

3.2 MIME Format Message

For MIME format message, there is EDIFACT message and Attachment file transmission message. Each format and message structure are shown as follows.

3.2.1 EDIFACT message

(1) Outline of EDIFACT

EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) is the standard that integrates EDI Standards developed in the US and Europe independently for exchanging information associated with commercial transactions between parties in the administrative, commercial and transportation sectors (such as manifest information, invoice information, and import/export declarations information). EDIFACT has been approved by the International Organization for Standardization (ISO) as a standard agreement for conducting EDI internationally and recommended by the United Nations Economic Commission for Europe (UN/ECE).

In EDIFACT, specific forms such as manifests, invoices, and import/export declarations are referred to as "standard messages". Messages related to customs stations have been created and developed by the WCO (World Customs Organization) with expertise, commissioned by UN/ECE.

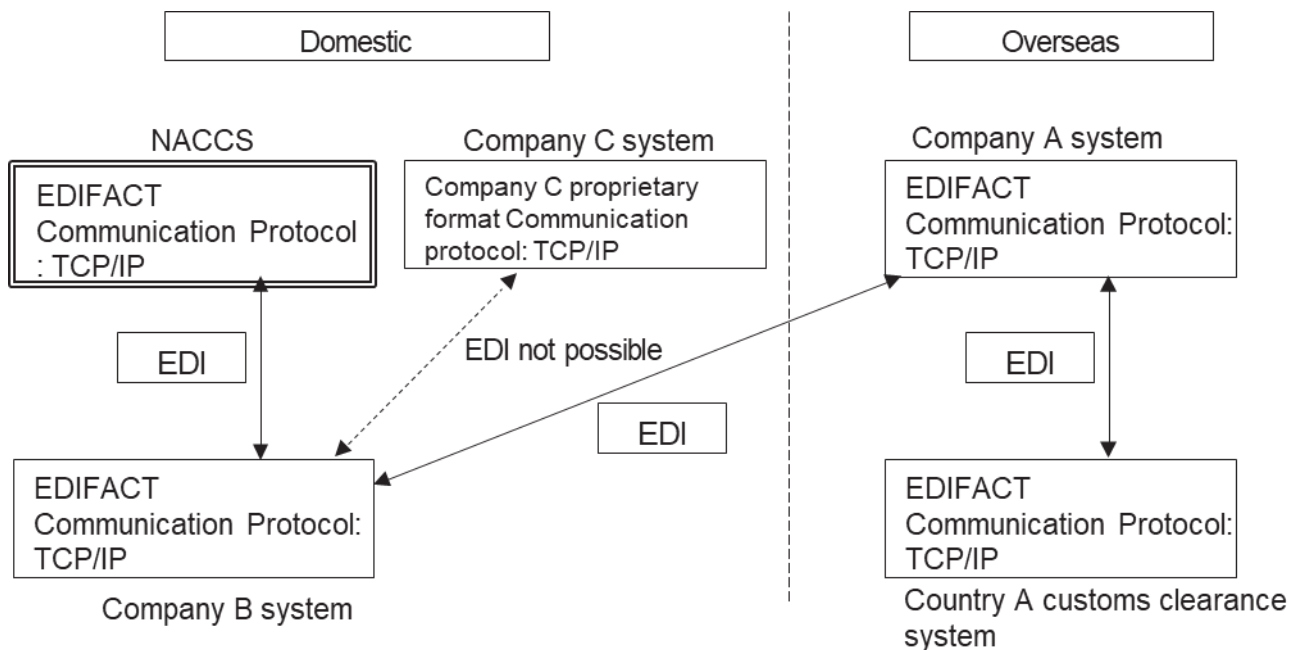


Figure 3.2.1 EDI image using EDIFACT

Table 3.2.1 Basic components of EDIFACT

Agreement	Description	Content
Standard message	Standard message format for documents	• Document format
Syntax rules	Syntax to make document into message	• How to arrange data • Character types that can be used

Data element directory	Definitions of terms and codes for data items (dictionary)	• The meanings of data items • The terms and codes for data items
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Table 3.2.2 Major Customs Station-related messages of EDIFACT

Message name	Content
CUSRES	Used as a notification of permission and approval of customs for declarations, etc.
CUSREP	Used as a general declaration
CUSCAR	Used as a manifest
PAXLST	Used as a passenger / crew member list
PNRGOV	Passenger reservation record

Table 3.2.2 Terminal Connectivity Confirmation Information

Field name	Description
Input Field 1	INPUT FIELD 1
Input Field 2	INPUT FIELD 2



GENRAL

UNH + 00000000000001 + TCC110 : D : 21A : UN : NAC10'
 (Message reference number) (Subset name) (Version) (Manual control organization)

BGM + 8 : : : TCC + 1234567890 + 9'
 (Document name) (Procedure code) (Input Message ID) (original)

FTX + AAI + + + A : INPUT FIELD 1 : INPUT FIELD 2'
 (Overall information) (Input Field 1) (Input Field 2)

UNT + 4 + 00000000000001'
 (Number of segments) (Message reference number)

Figure 3.2.2 An Example of EDIFACT Standard Message (GENRAL)

(Note) The specified values are examples. Refer to "Procedure Specifications" for details.

(2) EDIFACT Message Format

EDIFACT message formats are shown as follows.

(A) EDIFACT message adopted

NACCS adopts the following EDIFACT messages. Note that PAXLST cannot be sent from lines other than those provided by aeronautical communication companies.

1)UN/EDIFACT

- CUSRES (Customs response message)
- CUSREP (Customs conveyance report message)
- CUSCAR (Customs cargo report message)
- PAXLST (Passenger list message)
- CODECO (Container gate-in/gate-out report message)
- IFTMIN (Instruction message)
- IFTMBC (Booking confirmation message)
- APERAK (Application error and acknowledgment message)
- GENRAL (General purpose message)
- CONTRL (Syntax and service report message)

2)US/EDIFACT

- PAXLST (Passenger list message)

3)PADIS EDIFACT

- PNRGOV (Passenger Name Record information to government)

(B) Syntax rules

Syntax rules for EDIFACT messages used at NACCS should be ISO 9735 4th edition. Note that syntax rules for UN/EDIFACT should be ISO 9735 1st edition, however, when processing at NACCS mail server, process messages according to syntax rules specified in ISO 9735 4th edition.

(C) Message version

Message version for EDIFACT messages used at NACCS should be D21A. However, below message are not included.

Table 3.2.4 Exceptional Messages

Message	Version	Remarks
CUSCAR	D.17A	Which is only used for “Advance Cargo Information Registration (ADM01)” procedure and “Advance Cargo Information Registration (House Manifest) (HDM01)” procedure
PAXLIST	D.02B	
PNRGOV	11.1	

(D) Message Structure

For message structure of each EDIFACT messages used in NACCS, refer to "Appendix 12-1-2 Message Structure" in Appendix 12-1 EDIFACT Mapping Rules.

(E) How to Look at Segment Table/Mapping Table

How to look at the segment table and mapping table is explained below using the examples of the segment table and mapping table.

See "Table A12-1-1 Example of Segment Table" and "Table A12-1-2 Example of Mapping Table" as the following corresponds to the descriptions of "Table A12-1-1 Example of Segment Table" and "Table A12-1-2 Example of Mapping Table".

In addition, see the Procedure Specification for the segment table and mapping table of procedures subject to EDIFACT.

For PADIS EDIFACT, the same segment table and mapping table as UN/EDIFACT is used.

1) Segment Table

(a) Outline

All the segments, including those not used in NACCS, are described. Segments that are not used by NACCS can be sent, but segments that are not described in the Segment Table (such as UNS) must not be sent. For segments that are not used, mandatory check and length check are performed, but character type check is not performed.

(b) Tag column

Segment tags are described

(c) UN/EDIFACT S/R column

Described using the mandatory/conditional classification and the maximum number of repetitions in United Nations standard messages as reference.

M : Mandatory (mandatory item)

C : Conditional (conditional item)

(d) NACCS S/R column

Indicates the mandatory/conditional classification and the maximum number of repetitions in NACCS EDIFACT messages.

(The mandatory/conditional classification and the maximum number of repetitions of the NACCS S/R column shall be set for EDIFACT conversion process)

M : Mandatory (mandatory item)

C : Conditional (conditional item)

X : Not used (item not used in NACCS)

When the segment or segment group is repeatedly used and the usage is different for each repetition order, the number in parenthesis in the maximum number of repetitions indicates the order of a segment or segment group used.

(e) Field Name (For reference) column

Indicates the item number and field name in the List of Input/Output Information of the NACCS Procedure Specification.

When the use of a dummy data in the segment is required by syntax rules, it is described as "**.dummy data value (used as a dummy)"

2) Mapping Table

(a) Outline

Only the segments used in NACCS are described.

For items not used in NACCS, a mandatory check and length check are performed, but a character type check is not performed.

(b) UN/EDIFACT S/R column

Described using the mandatory/conditional classification and the maximum number of repetitions of each data element in United Nations standard messages as reference.

M : Mandatory (mandatory item)

C : Conditional (conditional item)

(c) NACCS S/R column

Indicates the mandatory/conditional classification and the maximum number of repetitions of each data element in NACCS.

(The mandatory/conditional classification of the NACCS S column shall be set for the EDIFACT conversion process)

M : Mandatory (mandatory item)

C : Conditional (conditional item)

X : Not used (item not used in NACCS)

The number in parentheses to the right of the maximum number of repeats indicates the lower segment group is divided only in upper segment group if the segment group is forming a hierarchy.

If "Segment group 6: Vessel owner information" in 1(1) indicated in Table 3.2.3 exists, only information related to vessel owner information will be handled in Segment group 7 and 8 which is under the hierarchy of Segment group 6.

If "Segment group 6: Vessel operator information" in 1(2) exists, only information related to vessel operation information will be handled in Segment group 7 and 8 which is under the hierarchy of Segment group 6.

Table 3.2.3 Example for VBX110

Tag	Name	UN/EDIFACT		NACCS		Field name (reference)
		S	R	S	R	
Segment group 6		C	9	C	1(1)	<i>Vessel owner information</i>
NAD	Name and address	M	1	M	1	18.Vessel Owner Code 19.Vessel Owner Name 20.Vessel Owner Address 21.Vessel Owner Country Code
Segment group 7		C	9	C	1	<i>Vessel owner's phone and fax information</i>
CTA	Contact information	M	1	M	1	**IC (used in dummy)

	COM	Communication contact	C	5	C	1(1)	22.Vessel Owner Telephone Number
	COM	Communication contact	C	5	C	1(2)	23.Vessel Owner Fax Number
	Segment group 8		C	9	X		
	RFF	Reference	M	1	X		
	DTM	Date/time/period	C	1	X		
	Segment group 6		C	9	C	1(2)	<i>Vessel operator information</i>
	NAD	Name and address	M	1	M	1	24.Vessel Operator Code 25.Vessel Operator Address 26.Vessel Operator Country Code
	Segment group 7		C	9	C	1	<i>Vessel operator phone and fax information</i>
	CTA	Contact information	M	1	M	1	**CA (used in dummy)
	COM	Communication contact	C	5	C	1(1)	27.Vessel Operator Telephone Number
	COM	Communication contact	C	5	C	1(2)	28.Vessel Operator Fax Number
	Segment group 8		C	9	X		
	RFF	Reference	M	1	X		
	DTM	Date/time/period	C	1	X		

(d) UN/EDIFACT FORMAT column

Described using the attribute and length of each data element in United Nations standard messages as reference.

