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C. Version 2.X BNF Message Descriptions

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C.2 BNF DESCRIPTIONS OF HL7 VERSION 2.X ABSTRACT MESSAGES

C.2.1 Message Structures

```
/*-- MessageStructures --*/  
MessageStructure :=  
    ACK  
    | ADT_A01  
    | ADT_A02  
    | ADT_A03  
    | ADT_A05  
    | ADT_A06  
    | ADT_A09  
    | ADT_A12  
    | ADT_A15  
    | ADT_A16  
    | ADT_A17  
    | ADT_A20  
    | ADT_A21  
    | ADT_A24  
    | ADT_A37  
    | ADT_A38  
    | ADT_A39  
    | ADT_A43  
    | ADT_A44  
    | ADT_A45  
    | ADT_A50  
    | ADT_A52  
    | ADT_A54  
    | ADT_A60  
    | ADT_A61  
    | BAR_P01  
    | BAR_P02  
    | BAR_P05  
    | BAR_P06  
    | BAR_P10  
    | BAR_P12  
    | BPS_O29  
    | BRP_O30  
    | BRT_O32  
    | BTS_O31  
    | CCF_I22  
    | CCI_I22  
    | CCM_I21  
    | CCQ_I19  
    | CCR_I16  
    | CCU_I20  
    | CQU_I19  
    | CRM_C01  
    | CSU_C09  
    | DBC_O41  
    | DBC_O42  
    | DEL_O46  
    | DEO_O45  
    | DER_O44  
    | DFT_P03  
    | DFT_P11
```

| DPR_O48
| DRC_O47
| DRG_O43
| EAC_U07
| EAN_U09
| EAR_U08
| EHC_E01
| EHC_E02
| EHC_E04
| EHC_E10
| EHC_E12
| EHC_E13
| EHC_E15
| EHC_E20
| EHC_E21
| EHC_E24
| ESR_U02
| ESU_U01
| INR_U06
| INR_U14
| INU_U05
| LSU_U12
| MDM_T01
| MDM_T02
| MFK_M01
| MFN_M02
| MFN_M04
| MFN_M05
| MFN_M06
| MFN_M07
| MFN_M08
| MFN_M09
| MFN_M10
| MFN_M11
| MFN_M12
| MFN_M13
| MFN_M15
| MFN_M16
| MFN_M17
| MFN_M18
| MFN_M19
| MFN_Znn
| NMD_N02
| OMB_O27
| OMD_O03
| OMG_O19
| OMI_O23
| OML_O21
| OML_O33
| OML_O35
| OML_O39
| OML_O59
| OMN_O07
| OMP_O09
| OMQ_O57
| OMS_O05
| OPL_O37

Appendix C: BNF Message Descriptions

| OPR_O38
| OPU_R25
| ORA_R33
| ORA_R41
| ORB_O28
| ORD_O04
| ORG_O20
| ORI_O24
| ORL_O22
| ORL_O34
| ORL_O36
| ORL_O40
| ORL_O53
| ORL_O54
| ORL_O55
| ORL_O56
| ORN_O08
| ORP_O10
| ORS_O06
| ORU_R01
| ORU_R30
| ORX_O58
| OSM_R26
| OSU_O51
| OSU_O52
| OUL_R22
| OUL_R23
| OUL_R24
| PEX_P07
| PGL_PC6
| PMU_B01
| PMU_B03
| PMU_B04
| PMU_B07
| PMU_B08
| PPG_PCG
| PPP_PCB
| PPR_PC1
| QBP_E03
| QBP_E22
| QBP_O33
| QBP_O34
| QBP_Q11
| QBP_Q13
| QBP_Q15
| QBP_Q21
| QBP_Qnn
| QBP_Z73
| QCN_J01
| QSB_Q16
| QVR_Q17
| RAS_O17
| RCV_O59
| RDE_O11
| RDE_O49
| RDS_O13
| RDY_K15

```

| RDY_Z80
| REF_I12
| RGV_O15
| RPA_I08
| RPI_I01
| RPI_I04
| RPL_I02
| RPR_I03
| RQA_I08
| RQI_I01
| RQP_I04
| RRA_O18
| RRD_O14
| RRE_O12
| RRE_O50
| RRG_O16
| RRI_I12
| RSP_E03
| RSP_E22
| RSP_K11
| RSP_K21
| RSP_K22
| RSP_K23
| RSP_K25
| RSP_K31
| RSP_K32
| RSP_O33
| RSP_O34
| RSP_Z82
| RSP_Z84
| RSP_Z86
| RSP_Z88
| RSP_Z90
| RSP_Znn
| RTB_K13
| RTB_Knn
| RTB_Z74
| SDR_S31
| SDR_S32
| SIU_S12
| SLR_S28
| SRM_S01
| SRR_S01
| SSR_U04
| SSU_U03
| STC_S33
| TCU_U10
| VXU_V04

