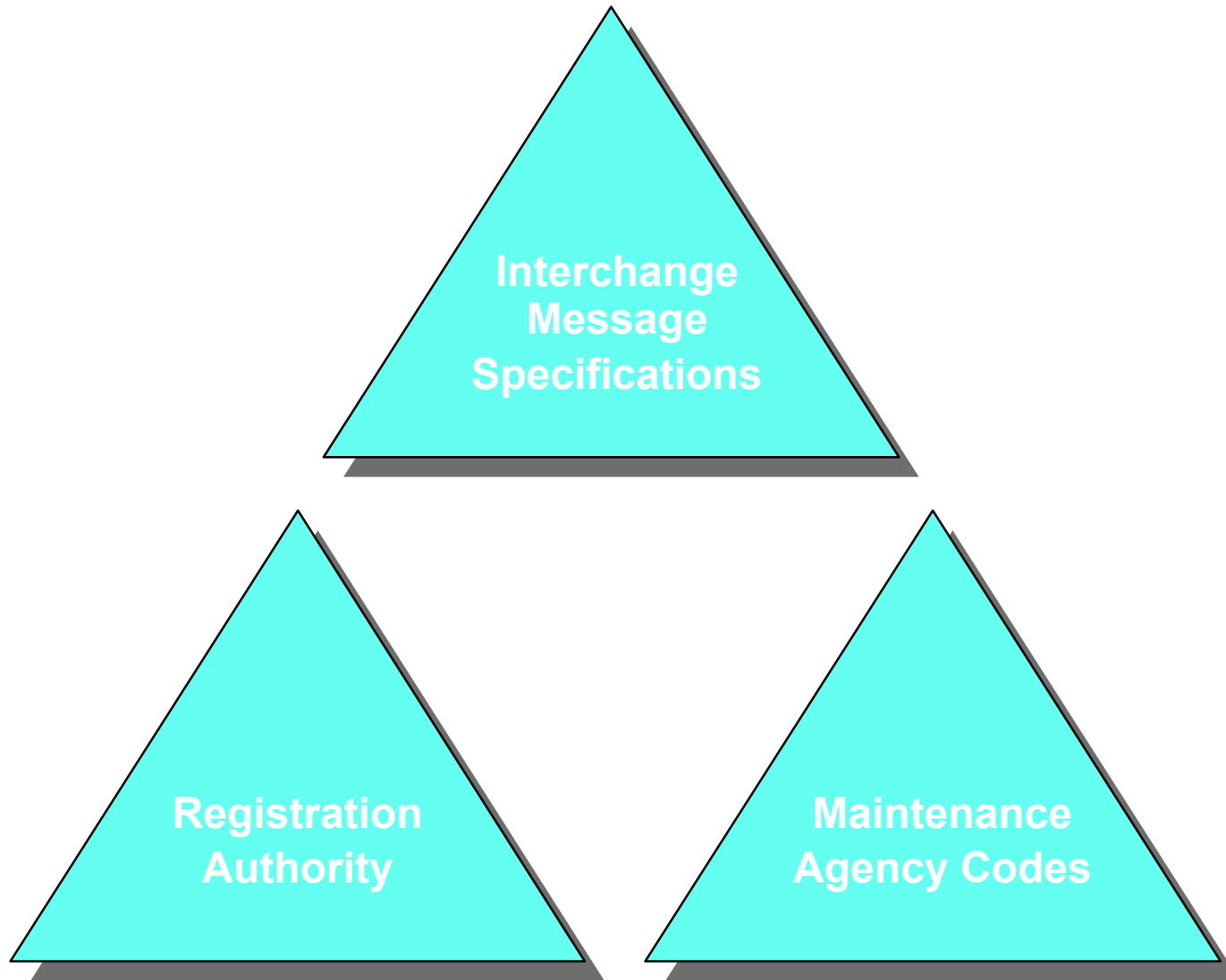
Thomas P. Taylor
EDI Services Consultant
EDI DAD