- a: Alphabetical character a3: Alphabetical characters, fixed length of 3 characters
n: Numeric character n3: Numeric characters, fixed length of 3 characters
an: Alphanumeric character an3: Alphanumeric characters, fixed length of 3 characters
a..3: Alphabetical characters, variable length of up to 3 characters
n..3: Numeric characters, variable length of up to 3 characters
an..3: Alphanumeric characters, variable length of up to 3 characters

(f) NACCS FORMAT column

Indicates the attribute and length of each data element in NACCS.

(g) Item No. column

Indicates the item number in the List of Input/Output Information of the NACCS Procedure Specification.

(h) Field Name/Setting Value column

Indicates the content of data set in NACCS.

- For those with an entry in the Item No. column, the input/output field name of the NACCS Procedure Specification is described.

(i) Special Notes

Indicates the additional information of the Field Name/Setting Value column.

- The code value is described with "=" used as a delimiter. (Example: 9=Original)
- The local codes provided by NACCS Center are indicated by enclosing in "[]".

(j) Each segment is described using sample data in NACCS

(k) Segment Group Number column

In case of a segment comprising a segment group, the segment group number to which the segment belongs is described.

(l) Attribute and length of numeric items

The attribute of numeric items is described as "n", and the length does not include decimal point and minus sign characters.

However, NACCS EDI messages are processed with the attribute being assumed as "an" and a decimal point and minus sign character being counted as one in the length, and the attribute and length in the List of Input/Output Information of the NACCS Procedure Specification are used to convert to NACCS EDI messages.

Table 3.2.4 Example of Numeric Item

Example of values actually entered	Mapping Table	NACCS Procedure Specification
10.5	n..3	an4
-10.5	n..3	an5

*Notes on describing a numeric data element

[1] A period (".") is uniformly used as a decimal point in NACCS, and the use of a comma (,) is prohibited.

[2] A comma separator for every 3 digits shall not be used.

[3] When the data value is negative, a minus sign ("-") shall immediately precede the value.

(m) When an input field in the NACCS Procedure Specification is divided into multiple data elements, "(/)" is given in the Field Name/Setting Value column.

(Divided into segments of the length given in the NACCS FORMAT column.)

Table 3.2.5 Case of an input field "10. Ship's Agent (an50)" in the NACCS Procedure Specification

TAG	COMP	NAME	UN/EDIFACT			NACCS			Item No.	Field name/setting value	Special Notes
			S	R e p	FORM AT	S	R e p	FORM AT			
C058		NAME AND ADDRESS	C	1		C	1				
	3124	Name and address description	M		an..35	M		an..35	10	Agent name	
	3124	Name and address description	C		an..35	C		an..15		(")	
	3124	Name and address description	C		an..35	X					
	3124	Name and address description	C		an..35	X					
	3124	Name and address description	C		an..35	X					

- (n) When multiple data elements of EDIFACT messages are combined (without adding a delimiter) into an input/output field in the NACCS Procedure Specification, "(")" is given in the Field Name/Setting Value column.

Example) Case of an output field "10. Ship's Agent (an50)" in the NACCS Procedure Specification
(See the example of (12) above.)

- (o) When multiple input/output fields in the NACCS Procedure Specification are combined into a data element of EDIFACT messages, multiple item numbers are given in the Item No. column.

Table 3.2.8 Case of input fields "20. Container Size Code (an2)" and "21. Container Type Code (an2)" in the NACCS Procedure Specification

TAG	COMP	NAME	UN/EDIFACT			NACCS			Item No.	Field name/setting value	Special Notes
			S	R e p	FORM AT	S	R e p	FORM AT			
C224		EQUIPMENT SIZE AND TYPE	C	1		M	1				
	8155	Equipment size and type description code	C		an..10	M		an..4	20 21	Container Size Code Container Type Code (ISO6346)	
	1131	Code list identification code	C		an..17	X					
	3055	Code list responsible agency code	C		an..3	X					
	8154	Equipment size and type description	C		an..35	X					

- (p) When a data element of EDIFACT messages is divided into multiple input/output fields in the NACCS Procedure Specification, multiple item numbers are given in the Item Number column.

Example) Case of output fields "20. Container Size Code (an2)" and "21. Container Type Code (an2)" in the NACCS Procedure Specification
(See the example of (14) above.)

(q) DEPENDENCY NOTES are described by a dependency identifier followed by a comma-separated list of Pos (Position Identifier) in "()". Dependency identifier is shown below. However, it is not used in NACCS.

D1 ONE AND ONLY ONE

Only one of the Pos lists in parentheses must exist.

D2 ALL OR NONE

If one of the Pos lists in parentheses exists, all must exist.

D3 ONE OR MORE

At least one Pos list in parentheses must exist.

D4 ONE OR NONE

No more than one Pos list in parentheses must exist.

D5 IF FIRST, THEN ALL

If the first Pos in the Pos list in parentheses exists, then all subsequent Pos must also exist. However, even if the first Pos does not exist, subsequent Pos may exist.

D6 IF FIRST, THEN AT LEAST ONE MORE

If the first Pos in the Pos list in parentheses exists, then at least one of the subsequent Pos must exist. However, even if the first Pos does not exist, subsequent Pos may exist.

D7 IF FIRST, THEN NONE OF THE OTHERS

If the first Pos in the Pos list in parentheses exists, then no subsequent Pos must exist.

Table 3.2.6 Example of D2(010, 060, 070) All or none

Pos	TAG	COMP	NAME	UN/EDIFACT			NACCS			Item No.	Field name/setting value	Special Notes
				S	R e p	FORM AT	S	R e p	FORM AT			
010	0038		MESSAGE GROUP IDENTIFICATION	C	1	an..6	M	1	an..6		Subset name	
020	S006		APPLICATION SENDER IDENTIFICATION	C	1		M	1				
		0040	Application sender identification	M		an..35	M		an..5		User Code	
		0007	Identification code qualifier	C		an..4	X					
030	S007		APPLICATION RECIPIENT IDENTIFICATION	C	1		M	1				
		0044	Application recipient identification	M		an..35	M		an..5		NACCS	
"												
		0007	Identification code qualifier	C		an..4	X					
040	S004		DATE AND TIME OF PREPARATION	C	1		M	1				
		0017	Date	M		n8	M		n8		Date and time sent (created)	
		0019	Time	M		n4	M		n4		Time sent (created)	
050	0048		GROUP REFERENCE NUMBER	M	1	an..14	M	1	an..14		Function group reference number	
060	0051		CONTROLLING AGENCY, CODED	C	1	an..3	M	1	an..3		UN	
070	S008		MESSAGE VERSION	C	1		M	1				
		0052	Message version number	M		an..3	M		an..3		D	
		0054	Message release number	M		an..3	M		an..3		21A	
		0057	Association assigned Code	C		an..6	M		an..6		NAC10	

If "MESSAGE GROUP IDENTIFICATION" exists, "CONTROLLING AGENCY, CODED" and "MESSAGE VERSION" must also exist.

(F) Available character set

The character set which can be used in EDIFACT messages including service segment part should be the Level A Character Set plus the 2 characters "@" and "#".

However, the above rule does not apply for some of the procedures, and details are shown in Mapping Table for Each Procedure as special notes.

Besides, note that the character set to be used in EDIFACT messages transmitted via lines which are provided by aeronautical communication companies should be Level A Character Set. If characters other than the Level A character set are included, the Process Result Message is returned.

Table 3.2.1 and Table 3.2.2 show Level A Character Set.

Table 3.2.10 Level A Character Set

Type	Available character	Remarks
Character (capital letter)	A - Z	In NACCS, a period is uniformly used to indicate a decimal point.
Numeric character	0 - 9	
Space		
Period	.	
Comma	,	
Hyphen/minus sign	-	
Left parenthesis	(	
Right parenthesis	)	
Slash	/	
Equal sign	=	
Exclamation mark	!	
Quotation mark	"	
Percentage	%	
Ampersand	&	
Semicolon	;	
Inequality sign (less-than)	<	
Inequality sign (greater-than)	>	
The following character set is Level A Character Set. This is used for special purposes, so when using this in data elements, make sure to assign a release character (?) right before this.		
Apostrophe	'	Segment ending sign
Plus sign	+	Data element separator
Colon	:	Component data element separator
Question mark	?	Release character
Asterisk	*	Repeating separator

Table 3.2.11 Range of Level A Character Set

									0	0	0	0	1	1	1	1
									0	0	1	1	0	0	1	1
									0	1	0	1	0	1	0	1
									Column							
Bits	b7	b6	b5	b4	b3	b2	b1	row	0	1	2	3	4	5	6	7
				0	0	0	0	0			SP (Note1)	0	@	P		
				0	0	0	1	1			!	1	A	Q		
				0	0	1	0	2			"	2	B	R		
				0	0	1	1	3			#	3	C	S		
				0	1	0	0	4				4	D	T		
				0	1	0	1	5			%	5	E	U		
				0	1	1	0	6			&	6	F	V		
				0	1	1	1	7			'	7	G	W		
				1	0	0	0	8			(	8	H	X		
				1	0	0	1	9			)	9	I	Y		
				1	0	1	0	A			*	:	J	Z		
				1	0	1	1	B			+	;	K			
				1	1	0	0	C			,	<	L			
				1	1	0	1	D			-	=	M			
				1	1	1	0	E			.	>	N			~
				1	1	1	1	F			/	?	O	_		

(Note 1) SP denotes a space.

(Note 2) “_” can be used only in “Invoice number” items in “Registration of items on import declarations (IDA)” etc.*¹ and “Shipper's Contact E-Mail Address” item, etc.*² in “ACL Information Registration (for Container Vessels) (ACL01)”, and “ACL Information Registration(For Conventional Vessels/Car Carriers)(ACL02)”.

(Note 3) “~” can be used only in “Shipper's Contact E-Mail Address” item, etc.*³ in “ACL Information Registration (for Container Vessels) (ACL01)”, and “ACL Information Registration(For Conventional Vessels/Car Carriers)(ACL02)”.

(*1) The subjected procedures are as follows

- "ACL Information Registration (For Container Vessels) (ACL01)" procedure
- "ACL Information Registration(For Conventional Vessels/Car Carriers)(ACL02)" procedure
- Registration of information about shipping instructions (S/I) (SIR)" procedure
- "Registration of items on export declarations (EDA)" procedure
- "Registration of changes to export declarations (EDA01)" procedure
- "Registration of items on applications for changes to the content of export permission (EAA)" procedure
- "Registration of import instruction documents (IIR)" procedure
- "Registration of items on import declarations (IDA)" procedure
- "Registration of changes to import declarations (IDA01)" procedure
- "Registration of invoice/packing list information (IVA)" procedure
- "Registration of invoice/packing list sorting information (IVB)" procedure
- "Provisional registration of invoice/packing list sorting information (IVB02)" procedure

(*2) The subjected fields are as follows

- Shipper's Contact E-Mail Address
- Consignor Address/Telephone Number
- Consignee Address/Telephone Number
- Notify Party Address/Telephone Number
- Goods Description
- Marks and Numbers
- Invoice number

(*3) The subjected fields are as follows

- Shipper's Contact E-Mail Address
- Consignor Address/Telephone Number
- Consignee Address/Telephone Number
- Notify Party Address/Telephone Number
- Goods Description
- Marks and Numbers

(3) EDIFACT message structure

When using EDIFACT messages, E-mail Style Processing Mode (gateway computers) should be used as the Data Transmission/Receipt Processing Mode. In this case, a communications protocol header and a trailer are added to an EDIFACT message.

Figure 3.2.3 shows message structure.