```

ACK := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [{ ERR ST }] EOM;

Appendix C: BNF Message Descriptions

```
ADT_A01 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST
] [{ OH4 ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT ST }] [{ ST NK1 ST [{ GSP ST
}] [{ GSR ST }] [{ OH2 ST }] [ OH3 ST ]}] ST PV1 ST [ PV2 ST ] [{ ARV ST }]
[{ ROL ST }] [{ PRT ST }] [{ DB1 ST }] [{ ST OBX ST [{ PRT ST }] }] ST [{ AL1
ST }] [{ IAM ST }] [{ DG1 ST }] [ DRG ST ] [{ ST PR1 ST [{ ROL ST }] [{ PRT ST
}] }] ST [{ ST GT1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ ST IN1 ST [ IN2 ST ]
[ IN3 ST ]}] [{ GSP ST }] [{ GSR ST }] [{ ROL ST }] [{ PRT ST }] [{ ST AUT ST
[ PRT ST ]}] ST [{ ST RF1 ST [{ PRT ST }] }] ST }} ST [ ACC ST ] [ UB1 ST ]
[ UB2 ST ] [ PDA ST ] EOM;
```

```
ADT_A02 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST
] [{ OH4 ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT ST }] PV1 ST [ PV2 ST ] [{ ARV
ST }] [{ ROL ST }] [{ PRT ST }] [{ DB1 ST }] [{ ST OBX ST [{ PRT ST }] }] ST [
PDA ST ] EOM;
```

```
ADT_A03 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST
] [{ OH4 ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT ST }] [{ ST NK1 ST [{ GSP ST
}] [{ GSR ST }] [{ OH2 ST }] [ OH3 ST ]}] ST PV1 ST [ PV2 ST ] [{ ARV ST }]
[{ ROL ST }] [{ PRT ST }] [{ DB1 ST }] [{ AL1 ST }] [{ IAM ST }] [{ DG1 ST }]
[ DRG ST ] [{ ST PR1 ST [{ ROL ST }] [{ PRT ST }] }] ST [{ ST OBX ST [{ PRT ST
}] }] ST [{ ST GT1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ ST IN1 ST [ IN2 ST ]
[ IN3 ST ]}] [{ GSP ST }] [{ GSR ST }] [{ ROL ST }] [{ PRT ST }] [{ ST AUT ST
[ PRT ST ]}] ST [{ ST RF1 ST [{ PRT ST }] }] ST }} ST [ ACC ST ] [ PDA ST ]
EOM;
```

```
ADT_A05 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST
] [{ OH4 ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT ST }] [{ ST NK1 ST [{ GSP ST
}] [{ GSR ST }] [{ OH2 ST }] [ OH3 ST ]}] ST PV1 ST [ PV2 ST ] [{ ARV ST }]
[{ ROL ST }] [{ PRT ST }] [{ DB1 ST }] [{ ST OBX ST [{ PRT ST }] }] ST [{ AL1
ST }] [{ IAM ST }] [{ DG1 ST }] [ DRG ST ] [{ ST PR1 ST [{ ROL ST }] [{ PRT ST
}] }] ST [{ ST GT1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ ST IN1 ST [ IN2 ST ]
[ IN3 ST ]}] [{ GSP ST }] [{ GSR ST }] [{ ROL ST }] [{ PRT ST }] [{ ST AUT ST
[ PRT ST ]}] ST [{ ST RF1 ST [{ PRT ST }] }] ST }} ST [ ACC ST ] [ UB1 ST ]
[ UB2 ST ] EOM;
```

```
ADT_A06 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST
] [{ OH4 ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT ST }] [ MRG ST ] [{ ST NK1 ST