Introduction

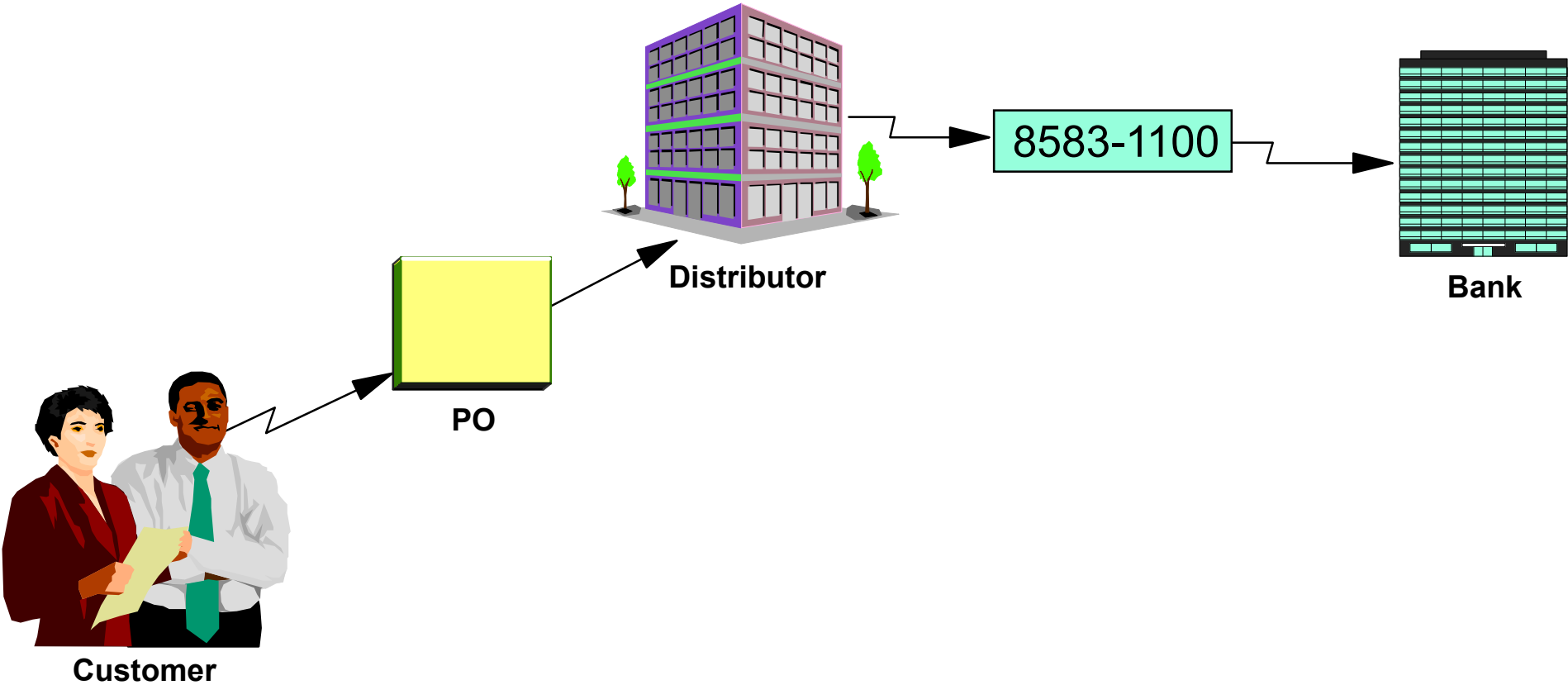
What is the ISO 8583?



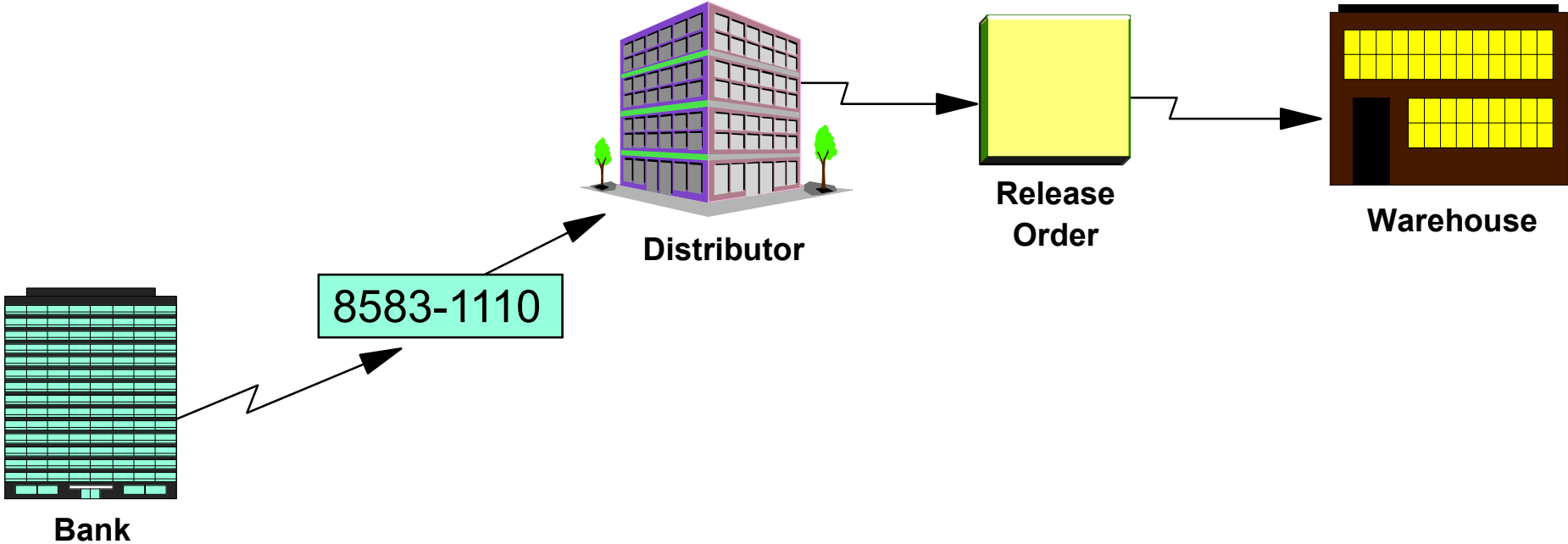
Financial Transaction Card Originated Messages