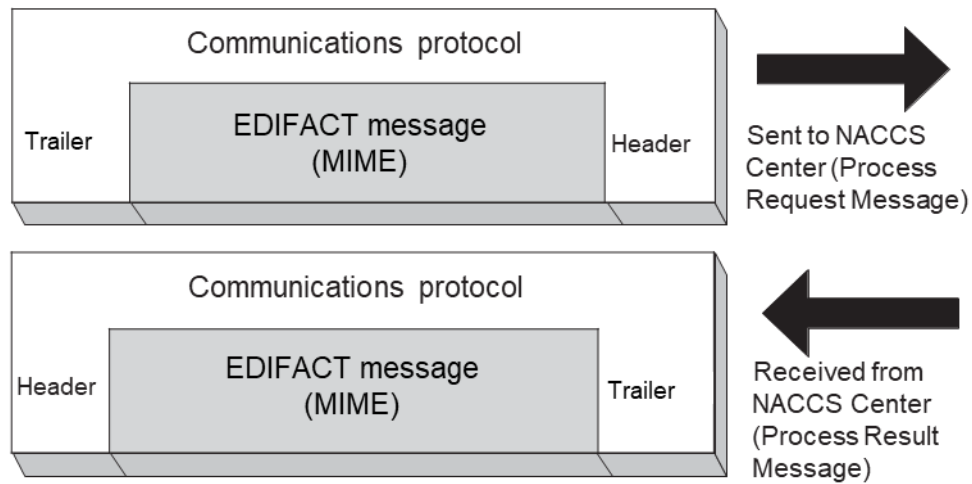


Figure 3.2.3 EDIFACT message

(A) Input (Output) Common Fields

The following shows Input (Output) Common Fields of procedure messages for EDIFACT messages. In addition, for the filing method for EDIFACT messages, details are shown in Mapping Table for Each Procedure.

1) Common field for input screen (Process Request Message)

Table 3.2.3 shows Input Common Fields for EDIFACT.

Table 3.2.12 Input Common Fields

Item No.	Field name	Length	Outline	Sample settings, etc.
1	Procedure Code	Max 5	Set a Procedure Code for identifying the procedure.	VBX (General Vessel Information Registration)
2	User code	Fixed 5	Set a User code, Identifying Numbers and User Password for identifying the user.	1AABC
3	Identifying Numbers	Fixed 3		001
4	User Password	Max 8		*****
5	Message Tag (Note)	Max 26	Set information for matching a Process Request Message with a Process Result Message. (See 3.5.2)	Assign a unique value.
6	Input Message ID (Note)	Max 10	This value will be output in a Process Result Message. (See 3.5.1)	Assigns an arbitrary value.
7	Index Tag (Note)	Max 64	Used in the inquiry procedure, etc. when inquiry results, etc. do not fit in a single Process Result Message, or when inquiring consecutive information (Sequential Processing), or when calling other specified information in the cargo information inquiry procedure (ICG). (See 3.5.3)	(When Sequential Processing is implemented, set a value as specified in Index Tag of the Process Result Message that has arrived)

(Note) See "3.5 Message control elements" for details on Message Tag, Input Message ID and Index Tag.

2) Output Common Fields (Process Result Messages)
Table 3.2.4 shows Output Common Fields for EDIFACT

Table 3.2.13 Output Common Fields

Item No.	Field name		Length	Outline	Sample settings, etc.
1	Procedure Code		Max 5	Indicates a Procedure Code (Note 2)	ACL01 (ACL Information Registration (for Container Vessels))
2	Output Information Code		Max 7	The code of an output message. Advisable to use this code for sorting messages.	SAT140
3	User Code		Fixed 5	The code of the user who received the relevant message	1AABC
4	Message Tag		Max 26	Used to identify a series of Process Result Messages responding to a Process Request Message. (See 3.5.2)	(Data set in the Process Request Message sent by the user is reflected as it is)
5	Message Control Information	Division Sequence Number	Fixed 3	Used to identify a series of Process Result Messages responding to a Process Request Message.	000 - 001
6		Termination	Fixed 1	Used to identify a series of Process Result Messages responding to a Process Request Message.	'E' is supplied at the end of the message. Otherwise, enter a space.
7		Message Type	Fixed 1	To indicate a message class. (See 3.4)	'R' is supplied for a Process Result Output Message.
8		(Reserved area)	Max 3	(Note 1)	
9	Input Message ID		Max 10	Outputs all settings of the Process Request Message. For EXC type messages, spaces are filled (See 3.5.1)	(Settings of a Process Request Message)
10	Index Tag		Max 64	Set when inquiry results do not fit in a single Process Result Message (Sequential Processing to follow) (See 3.5.3)	(Sequential Processing)

(Note 1) The reserved areas are used to control the system.

(Note 2) The Procedure Code set in the Output Common Fields may not necessarily match that in another Input Common Fields. There are some occasions where a Procedure Code different from that in the Process Request Message is specified in the Output Common Fields. Advisable to use Output Information Code s for sorting messages.

(B) Transmission unit for messages

1) Transmission unit for one exchange

In NACCS, UNA may be used as a header for one exchange of EDIFACT messages. In addition, one to multiple EDIFACT messages can be stored for one exchange (UNB - UNZ). (Because UNA is allowed to be sent in accordance with the protocol, NACCS also supports it.)

However, UNA shall not be used for "Passenger Name Record Report(PNR110)", "Advance Cargo Information Registration (ADM110)", and "Advance Cargo Information Registration (House Manifest) (HDM01)". If UNA is used in "Passenger Name Record Report(PNR110)", "Advance Cargo Information Registration (ADM110)" and "Advance Cargo Information Registration (House Manifest) (HDM01)", the EDIFACT message will be discarded.

2) Transmission unit for single-message and multiple-message

Single-message refers to a message where 1 EDIFACT message (UNH - UNT) is stored in one exchange (UNB - UNZ). Multiple-message refers to multiple EDIFACT messages are stored in one exchange.

However, when using multiple messages, due to the limit in processing capacity of the NACCS Center server, the maximum number of EDIFACT messages to be stored by one exchange should be 99. If the value exceeds 99, a CONTRL message is returned with syntax error code 18 (unspecified error).

However, in "Passenger Manifest Report (PLR01)" procedure, "Crew List Report (NLR01)" procedure, and "Passenger Name Record Report (PNR01)" procedure, "Advance Cargo Information Registration (ADM01)" procedure and "Advance Cargo Information Registration (House Manifest) (HDM01)" procedure, only single-messages should be used. If multiple messages are sent, the EDIFACT message is discarded.

3) Transmission unit for single B/L message and multiple B/L message

A single B/L message refers to a message where 1 unit of B/L information and container information relating to the B/L are stored in 1 CUSCAR message which is used in the "Manifest Information Registration (MFR)" procedure and "Manifest Information Correction (Before the Manifest Submission procedure) (CMF01)" procedure. Multiple B/L message refers to a message where multiple units of B/L information and container information are stored in a similar CUSCAR message.

However, due to the limit in processing capacity of the NACCS Center server, only single-messages should be used to send multiple B/L messages. If multiple messages are sent, a CONTRL message is returned with syntax error code 18 (unspecified error).

(C) Message format

1) Process Request Message

(a) UN/US EDIFACT format

In the message structure of UN/US EDIFACT messages for Process Request Messages, multiple function groups (groups composed of the same message) or multiple messages can be stored in 1 procedure message.

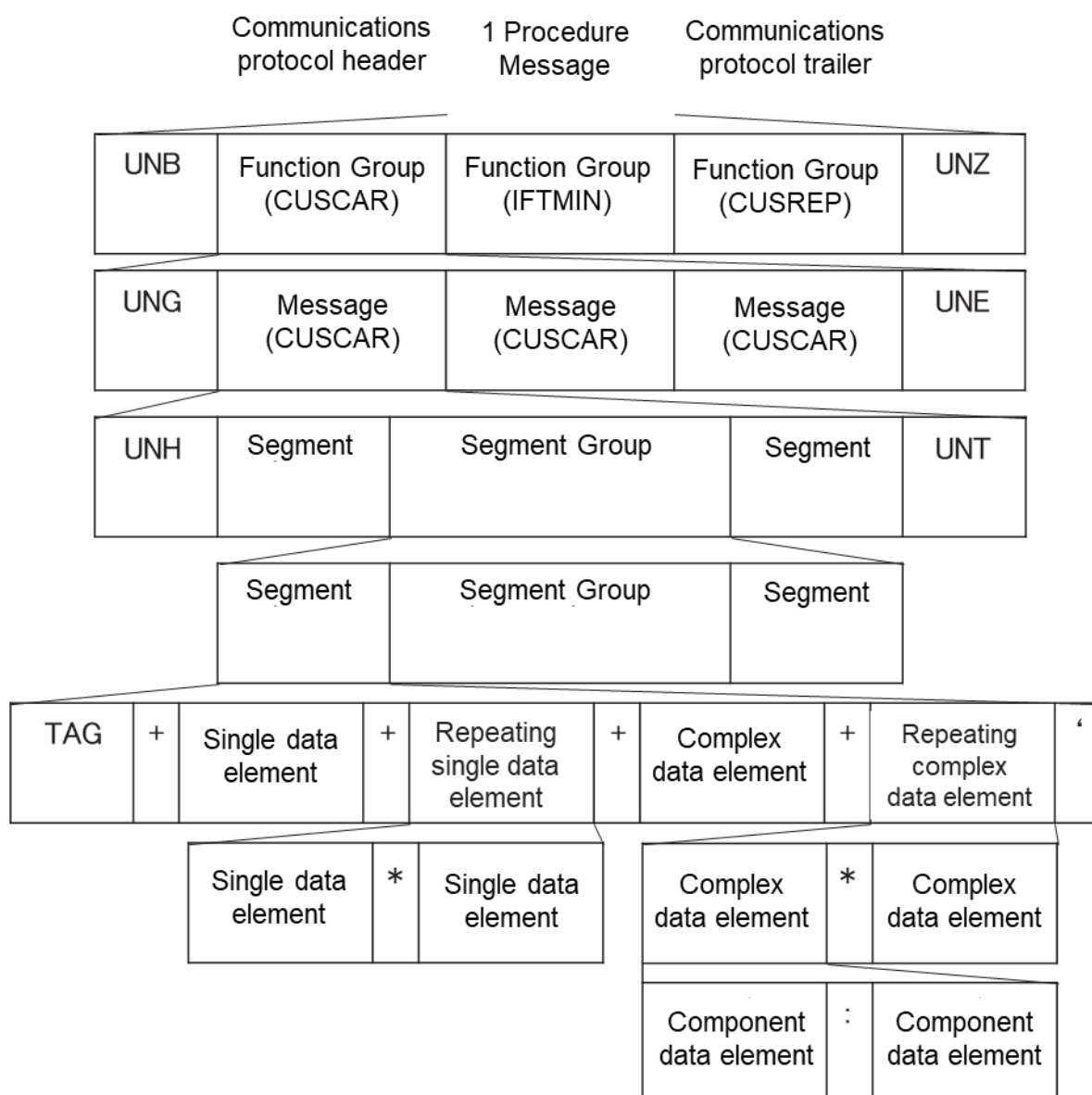
In addition, for multiple B/L messages, multiple B/Ls and containers can be stored.

However, the maximum message length per procedure message is 10MB (10,000,000 bytes) for the multiple B/L message. If it exceeds 10 MB, the EDIFACT message is discarded.

When multiple function groups or messages are included in 1 procedure message, and when multiple B/Ls or containers are included in 1 multiple B/L message, those will be decomposed into multiple NACCS EDI messages by the mail server.