[ GSP ST ]}] [{ GSR ST }] [{ OH2 ST }] [ OH3 ST ]}] ST PV1 ST [ PV2 ST ] [{
ARV ST }] [{ ROL ST }] [{ PRT ST }] [{ DB1 ST }] [{ ST OBX ST [{ PRT ST }] }]
ST [{ AL1 ST }] [{ IAM ST }] [{ DG1 ST }] [ DRG ST ] [{ ST PR1 ST [{ ROL ST }]
[ PRT ST ]}] ST [{ ST GT1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ ST IN1 ST [
IN2 ST ] [ IN3 ST ]}] [{ GSP ST }] [{ GSR ST }] [{ ROL ST }] [{ PRT ST }] }}
ST [ ACC ST ] [ UB1 ST ] [ UB2 ST ] EOM;
```

```
ADT_A09 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] PV1 ST [ PV2 ST ] [{ DB1 ST }] [{
ST OBX ST [{ PRT ST }] }] ST EOM;
```

```
ADT_A12 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] PV1 ST [ PV2 ST ] [{ DB1 ST }] [{
ST OBX ST [{ PRT ST }] }] ST EOM;
```

```
ADT_A15 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT
ST }] PV1 ST [ PV2 ST ] [{ ARV ST }] [{ ROL ST }] { PRT ST } [{ DB1 ST }] [{
ST OBX ST [{ PRT ST }] }] ST EOM;
```

```
ADT_A16 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST
] [{ OH4 ST }] [{ ARV ST }] [{ ROL ST }] [{ PRT ST }] [{ ST NK1 ST [{ GSP ST
}] [{ GSR ST }] [{ OH2 ST }] [ OH3 ST ] }] ST PV1 ST [ PV2 ST ] [{ ARV ST }]
[{ ROL ST }] [{ PRT ST }] [{ DB1 ST }] [{ ST OBX ST [{ PRT ST }] }] ST [{ AL1
ST }] [{ IAM ST }] [{ DG1 ST }] [ DRG ST ] [{ ST PR1 ST [{ ROL ST }] [{ PRT ST
}] }] ST [{ ST GT1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ ST IN1 ST [ IN2 ST ]
[ IN3 ST ]}] [{ GSP ST }] [{ GSR ST }] [{ ROL ST }] [{ PRT ST }] [{ ST AUT ST
[ PRT ST ]}] ST [{ ST RF1 ST [{ PRT ST }] }] ST }} ST [ ACC ST ] EOM;
```

```
ADT_A17 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [{
GSP ST }] [{ GSR ST }] [{ GSC ST }] [ PD1 ST ] PV1 ST [ PV2 ST ] [{ DB1 ST }]
[ ST OBX ST [{ PRT ST }] }] ST PID ST [ PD1 ST ] PV1 ST [ PV2 ST ] [{ DB1 ST
}] [ ST OBX ST [{ PRT ST }] }] ST EOM;
```

```
ADT_A20 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EVN ST NPU ST EOM;
```

```
ADT_A21 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] PV1 ST [ PV2 ST ] [{ DB1 ST }] [{
ST OBX ST [{ PRT ST }] }] ST EOM;
```

```
ADT_A24 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [ PV1 ST ] [{ DB1 ST }] PID ST [
PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [ PV1 ST ] [{ DB1 ST }] EOM;
```

```
ADT_A37 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [ PV1 ST ] [{ DB1 ST }] PID ST [
PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [ PV1 ST ] [{ DB1 ST }] EOM;
```

```
ADT_A38 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] PV1 ST [ PV2 ST ] [{ DB1 ST }] [{
ST OBX ST [{ PRT ST }] }] ST [{ DG1 ST }] [ DRG ST ] EOM;
```