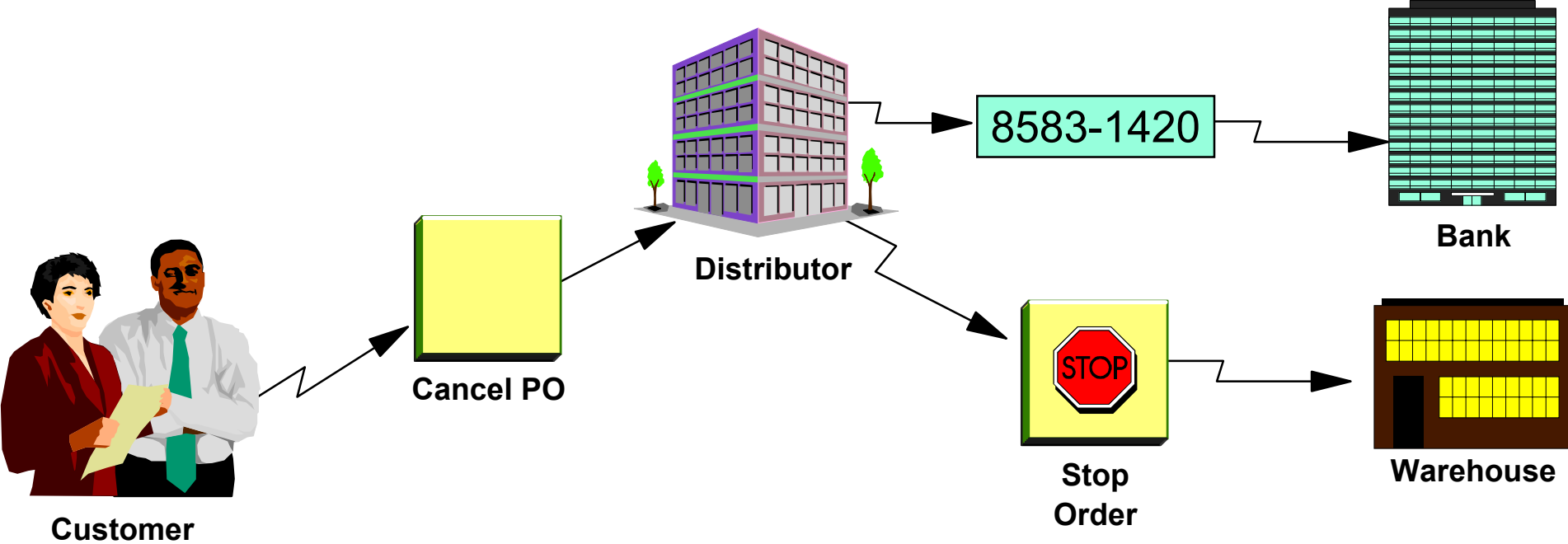
Authorization Request



Authorization Request Response

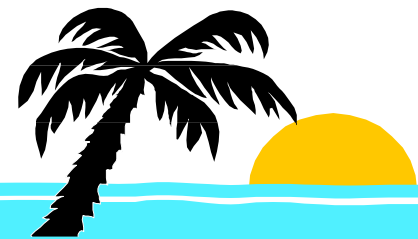


Reversal Advice



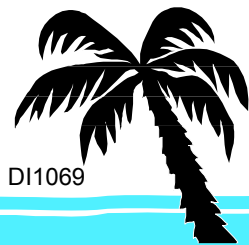
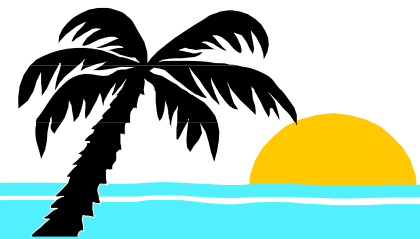
Message Structure

- **Message Type Identifier**
 - Four numbers
 - Identifies transaction type
- **One or Two Bit Maps**
 - 64 Bits each
 - Presence (1) of data element
 - Absence (0) of data element
 - First bit map required
- **Series of Data elements in the Order of Bit Map Representation**
- **No Data Element Delimiters**



Define Field Types

- **an 12**
- **n 4**
- **LL VAR n..11**
- **LLL VAR ans..999**
- **b 8**
- **etc.**