For transmission/receipt of EDIFACT messages, E-mail Style Processing Mode (gateway computer) is used and a communications protocol header and a trailer are added.

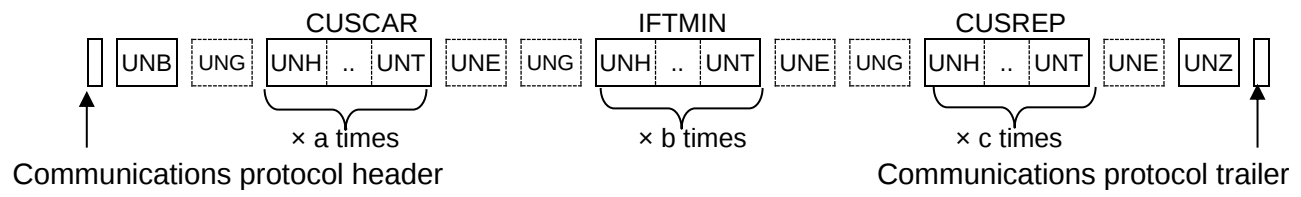
Figure 3.2.4 shows the message structure of EDIFACT messages for Process Request Messages.



(Note) Function group header (UNG) and function group trailer (UNE) may not be used.

Figure 3.2.4 Message Structure of Process Request Message

* Message example: When multiple messages of CUSCAR, IFTMIN, and CUSREP are stored in 1 message



(b) PADIS EDIFACT format

In message structure of PADIS EDIFACT messages for Process Request Messages, single function group can be stored in 1 procedure message.

In addition, PADIS EDIFACT messages can use only the single-message.

However, the maximum length per procedure message is 10MB (10,000,000 bytes). If it exceeds 10 MB, the EDIFACT message is discarded.

For transmission/receipt of PADIS EDIFACT messages, E-mail Style Processing Mode (gateway computer) is used and a communications protocol header and a trailer are added.

Figure 3.2.5 shows the message structure of PADIS EDIFACT messages for

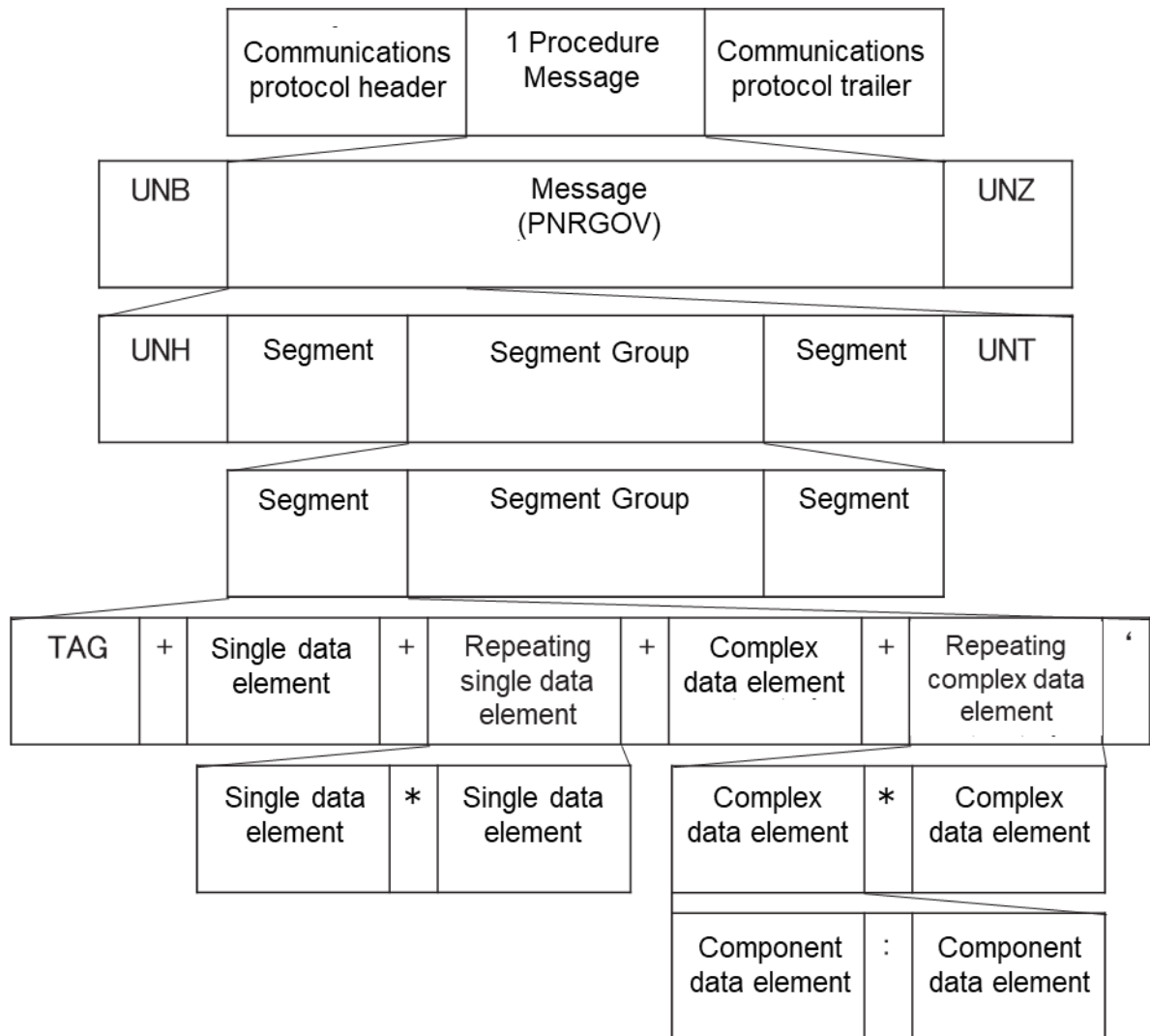
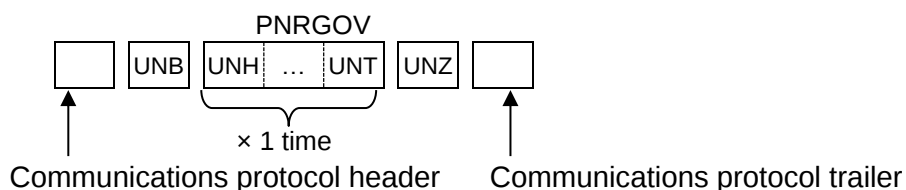


Figure 3.2.5 Message Structure of Process Request Message

* Message example: When 1 PNRGOV is stored in 1 message



2) Process Result Message

Processing is carried out by each message, B/L, or container, and a Process Result Output Message and an Output Information Message are output by each message, B/L, or container. In other words, in message structure for Process Result Messages, 1 message is stored in 1 procedure message.

For transmission/receipt of EDIFACT messages, E-mail Style Processing Mode (gateway computer) is used and a communications protocol header and a trailer are added to a message.

Figure Figure 3.2.3 shows the message structure of the EDIFACT message in the Process Result Message.

Note that Process Result Messages are returned only to Process Request Messages with UN/EDIFACT format except "Passenger Manifest Report (PLR110/PLR210)", Crew List Report(NLR110/NLR210)", "Advance Cargo Information Registration (ADM110)" and "Advance Cargo Information Registration (House Manifest) (HDM01)". It is not returned for Process Request Messages in US/EDIFACT format or PADIS EDIFACT format.