Appendix C: BNF Message Descriptions

ADT_A39 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST { ST PID ST
[PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] MRG ST [PV1 ST] } ST EOM;

ADT_A43 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST { ST PID ST
[PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] MRG ST } ST EOM;

ADT_A44 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST { ST PID ST
[PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ARV ST }] MRG ST } ST
EOM;

ADT_A45 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1
ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] { ST MRG ST PV1 ST } ST EOM;

ADT_A50 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1
ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] MRG ST PV1 ST EOM;

ADT_A52 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1
ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] PV1 ST [PV2 ST] EOM;

ADT_A54 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1
ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ROL ST }] [{ PRT ST }] PV1 ST [PV2
ST] [{ ROL ST }] [{ PRT ST }] EOM;

ADT_A60 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST PID ST [{
GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ARV ST }] [ST PV1 ST [PV2 ST] [{ ARV
ST }]] ST [{ ST IAM ST [{ NTE ST }] [{ IAR ST }]] ST EOM;

ADT_A61 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1
ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ROL ST }] [{ PRT ST }] PV1 ST
[{ ROL ST }] [{ PRT ST }] [PV2 ST] EOM;

BAR_P01 := SOM MSH ST [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1 ST] [{ GSP
ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ROL ST }] { ST PV1 ST [PV2 ST
] [{ PRT ST }] [{ ROL ST }] [{ DB1 ST }] [{ OBX ST }] [{ PRT ST }] [{ AL1 ST
}] [{ ST DG1 ST }] ST [DRG ST] [{ ST PR1 ST [{ PRT ST }] [{ ROL ST }]] ST
[{ GT1 ST }] [{ GSP ST }] [{ GSR ST }] [{ NK1 ST }] [{ GSP ST }] [{ GSR ST }]
[{ ST IN1 ST [{ GSP ST }] [{ GSR ST }] [IN2 ST] [{ IN3 ST }] [{ PRT ST }] [{
ROL ST }]] ST [ACC ST] [UB1 ST] [UB2 ST] } ST EOM;

BAR_P02 := SOM MSH ST [{ SFT ST }] [UAC ST] EVN ST { ST PID ST [PD1 ST] [{
PRT ST }] [PV1 ST] [{ DB1 ST }] } ST EOM;