A Picture of The Data

1110

01010010001000000000000100000011000001100000000010000000

091035926bb00000002613013010455100015310020CUST-PO-N0-----

bit	Data Element Name	format	att
1	Is second bit map present		b 8
2	primary account number	LLVAR	n..19
3	processing code		n 6
4	amount, transaction		n 12
5	amount, reconciliation		n 12



Sample Data

1110ê Ø 091035926 00000002613013010455100015310020CUST-PO-NOOOOOO
FFFF52000082FFFFFFFF44FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFCEEE6DD6DDDDDDDD
11102013600009103592600000000026130130104551000153100203423076056666666

OOO01199999999999654321000USD022\20-03-7610028-000153
DDDDFFFFFFFFFFFFFFFFFFFFFFFFEECFEFFF6FF6FFFFFFFF6FFFFFFF
66661199999999999654321000424022020003076100280000153



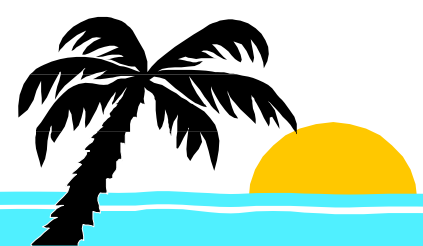
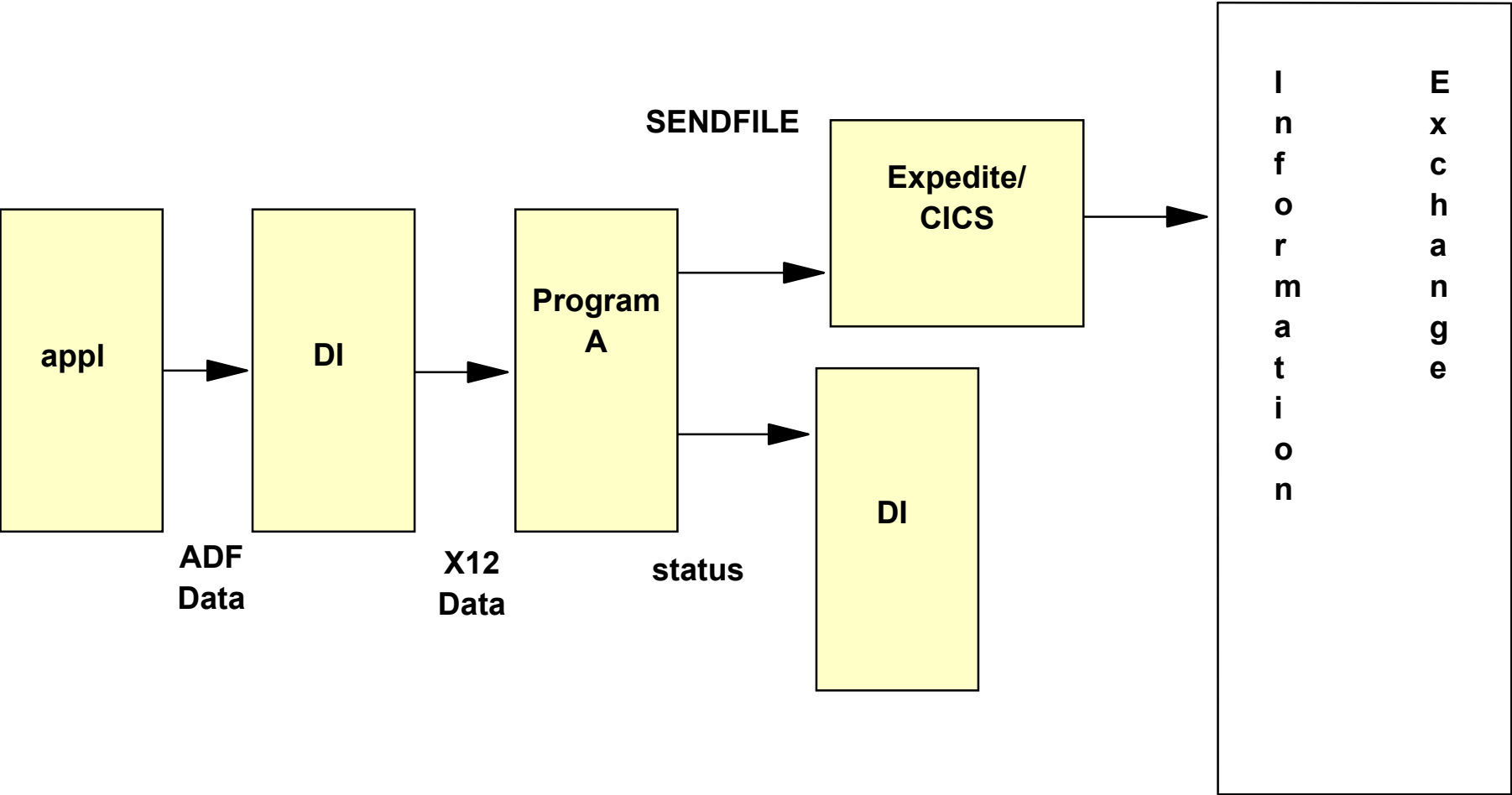
Why use DataInterchange?