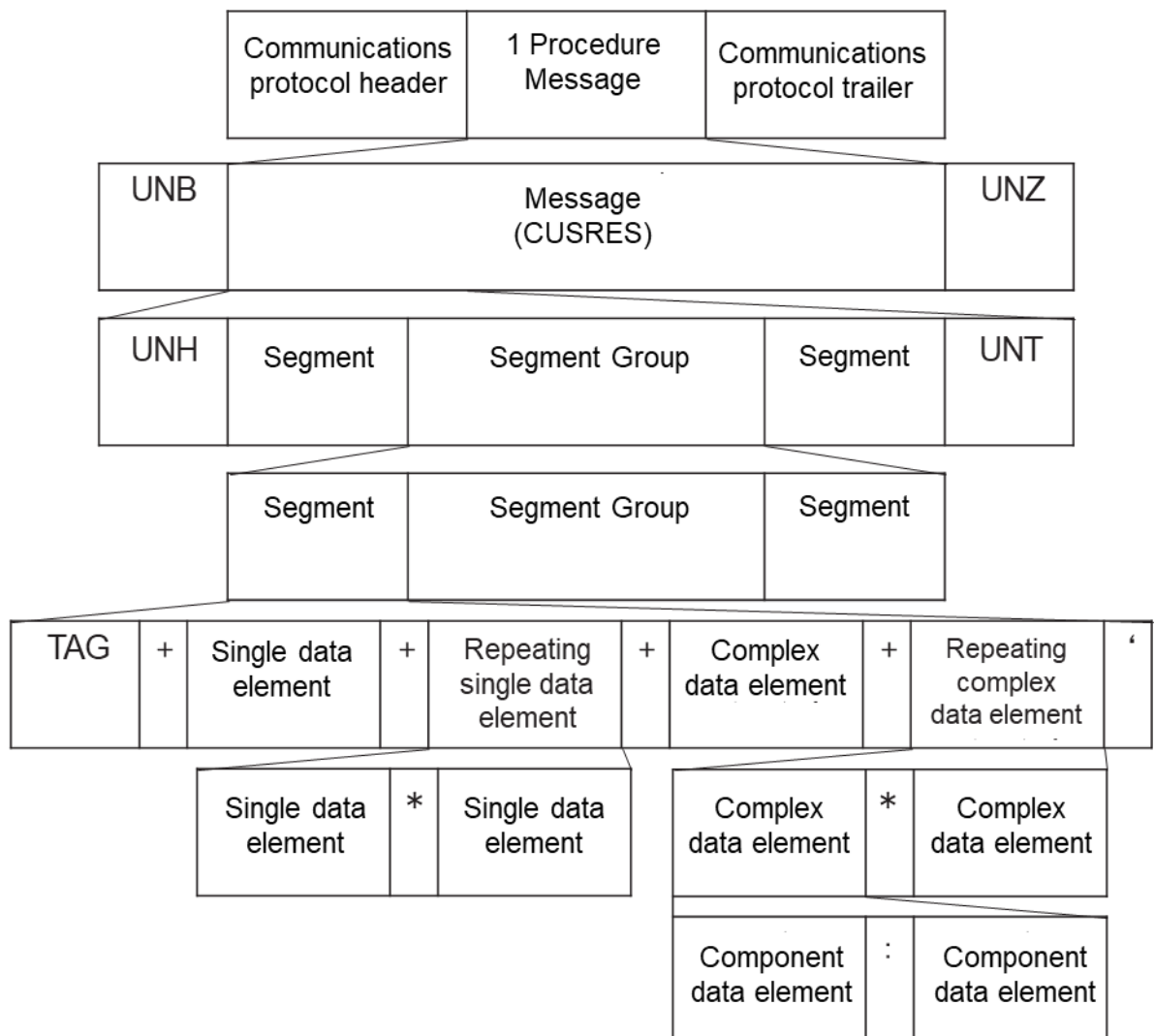
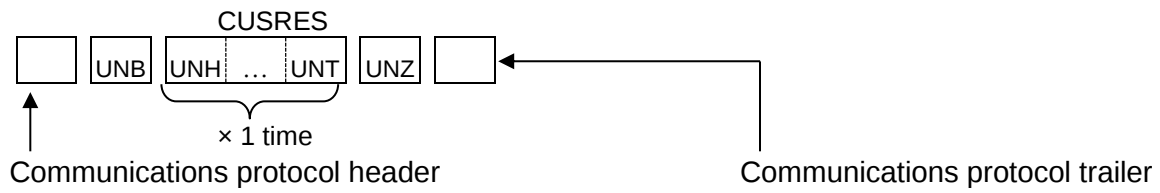
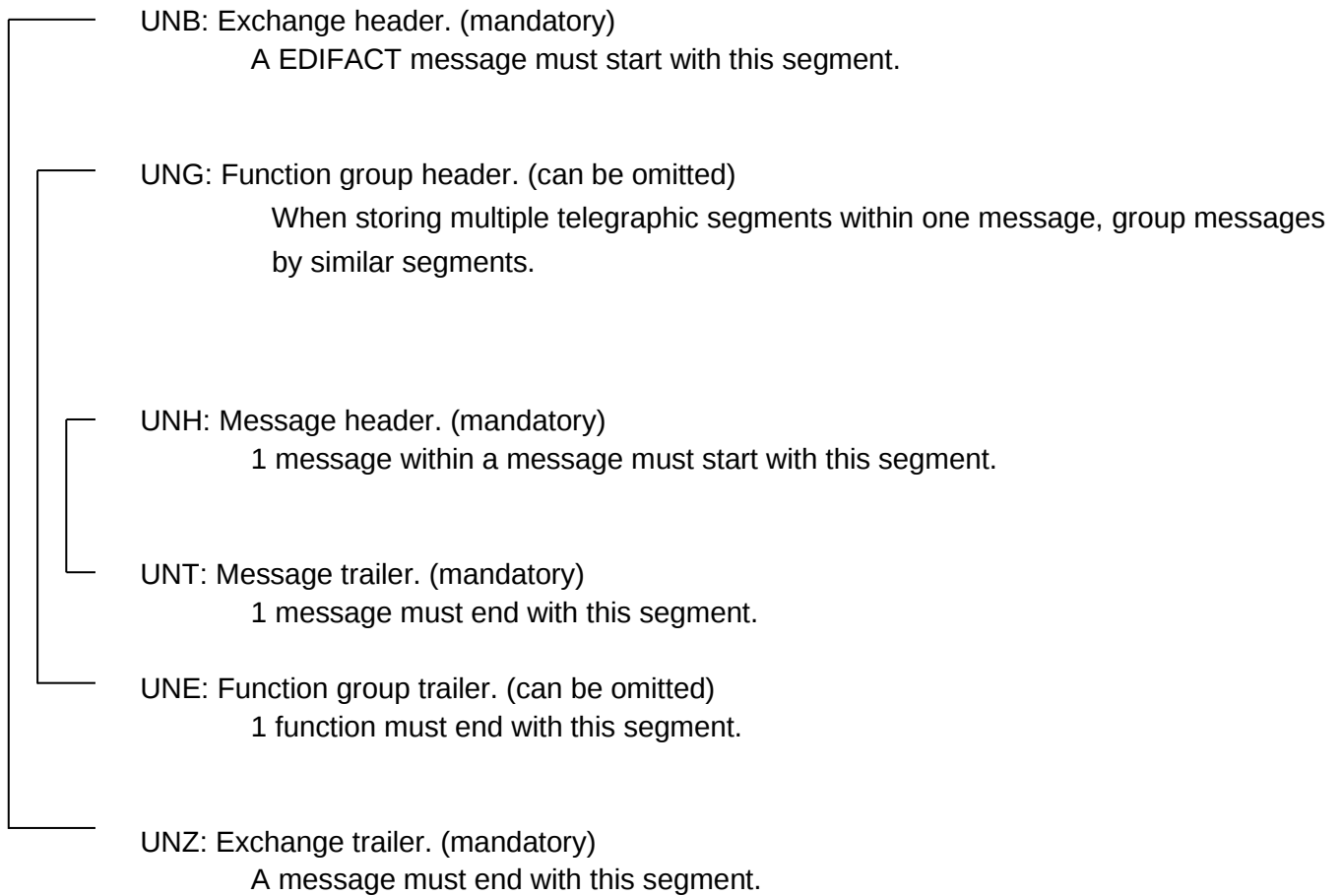


Figure 3.2.3 Message Structure of Process Result Message

* Message example: When 1 CUSRES is stored in 1 message



(Term description)



(D) Message Processing Mode

1) Processing Mode for single-message

Figure 3.2.7 shows process image when one EDIFACT message is stored (single-message) in one EDIFACT message.

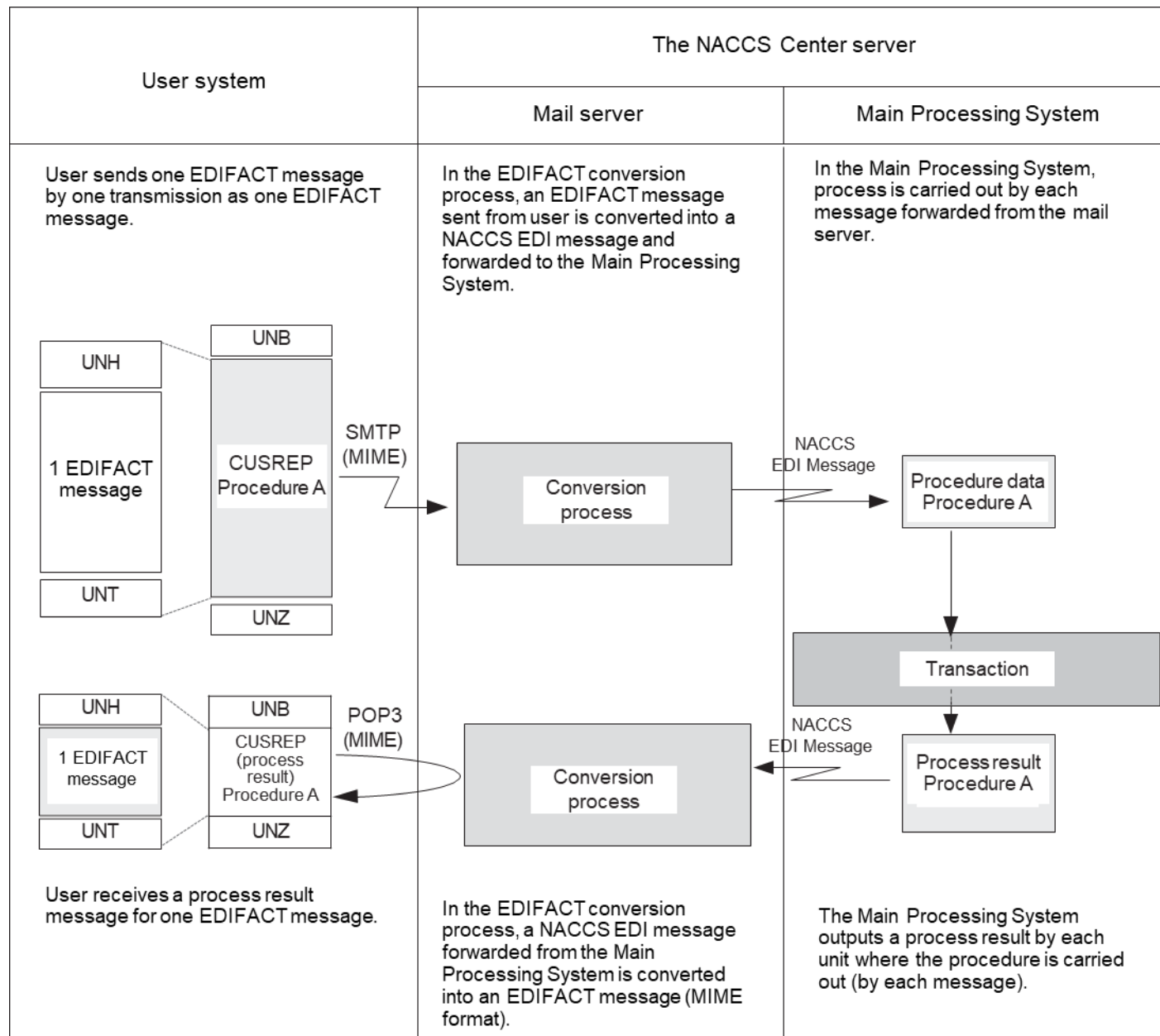


Figure 3.2.7 Image of Single-Message Processing

2) Processing Mode for multiple-message

Figure 3.2.8 shows outline of image of Processing Mode when multiple-message is used.

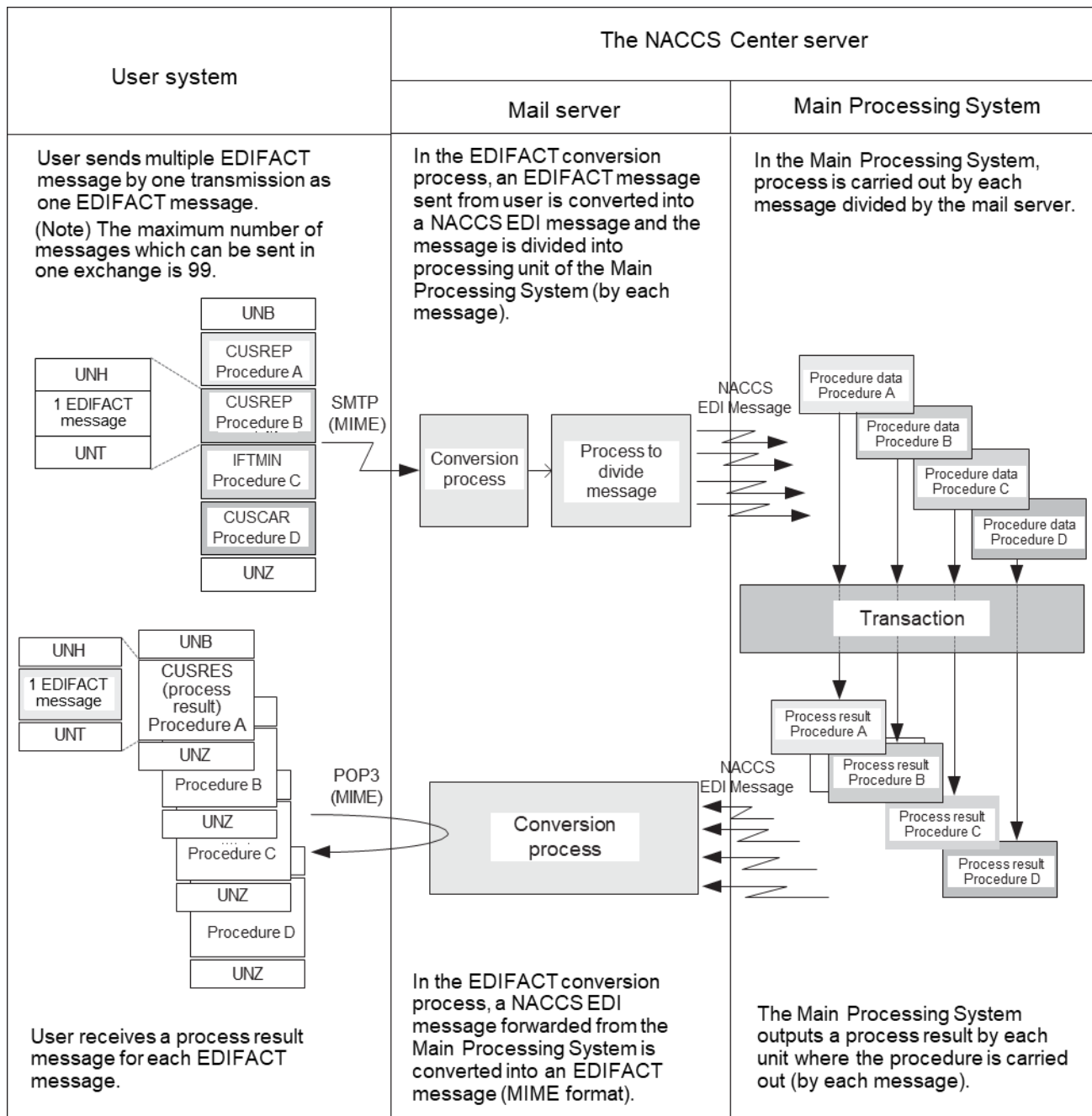


Figure 3.2.8 Image of Multiple-Message Processing

3) Processing Mode for Multiple B/L Message

Figure 3.2.4 shows image of Processing Mode when multiple B/L is used. The Number of B/L that can be registered in one message of multiple B/L Messages is up to max 2000 times. A CONTRL message is returned with syntax error code 18 (unspecified error) when the message is registered in the number of B/L more than 2000 times