BAR_P05 := SOM MSH ST [{ SFT ST }] [UAC ST] EVN ST PID ST [PD1 ST] [{ GSP
ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ROL ST }] { ST PV1 ST [PV2 ST
] [{ PRT ST }] [{ ROL ST }] [{ DB1 ST }] [{ OBX ST }] [{ PRT ST }] [{ AL1 ST


```
}} [ { ST DG1 ST } } ST [ DRG ST ] [ { ST PR1 ST [ { PRT ST } } [ { ROL ST } } ] ST
[ { GT1 ST } } [ { GSP ST } } [ { GSR ST } } [ { NK1 ST } } [ { GSP ST } } [ { GSR ST } }
[ { ST IN1 ST [ { GSP ST } } [ { GSR ST } } [ IN2 ST ] [ { IN3 ST } } [ { PRT ST } } [ {
ROL ST } } ] ST [ ACC ST ] [ UB1 ST ] [ UB2 ST ] [ ABS ST ] [ { BLC ST } } [ RMI
ST ] } ST EOM;
```

```
BAR_P06 := SOM MSH ST [ { SFT ST } } [ UAC ST ] EVN ST { ST PID ST [ { PRT ST } }
[ PV1 ST ] } ST EOM;
```

```
BAR_P10 := SOM MSH ST [ { SFT ST } } [ UAC ST ] EVN ST PID ST [ { PRT ST } } PV1
ST [ { ST DG1 ST } } ST GP1 ST [ { ST PR1 ST [ GP2 ST ] } ] ST EOM;
```

```
BAR_P12 := SOM MSH ST [ { SFT ST } } [ UAC ST ] EVN ST PID ST [ { PRT ST } } PV1
ST [ { ST DG1 ST } } ST [ DRG ST ] [ { ST PR1 ST [ { PRT ST } } [ { ROL ST } } ] ST
[ OBX ST ] [ { PRT ST } } EOM;
```

```
BPS_O29 := SOM MSH ST [ { ARV ST } } [ { SFT ST } } [ UAC ST ] [ { NTE ST } } [ ST
PID ST [ PD1 ST ] [ { GSP ST } } [ { GSR ST } } [ { GSC ST } } [ { PRT ST } } [ { ARV
ST } } [ { NTE ST } } [ ST PV1 ST [ PV2 ST ] [ { PRT ST } } ] ST ] ST { ST ORC ST
[ { PRT ST } } [ { ST TQ1 ST [ { TQ2 ST } } ] } ST BPO ST [ { NTE ST } } [ { ST BPX ST
[ { NTE ST } } ] } ST } ST EOM;
```

```
BRP_O30 := SOM MSH ST MSA ST [ { ARV ST } } [ { ERR ST } } [ { SFT ST } } [ UAC ST ]
[ { NTE ST } } [ ST [ ST PID ST [ { PRT ST } } [ { ARV ST } } [ { ST ORC ST [ { PRT ST
} } [ { ST TQ1 ST [ { TQ2 ST } } ] } ST [ BPO ST ] [ { BPX ST } } ] ST ] ST ] ST
EOM;
```

```
BRT_O32 := SOM MSH ST MSA ST [ { ARV ST } } [ { ERR ST } } [ { SFT ST } } [ UAC ST ]
[ { NTE ST } } [ ST [ ST PID ST [ { PRT ST } } [ { ARV ST } } ] ST [ { ST ORC ST [ {
PRT ST } } [ { ST TQ1 ST [ { TQ2 ST } } ] } ST [ BPO ST ] [ { BTX ST } } ] ST ] ST
EOM;
```

```
BTS_O31 := SOM MSH ST [ { ARV ST } } [ { SFT ST } } [ UAC ST ] [ { NTE ST } } [ ST
PID ST [ PD1 ST ] [ { GSP ST } } [ { GSR ST } } [ { GSC ST } } [ { PRT ST } } [ { NTE
ST } } [ ST PV1 ST [ PV2 ST ] [ { PRT ST } } ] ST ] ST { ST ORC ST [ { PRT ST } }
[ { ST TQ1 ST [ { TQ2 ST } } ] } ST BPO ST [ { NTE ST } } [ { ST BTX ST [ { NTE ST } }
] } ST } ST EOM;
```

```
CCF_I22 := SOM MSH ST [ { SFT ST } } [ UAC ST ] PID ST [ { GSP ST } } [ { GSR ST } }
[ { GSC ST } } EOM;
```

```
CCI_I22 := SOM MSH ST [ { SFT ST } } [ UAC ST ] MSA ST [ { ERR ST } } PID ST [ PD1
ST ] EOM;
```

```
CCM_I21 := SOM MSH ST [ { SFT ST } } [ UAC ST ] PID ST [ PD1 ST ] EOM;
```