If not DI the functions of DI would have to be re-created

- **Transaction Store - Incoming and Outgoing**
 - Repository
 - Search
 - Display Status
- **Network Status update**
- **Event Logs**
- **Audits and Controls**
 - Beeper - scan the store for delayed events
 - Audit - compare Advantis audit with transaction store



Outbound Process



Transactions

Standard Definition

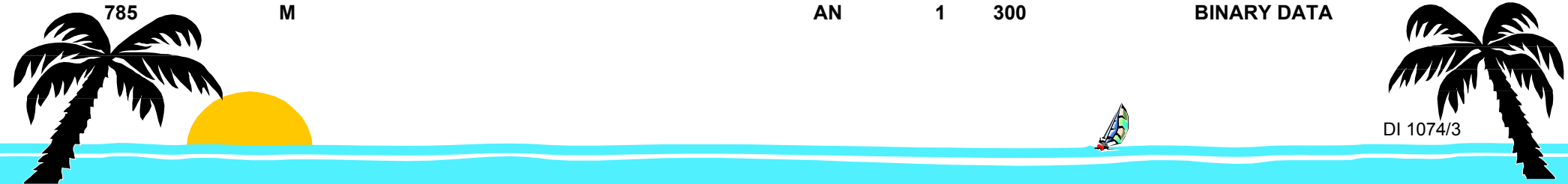
Transactions

STD4 ISO8583 583 Transaction Set Date: 98/04/23
 Page: 1 Time: 15:00:46
 Transaction description: PROCESS ALREADY TRANSLATED FOR DI STORE STATUS
 Functional group ID . . . : ZZ

Seg/De ID	Reg Des	Max Use	Loop ID	Loop Repeat	Data Type	Length Min	Length Max	Validation Table	Description
REF	M	1	0	0					Reference Numbers
128	M				ID	2	2	128	Reference Number Qualifier
127	O				AN	1	30		Reference Number
BIN	M	1	0	0					BINARY DATA FOR 8583
784	M				AN	3	3		LENGTH OF BINARY DATA
785	M				AN	1	300		BINARY DATA

STD4 ISO8583 584 Transaction Set Date: 98/04/23
 Page: 1 Time: 15:00:50
 Transaction description: FROM 583 SEND FOR INCOMING 8583 02/17/98 DEVK-TPT
 Functional group ID . . . : ZZ

Seg/De ID	Reg Des	Max Use	Loop ID	Loop Repeat	Data Type	Length Min	Length Max	Validation Table	Description
REF	M	1	0	0					Reference Numbers
128	M				ID	2	2	128	Reference Number Qualifier
127	O				AN	1	30		Reference Number
BIN	M	1	0	0					BINARY DATA FOR 8583
784	M				AN	3	3		LENGTH OF BINARY DATA
785	M				AN	1	300		BINARY DATA



Segments and Elements

Segments

STD2 ISO8583 Segment Directory
Page: 1
Standard description: FINANCIAL TRANSACTION CARD ORIGINATED MSG DEVL-TPT
Segment ID: BIN Description: BINARY DATA FOR 8583

Date: 98/04/23
Time: 15:01:10

Ref Num	Element ID	Req Des	Rel Def	Related Element Reference Number	Description
1	784	M			LENGTH OF BINARY DATA
2	785	M			BINARY DATA

Segment ID: REF Description: Reference Numbers

Ref Num	Element ID	Req Des	Rel Def	Related Element Reference Number	Description
1	128	M			Reference Number Qualifier
2	127	O			Reference Number

Elements

STD3 ISO8583 Data Element Dictionary
Page: 1
Standard description: FINANCIAL TRANSACTION CARD ORIGINATED MSG DEVL-TPT

Date: 98/04/23
Time: 15:01:27

Element ID	Type	Min	Max	Validation Table	Description
127	AN	1	30		Reference Number
128	ID	2	2	128	Reference Number Qualifier
784	AN	3	3		LENGTH OF BINARY DATA
785	AN	1	300		BINARY DATA



Outbound ADF

APP1
Page: 1

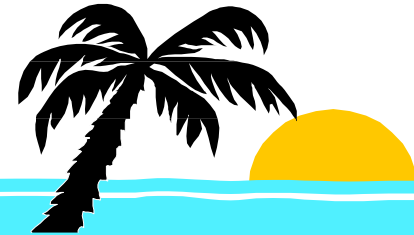
GENER583SV01

Application Data Format

Date: 98/04/23
Time: 15:54:12

Description..... : FROM ISO8583V10 2/11/98 DEVL-TPT
 Base structure name..... : ISO8583
 Application file name..... :
 Application file type..... :
 Record ID position..... : 1
 Record ID length..... : 3
 Record ID data type..... : CH
 Beginning structure name..... : 8583
 Ending structure name..... :
 Trading partner ID field..... : TRADING-PARTNER
 Generic routing code field..... :