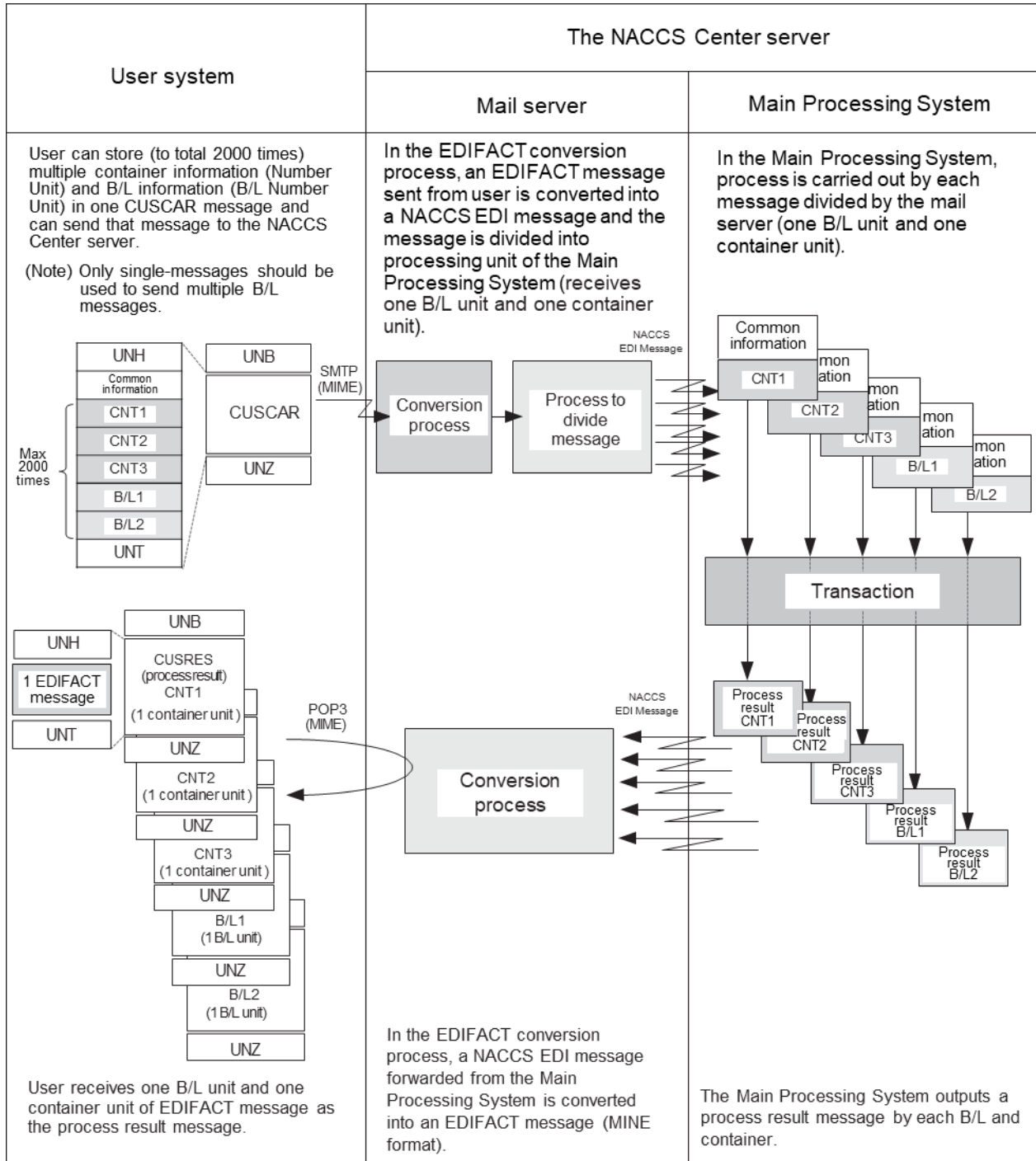


Figure 3.2.4 Image of Multiple B/L Processing

(4) Receipt confirmation for EDIFACT message

(A) Timing of receipt confirmation

The following 3 measures can be considered as measures to confirm that an EDIFACT sent by user is received by the NACCS Center server.

- 1) Send a receipt confirmation at the time when the mail server on the Center side receives the message.
- 2) Send a receipt confirmation to the user at the time when conversion from an EDIFACT message to a NACCS EDI message is completed in the mail server on the Center side.
- 3) Send a receipt confirmation to the user at the time when the Main Processing System of the NACCS Center server completes the procedure processing.

In 1), the fact where the EDIFACT message is recorded at the mail server will be demonstrated. However, when an error occurs in subsequent message exchanges, a receipt error message will be sent to the user during the 2) time.

In 3), " Process Result Output " will be sent to the user as a result of the procedure processing, so it is pointless to send a receipt confirmation to the user at this time.

Therefore, the time to send a receipt confirmation for the EDIFACT message (Note) should be when conversion to a NACCS EDI message described in 2) is completed. However, for "Passenger Manifest Report (PLR110/PLR210)", " Crew List Report (NLR110/NLR210)", " Passenger Name Record Report (PNR110)", "Advance Cargo Information Registration (ADM110)" and "Advance Cargo Information Registration (House Manifest) (HDM110)" returns to users using response messages (CONTRL, etc.) from NACCS will not be implemented.

(Note) In this case, the time to send a receipt confirmation does not have a meaning used for laws and regulations.

(B) Measure for receipt confirmation

CONTRL message is used as a measure to confirm receipt of a EDIFACT message sent from user. User chooses whether receipt confirmation function is used. A CONTRL message will be returned as receipt confirmation when user specifies "1" in the "receipt confirmation request classification" column of UNB segment of the EDIFACT message (Process Request Message).

In addition, a CONTRL message is used not only for receipt confirmation but also for notification when syntax errors occur in an EDIFACT message (Process Request Message) sent by user (CONTRL message used for error notification is output to user even when "1" is not specified in the "receipt confirmation request classification" column).

(Refer to "Appendix 12.1.4 Error Handling for EDIFACT messages")

(C) Notification of receipt confirmation

CONTRL messages are stored in the user's Inbox for incoming messages within the mail server. Therefore, receipt confirmation is carried out by retrieving messages from the user's Inbox for incoming messages within the mail server.

3.2.2 Attachment file message

(1) Message format for attachment file message

Message format for attachment files used in NACCS is MIME format message. Encode format is Base64.

(2) Message structure of attachment file

Figure 3.2.10 and Figure 3.2.11 show message structures for attachment files procedure.

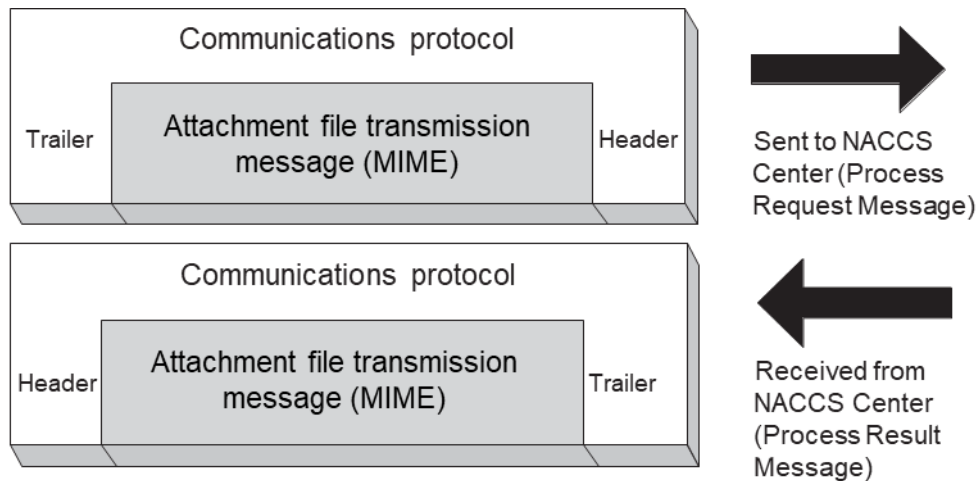


Figure 3.2.10 Attachment file message

Protocol header/trailer												
System header /procedure data												
MIME Header	content Field	boundary	content field	NACCS message	boundary	content field	Attachment file Data 1	boundary	...	content field	Attachment file Data n	boundary

Figure 3.2.11 Attachment file message (MIME format)

(3) Implemented mode

Data transmission Processing Mode for transmission of attachment files are all Processing Mode (interactive processing mode, WebNACCS Processing Mode, and E-mail Style Processing Mode). When sending attachment files, multiple attachment files can be sent at once as long as those do not exceed the maximum message length for attachment file (30,000,000 bytes). Transmission of a file should not be carried out when the file exceeds the maximum message length by one file. User should transmit a message after dividing the message into multiple procedures so that it does not exceed the maximum message length.

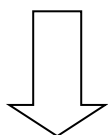
The maximum message length which can be transmitted varies depending on procedures, so refer to the "Procedure Specifications".

Figure 3.2.12 shows illustrated image of divided transmission of attachment files.

(When this is transmitted in one message, the maximum message length will be exceeded)

MIME Header, etc.	NACCS message	Attachment file Data 1	Attachment file Data 2	Attachment file Data 3	Attachment file Data 4	Attachment file Data 5
-------------------	---------------	------------------------	------------------------	------------------------	------------------------	------------------------

→ When 5 files are attached, the maximum message length will be exceeded.



Divide the attachment files so that one message does not exceed the maximum message length, and transmit it in multiple messages. (In the example, 5 files are divided into 3 files and 2 files)

(Message 1 ⇒ 3 files are attached, which enables it to be kept within the maximum message length.

MIME Header, etc.	NACCS message	Attachment file Data 1	Attachment file Data 2	Attachment file Data 3
-------------------	---------------	------------------------	------------------------	------------------------

(Message 2 ⇒ 2 files are attached, which enables it to remain within the maximum message length.

MIME Header, etc.	NACCS message	Attachment file Data 1	Attachment file Data 2
-------------------	---------------	------------------------	------------------------

Figure 3.2.12 Illustrated Image of Divided Transmission of Attachment File

(4) Processing sequence

(A) Interactive processing mode

1) Processing sequence for attachment file transmission

エラー! 参照元が見つかりません。 shows sending attachment files in interactive processing mode (NACCS Packaged Software),エラー! 参照元が見つかりません。 shows the processing sequence for interactive processing mode (SMTP Two-Way) and Figure 3.2.15 shows the processing sequence for interactive processing mode (net API).