Appendix C: BNF Message Descriptions

CCQ_I19 := SOM MSH ST [{ SFT ST }] [UAC ST] RF1 ST [{ ST PRD ST [{ CTD ST }] }]
}] ST [{ REL ST }] EOM;

CCR_I16 := SOM MSH ST [{ SFT ST }] [UAC ST] { RF1 ST } { ST PRD ST [{ CTD ST }]
}] ST [{ ST ORC ST [{ ST TQ1 ST [{ TQ2 ST }] }]} ST { ST < ST OBR ST [{ PRT
ST }] | ST RXO ST [{ PRT ST }] | ST ODS ST PR1 ST > ST [{ ST OBX ST [{ PRT ST
}] }] ST } ST [{ CTI ST }] } ST { ST PID ST [PD1 ST] EOM;

CCU_I20 := SOM MSH ST [{ SFT ST }] [UAC ST] RF1 ST [{ ST PRD ST [{ CTD ST }]
}] ST [{ ST PID ST [PD1 ST] EOM;

CQU_I19 := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [{ ERR ST }] RF1 ST [{ ST
PRD ST [{ CTD ST }] }]} ST [{ ST PID ST [PD1 ST] EOM;

CRM_C01 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] { ST PID ST [{ GSP
ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] [ST PV1 ST [{ PRT
ST }]] ST CSR ST [{ CSP ST }] } ST EOM;

CSU_C09 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] { ST PID ST [PD1
ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] [{ NTE
ST }] [ST PV1 ST [PV2 ST] [{ PRT ST }]] ST CSR ST { ST [CSP ST] { ST [
CSS ST] { ST [ST ORC ST [{ PRT ST }]] ST OBR ST [{ PRT ST }] [{ ST TQ1 ST
[{ TQ2 ST }] }]} ST OBX ST [{ PRT ST }] } ST { ST [ST ORC ST [{ PRT ST }]] ST
{ ST RXA ST RXR ST [{ PRT ST }] } ST } ST } ST } ST EOM;

DBC_O41 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [ST PID ST [PD1
ST] [{ PRT ST }] [{ ST OBX ST [{ PRT ST }] }]} ST [{ NTE ST }] [{ ARV ST }] [{
AL1 ST }]] ST EOM;

DBC_O42 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [ST PID ST [PD1
ST] [{ PRT ST }] [{ ST OBX ST [{ PRT ST }] }]} ST [{ NTE ST }] [{ AL1 ST }] [{
ARV ST }]] ST EOM;

DEL_O46 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [ST PID ST [PD1
ST] [{ PRT ST }] [{ ST OBX ST [{ PRT ST }] }]} ST [{ NTE ST }] [{ AL1 ST }] [{
ARV ST }] [ST PV1 ST [{ PRT ST }] [{ NTE ST }]] ST] ST DON ST [{ NTE ST }]
EOM;

DEO_O45 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [ST PID ST [{ PRT
ST }] [{ ST OBX ST [{ PRT ST }] }]} ST [{ ARV ST }] [{ NTE ST }] [ST PV1 ST [{
PRT ST }] [{ NTE ST }]] ST] ST { ST OBR ST [{ PRT ST }] [{ NTE ST }] [{ ST
OBX ST [{ PRT ST }] [{ NTE ST }] }]} ST } ST EOM;