Field/Structure Name	Type	Length	Positions	Max-Use	Passed Separately?	Record ID
ISO8583	ST	0		1		
8583	ST	12	1-12	1	Y	B10
RECORD-B10	CH	3	1-3			
TRADING-PARTNER	CH	9	4-12			
BINARY-ST	ST	10	1-10	1	Y	B20
RECORD-B20	CH	3	1-3			
AUDIT-NM	PD	4	4-7			
LENGTH	CH	3	8-10			
BINARY-ST-B30	ST	1002	1-1002	1	Y	B30
RECORD-B30	CH	3	1-3			
BINARY-DATA	CH	999	4-1002			



Outbound MAP

MAP1 Standard-to-Application Mapping
 Page: 1

Date: 98/04/23
 Time: 15:55:37

Trading partner transaction ID ...: GENER583S0101V01 Send/receive: S
 Description.....: FROM ISO-85830101V11 3/16/98 DEVL-TPT

Application Control Fields Length
 1 TRADING-PARTNER 9

STANDARD (** - Denotes repeated elements)
 Standard ID: ISO8583 Standard transaction ID: 583

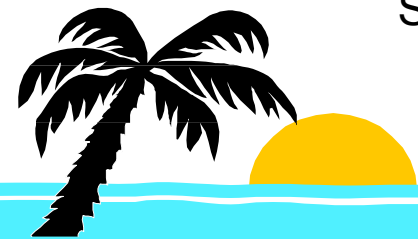
APPLICATION (*-Denotes literals)
 Data format ID: GENER583SV01

Loop ID	Seq ID	Req Des	Data Type	Min	Length Max	Validation Table	Field Name/Special Handling	Data Type	Length	Edit Type	Exit/Table Name
REF											
	0001	128	M	ID	2	2	128	* ZZ			
	0002	127	O	AN	1	30		AUDIT-NM	PD	4	
	0002	127	xxx	xxx	xxx	xxx		* & SET VAUDITNM			
	0002	127	xxx	xxx	xxx	xxx		* & SET VAUDITNM2 & E('000000' + CHAR(VAUDITNM))			
	0002	127	xxx	xxx	xxx	xxx		* & E(CHAR(VAUDITNM3))			
	0002	127	xxx	xxx	xxx	xxx		Concatenation position =	1,	length =	6
	0002	127	xxx	xxx	xxx	xxx		* & SET DIEXPTRACE	0		
	0002	127	xxx	xxx	xxx	xxx		* & SET DIVARTRACE	0		
	0002	127	xxx	xxx	xxx	xxx		* & SET VTIME &E(&TIME)			
	0002	127	xxx	xxx	xxx	xxx		* & USE VTIME,5,2 00			
	0002	127	xxx	xxx	xxx	xxx		Concatenation position =	7,	length =	2
BIN											
	0001	784	M	AN	3	3		RECORD-B30	CH	3	
	0001	784	xxx	xxx	xxx	xxx		Concatenation position =	1,	length =	1
	0001	784	xxx	xxx	xxx	xxx		LENGTH	CH	3	
	0001	784	xxx	xxx	xxx	xxx		* & IF (&TPNICKN = 'IBMCREDIT8583O')			
	0001	784	xxx	xxx	xxx	xxx		Concatenation position =	1,	length =	3
	0001	784	xxx	xxx	xxx	xxx		* & IF (& TPNICKN = 'NATIONSBANK8583O')	160		
	0001	784	xxx	xxx	xxx	xxx		Concatenation position =	1,	length =	3
	0001	784	xxx	xxx	xxx	xxx		* & IF (& TPNICKN = 'DEUTSCHE8583O')	170		
	0001	784	xxx	xxx	xxx	xxx		Concatenation position =	1,	length =	3
	0002	785	M	AN	1	999		BINARY - DATA	CH	999	