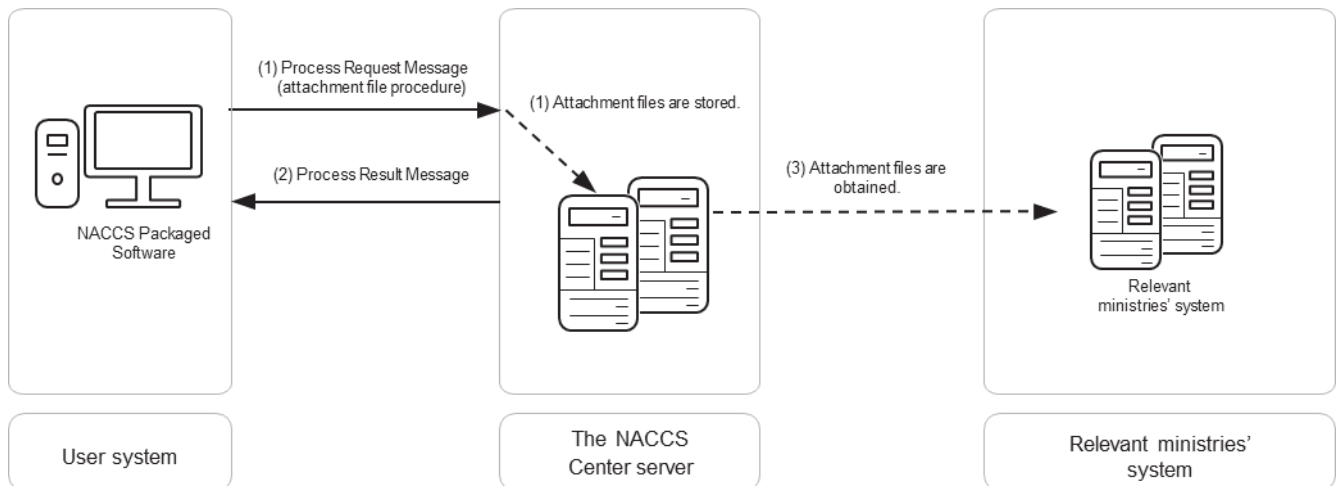


Figure 3.2.13 Attachment File Transmission Sequence in Interactive Processing Mode (NACCS Packaged Software)

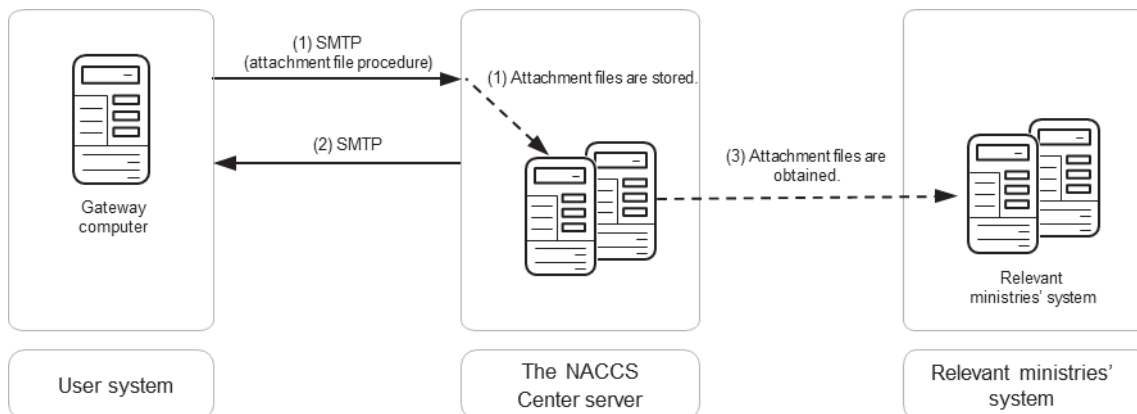


Figure 3.2.14 Attachment File Transmission Sequence in Interactive Processing Mode (SMTP Two-Way)

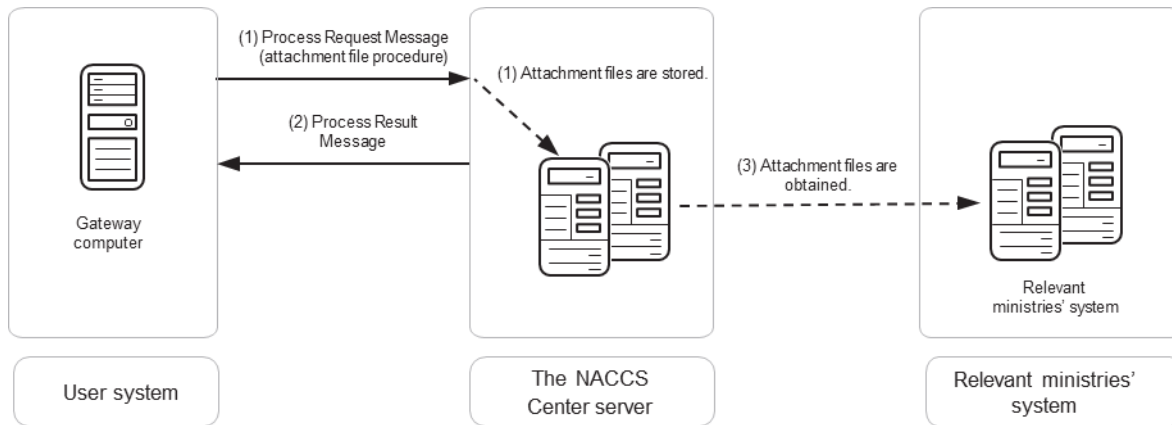


Figure 3.2.15 Attachment File Transmission Sequence in Interactive Processing Mode (netAPI)

- (a) User sends a procedure message with attachment files to the NACCS Center server through the procedure dedicated to attachment files.
The NACCS Center server issues an acquisition key for attachment files and stores output messages with attachment files and the acquisition key for attachment files.
- (b) User receives a Process Result Message from the NACCS Center server.
- (c) Relevant ministries' system retrieves the stored attachment file.

2) Processing sequence for attachment file receipt

エラー! 参照元が見つかりません。 shows processing sequence for attachment file receipt in interactive processing mode (NACCS Packaged Software) ,エラー! 参照元が見つかりません。 shows the processing sequence for interactive processing mode (SMTP Two-Way) and Figure 3.2.18 shows the processing sequence for interactive processing mode (net API).

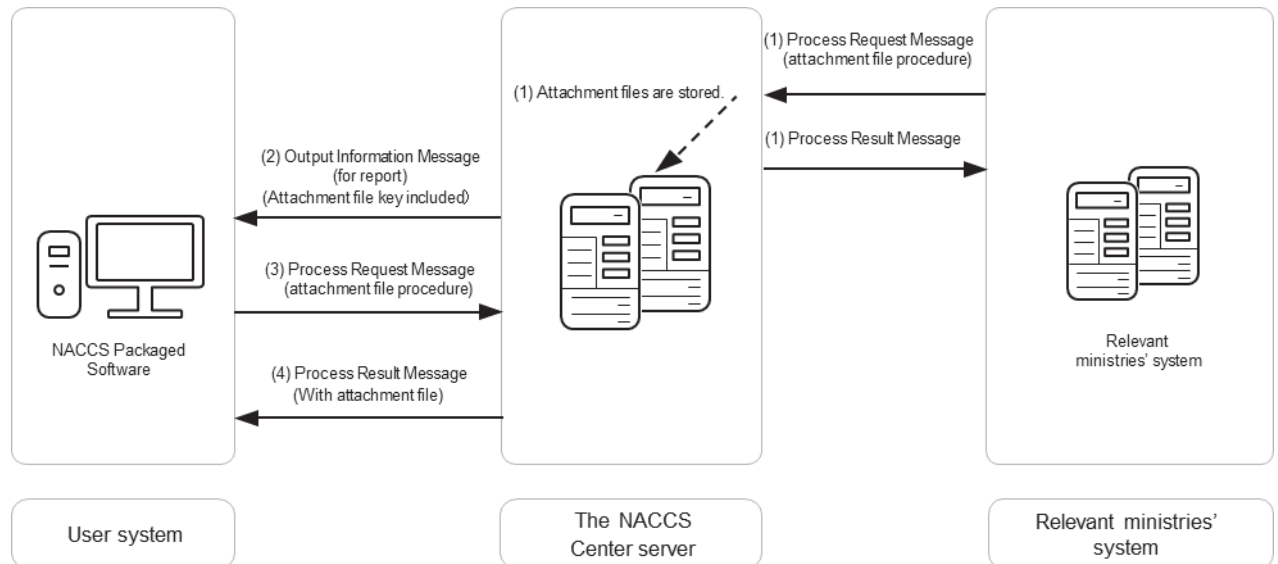


Figure 3.2.16 Attachment File Receipt Sequence in Interactive Processing Mode (NACCS Packaged Software)

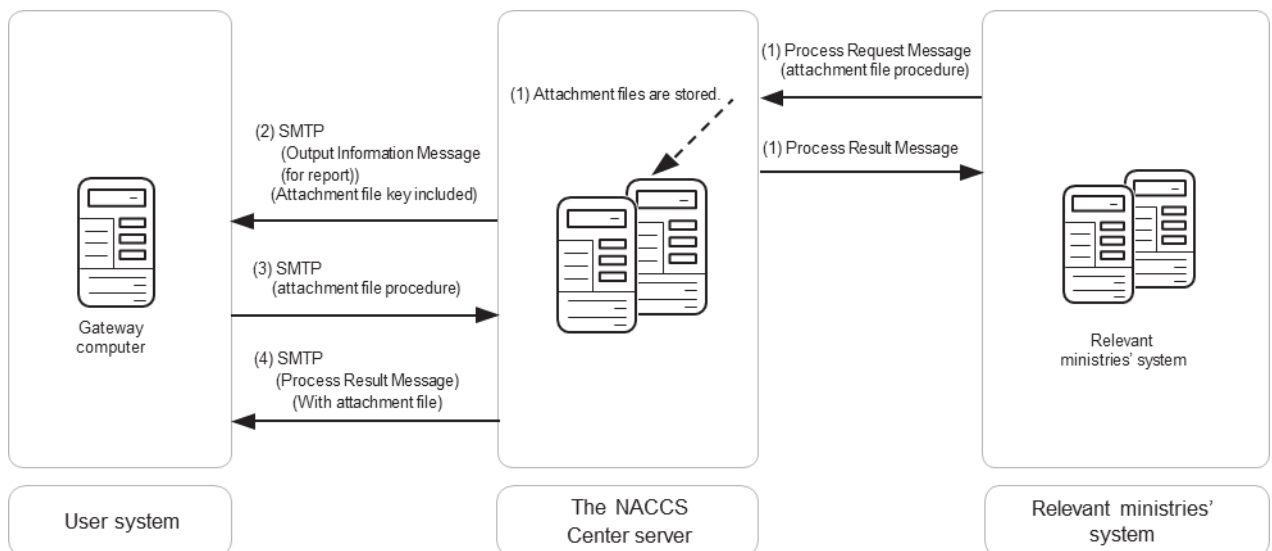


Figure 3.2.17 Attachment File Receipt Sequence in Interactive Processing Mode (SMTP Two-Way)