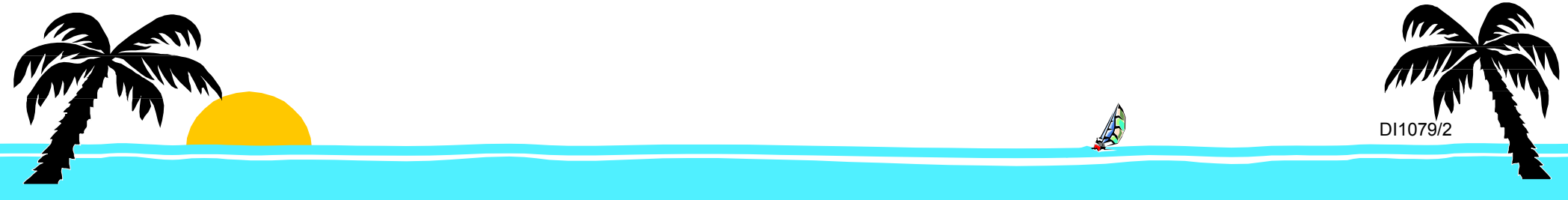
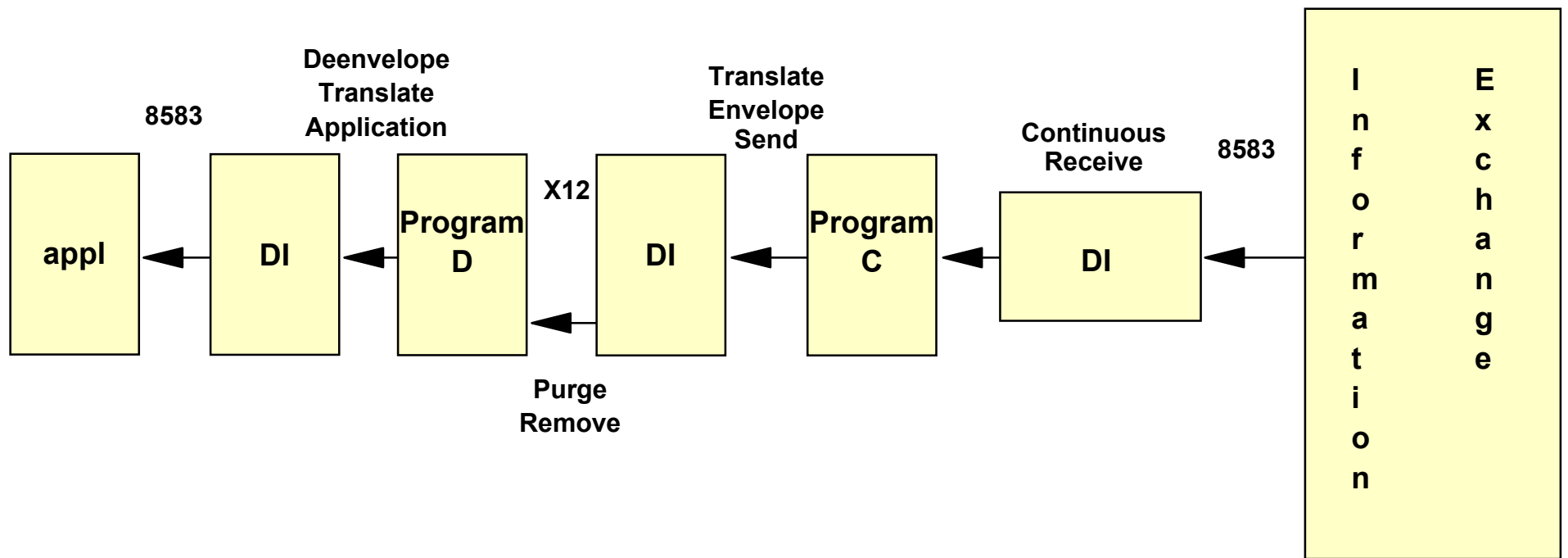


Common Area for Link to Expedite/CICS

SF - PASS	=	4
SF - FNAM	=	Name of file
SF - FTYPE	=	Type of file (TD, TS, VS)
SF - DTYPE	=	TYPE of data (A, B, E, O)
SF - FDISP	=	N
SF - CCMD	=	EXPSNDF
SF - CACCT	=	ATAP
SF - CUSER	=	TO58301
SF - CDACCT	=	CFI1
SF - CDUSER	=	CFI1170
SF - CDTYPE	=	D
SF - CUMSGC	=	1100
SF - CRCPT	=	F
SF - CVFY	=	N
SF - CMSRTN	=	5
SF - CDESC	=	'8583 Transaction'
SF - UNIQUE	=	REF02 from send map



Inbound Process



Incoming Send ADF

APP1

GENER584SV01 Application Data Format

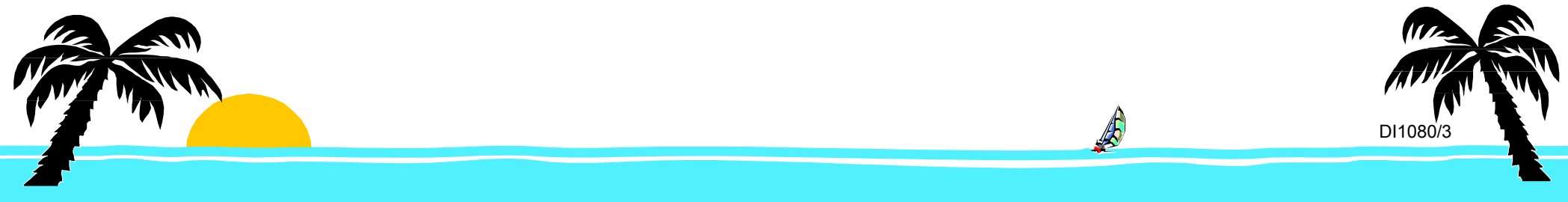
Date: 98/04/23

Page: 1

Time: 15:54:13

Description..... : FROM GENER583SV01 2/17/98 DEVL-TPT
 Base structure name..... : ISO8583
 Application file name..... :
 Application file type..... :
 Record ID position..... : 1
 Record ID length..... : 3
 Record ID data type..... : CH
 Beginning structure name..... : 8583
 Ending structure name..... :
 Trading partner ID field..... : TRADING-PARTNER
 Generic routing code field..... :