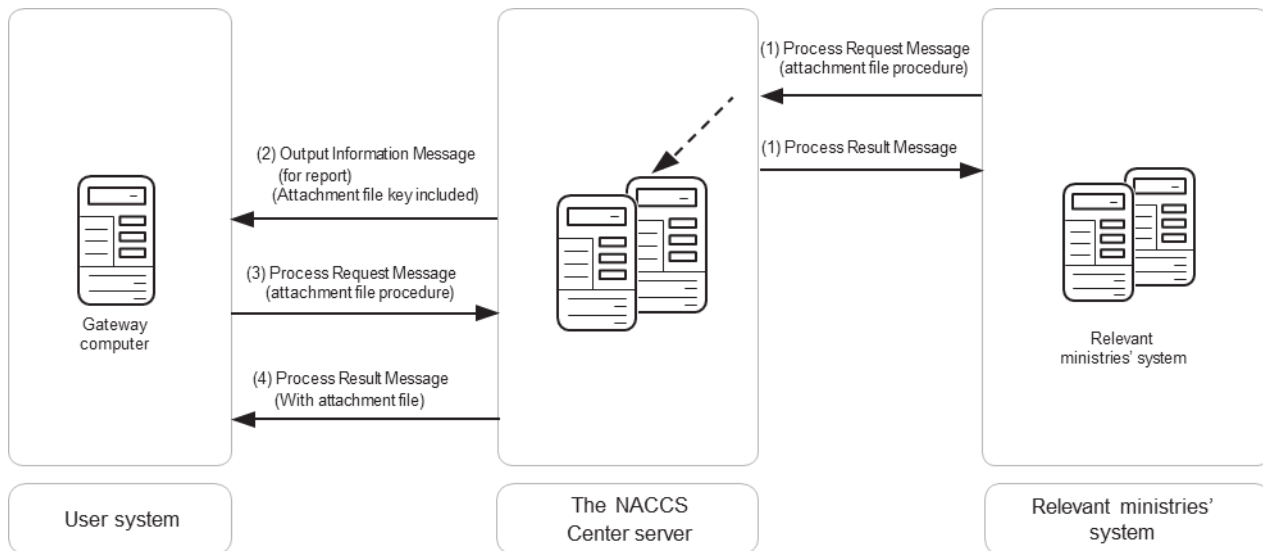


Figure 3.2.18 Attachment File Receipt Sequence in Interactive Processing Mode (netAPI)

- (a) Relevant ministries' system sends a procedure message with attached file to the NACCS Center server through the procedure dedicated to attachment files.
The NACCS Center server issues an acquisition key for attachment files and stores Output Information Messages (for reports) with attachment files and the acquisition key for attachment files.
- (b) User receives the Output Information Message (for reports) containing the acquisition key for attachment files from the NACCS Center server.
- (c) The user sends a procedure message containing the acquisition key for attachment files to the NACCS Center server through the procedure dedicated to attachment files.
- (d) The user receives Process Result Message with attachment files from the NACCS Center server.

(B) WebNACCS Processing Mode

1) Processing sequence for attachment file transmission

Figure 3.2.5 shows processing sequence in WebNACCS Processing Mode for attachment file transmission.

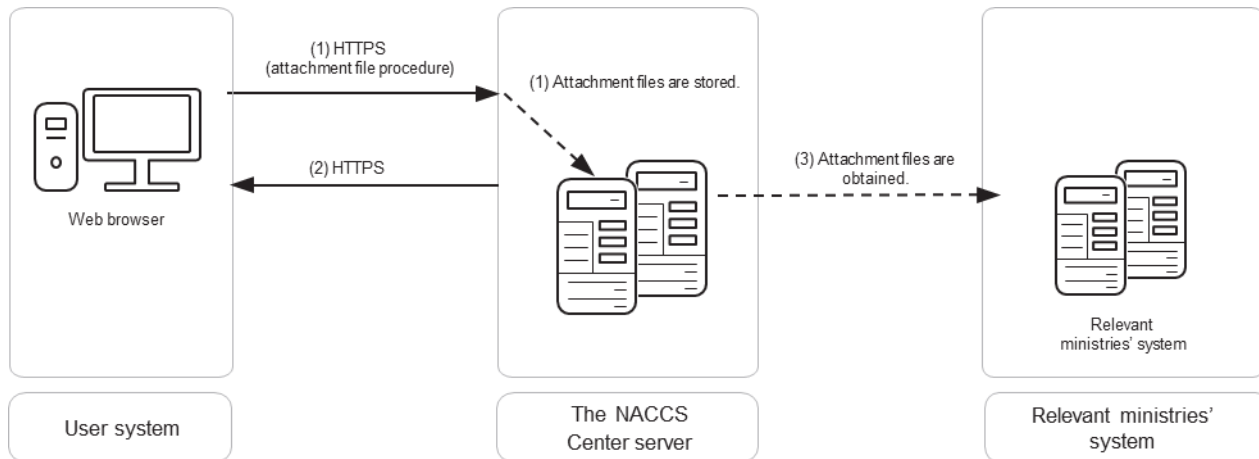


Figure 3.2.59 Attachment File Transmission Sequence in WebNACCS Processing Mode

- (a) User sends a procedure message with attachment files to the NACCS Center server over HTTPS through the procedure dedicated to attachment files.
The NACCS Center server issues an acquisition key for attachment files and stores output messages with attachment files and the acquisition key for attachment files.
- (b) User retrieves a Process Result Message from the NACCS Center server over HTTPS.
- (c) Relevant ministries' system retrieves the stored attachment file.

(C) E-mail Style Processing Mode

1) Processing sequence for attachment file transmission

Figure 3.2.20 shows processing sequence in E-mail Style Processing Mode for sending attachment files.

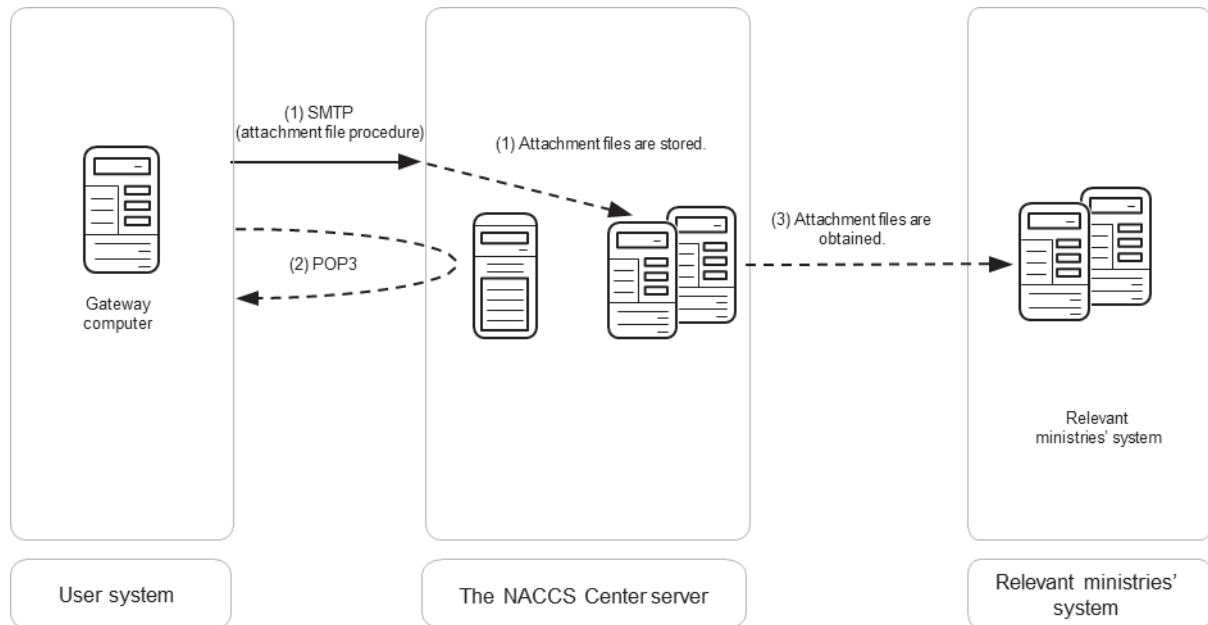


Figure 3.2.20 Attachment File Transmission Sequence in E-mail Style Processing Mode

- (a) User sends a procedure message with attachment files to the NACCS Center server (mail server) over SMTP through the procedure dedicated to attachment files.
The NACCS Center server issues an acquisition key for attachment files and stores report message with attachment files and the acquisition key for attachment files.
- (b) User retrieves a Process Result Message from the NACCS Center server (mailbox) over POP3.
- (c) Relevant ministries' system retrieves the stored attachment file.

2) Processing sequence for attachment file receipt

Figure 3.2.21 shows processing sequence in E-mail Style Processing Mode for attachment file receipt

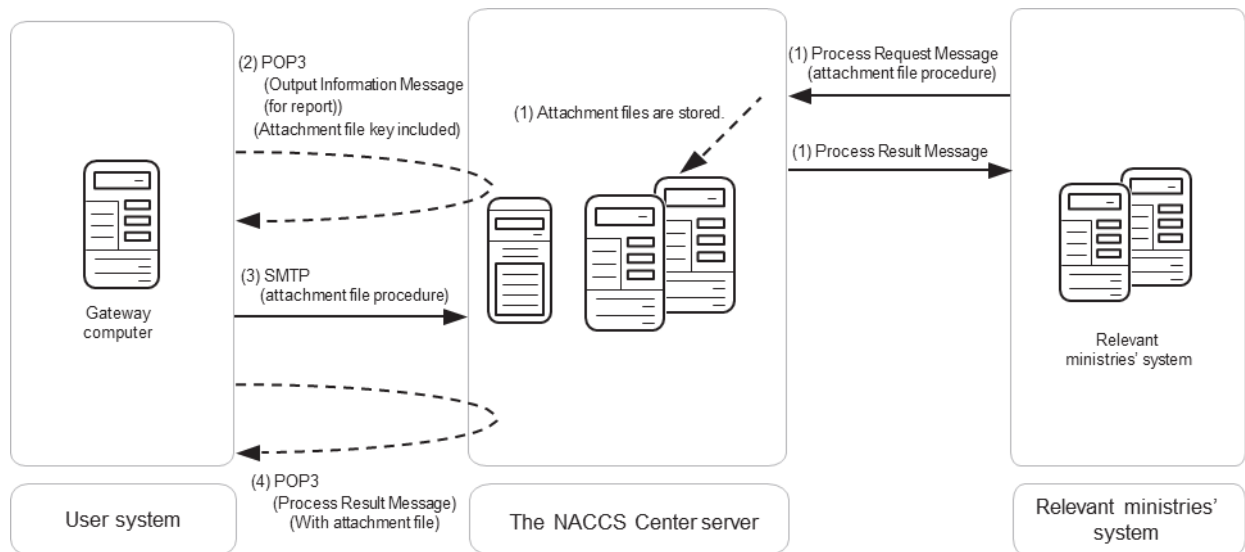


Figure 3.2.21 Attachment File Receipt Sequence in E-mail Style Processing Mode

- (a) Relevant ministries' system sends a procedure message with the attached file to the NACCS Center server through the procedure dedicated to attachment files. The NACCS Center server issues an acquisition key for attachment files and stores Output Information Messages (for reports) with attachment files and the acquisition key for attachment files.
- (b) User retrieves the Output Information Message (for reports) containing the acquisition key for attachment files from the NACCS Center server (E-mail box) over POP3.
- (c) User sends a procedure message containing the acquisition key for attachment files to the NACCS Center server (mail server) over SMTP through the procedure dedicated to attachment files.
- (d) User retrieves a Process Result Message containing the attachment files from the NACCS Center server (E-mail box) over POP3.