Field/Structure Name	Type	Length	Positions	Max-Use	Passed Separately?	Record ID
ISO8583	ST	0		1		
8583	ST	12	1-12	1	Y	B10
RECORD-B10	CH	3	1-3			
TRADING-PARTNER	CH	9	4-12			
BINARY-ST	ST	10	1-10	1	Y	B20
RECORD-B20	CH	3	1-3			
AUDIT-NM	PD	4	4-7			
LENGTH	CH	3	8-10			
BINARY-ST-B30	ST	1002	1-1002	1	Y	B30
RECORD-B30	CH	3	1-3			
BINARY-DATA	CH	999	4-1002			



Incoming Send Map

MAP1 Standard-to-Application Mapping Date: 98/04/23
 Page: 1 Time: 15:55:45

Trading partner transaction ID: GENER584S0101V01 Send/receive : S
 Description: FROM INCOMING 8583 785=300 3/3/98 DEVL-TPT

Application Control Fields Length
 1 TRADING-PARTNER 9

STANDARD (**-Denotes repeated elements) APPLICATION (*-Denotes literals)
 Standard ID: ISO 8583 Standard transaction ID: 584 Data format ID: GENER584SV01

Loop ID	Seg ID De seq/ID	Req Des	Data Type	Length Min Max	Validation Table	Field Name/Special Handling	Data Type	Length	Edit Type	Exit/Table Name
REF										
0001	128	M	ID	2 2	128	*ZZ				
0002	127	O	AN	1 30		AUDIT-NM Concatenation position = 1, length = 6	PD	4		
BIN										
0001	784	M	AN	3 3		LENGTH	CH	3		
0002	785	M	AN	1 300		BINARY-DATA	CH	999		



Incoming Receive ADF

APP1

GENER584SV01 Application Data Format

Date: 98/04/23

Page: 2

Time: 15:54:13

Description..... : FROM GENER583RV01 FOR INBOUND 2/23/98_DEVL-TPT
Base structure name..... : ISO_8583RV01
Application file name..... : RTATRESP
Application file type..... : PG
Record ID position..... : 1
Record ID length..... : 3
Record ID data type..... : AN
Beginning structure name..... : B10
Ending structure name..... :
Trading partner ID field..... : A10-INTPID
Generic routing code field..... :

Field/Structure Name	Type	Length	Positions	Max-Use	Passed Separately?	Record ID
8583	ST	12	1-12	1	Y	B10
RECORD-B10	CH	3	1-3			
TRADING-PARTNER	CH	9	4-12			

BINARY-ST	ST	10	1-10	1	Y	B20
RECORD-B20	CH	3	1-3			
AUDIT-NM	PD	4	4-7			
LENGTH	CH	3	8-10			

BINARY-ST-B30	ST	303	1-303	1	Y	B30
RECORD-B30	CH	3	1-3			
BINARY-DATA	CH	300	4-303			



Incoming Receive Map

MAP1
Page: 1

Standard-to-Application Mapping

Date: 98/04/23
Time: 15:55:43

Trading partner transaction ID : GENER584R0101V01 Send/receive : R
Description: FROM ISO-8583R0101V23 785=300 3/3/98 DEVL-TPT

Application Control Fields Length

STANDARD (**-Denotes repeated elements)

APPLICATION (*-Denotes literals)

Standard ID: ISO 8583 Standard transaction ID: 584

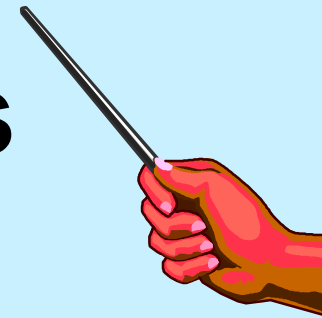
Data format ID: GENER584RV01

Loop ID	Seg ID De seq/ID	Req Des	Data Type	Length Min Max	Validation Table	Field Name/Special Handling	Data Type	Length	Edit Type	Exit/Table Name
	REF									
	0002 127	***	***	*** ***		*SET VTPID &TPID				
	0002 127	***	***	*** ***		TRADING-PARTNER	CH	9		
						&USE VTPID,5, UNKNOWN				
	BIN									
	0001 784	M	AN	3 3		LENGTH	CH	3		
	0002 785	M	AN	1 300		BINARY-DATA	CH	300		



Conclusion

**DataInterchange
can process
unsupported
standard
transactions**



Questions