DER_O44 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [ST PID ST [PD1
ST] [{ PRT ST }] [{ ST OBX ST [{ PRT ST }] }]} ST [{ NTE ST }] [{ AL1 ST }] [{

```
ARV ST }} [ ST PV1 ST [{ PRT ST }} [{ NTE ST }} ] ST ] ST { ST OBR ST [{ PRT
ST }} [{ NTE ST }} } ST EOM;
```

```
DFT_P03 := SOM MSH ST [{ SFT ST }} [ UAC ST ] EVN ST PID ST [ PD1 ST ] [{ GSP
ST }} [{ GSR ST }} [{ GSC ST }} [{ PRT ST }} [{ ROL ST }} [ ST [ PV1 ST ] [
PV2 ST ] [{ PRT ST }} [{ ROL ST }} ] ST [{ DB1 ST }} [{ ST ORC ST [{ PRT ST }}
[{ ST TQ1 ST [{ TQ2 ST }} ]} ST [ ST OBR ST [{ PRT ST }} [{ NTE ST }} ] ST [{
ST OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST }} ST { ST FT1 ST [{ PRT ST }} [{
ROL ST }} [{ NTE ST }} [{ ST PR1 ST [{ PRT ST }} [{ ROL ST }} ]} ST [{ ST OBX
ST [{ PRT ST }} [{ NTE ST }} ]} ST [{ ST OBR ST [{ PRT ST }} [{ NTE ST }} [{
ST OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST }} ST [{ ST ORC ST [{ PRT ST }} [{
ST TQ1 ST [{ TQ2 ST }} ]} ST [ ST OBR ST [{ PRT ST }} [{ NTE ST }} ] ST [{ ST
OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST }} ST } ST [{ ST DG1 ST }} ST [ DRG ST
] [{ GT1 ST }} [{ ST IN1 ST [{ GSP ST }} [{ GSR ST }} [ IN2 ST ] [{ IN3 ST }}
[{ PRT ST }} [{ ROL ST }} ]} ST [ ACC ST ] EOM;
```

```
DFT_P11 := SOM MSH ST [{ SFT ST }} [ UAC ST ] EVN ST PID ST [{ PRT ST }} [ PD1
ST ] [{ GSP ST }} [{ GSR ST }} [{ GSC ST }} [{ PRT ST }} [{ ROL ST }} [ ST [
PV1 ST ] [ PV2 ST ] [{ PRT ST }} [{ ROL ST }} ] ST [{ DB1 ST }} [{ ST ORC ST
[{ PRT ST }} [{ ST TQ1 ST [{ TQ2 ST }} ]} ST [ ST OBR ST [{ PRT ST }} [{ NTE
ST }} ] ST [{ ST OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST }} ST [{ ST DG1 ST }}
ST [ DRG ST ] [{ GT1 ST }} [{ GSP ST }} [{ GSR ST }} [{ ST IN1 ST [{ GSP ST }}
[{ GSR ST }} [ IN2 ST ] [{ IN3 ST }} [{ PRT ST }} [{ ROL ST }} ]} ST [ ACC ST
] { ST FT1 ST [{ NTE ST }} [{ PRT ST }} [{ ST PR1 ST [{ PRT ST }} [{ ROL ST }}
]} ST [{ ST OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST [{ ST OBR ST [{ PRT ST }}
[{ NTE ST }} [{ ST OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST }} ST [{ ST ORC ST
[{ PRT ST }} [{ ST TQ1 ST [{ TQ2 ST }} ]} ST [ ST OBR ST [{ PRT ST }} [{ NTE
ST }} ] ST [{ ST OBX ST [{ PRT ST }} [{ NTE ST }} ]} ST }} ST [{ ST DG1 ST }}
ST [ DRG ST ] [{ GT1 ST }} [{ GSP ST }} [{ GSR ST }} [{ ST IN1 ST [{ GSP ST }}
[{ GSR ST }} [ IN2 ST ] [{ IN3 ST }} [{ PRT ST }} [{ ROL ST }} ]} ST } ST
EOM;
```

```
DPR_O48 := SOM MSH ST [{ ARV ST }} [{ SFT ST }} [ UAC ST ] [ ST PID ST [ PD1
ST ] [{ PRT ST }} [{ ST OBX ST [{ PRT ST }} ]} ST [{ NTE ST }} [{ AL1 ST }} [{
ARV ST }} [ ST PV1 ST [{ PRT ST }} [{ NTE ST }} ] ST ] ST { ST OBR ST [{ PRT
ST }} [{ NTE ST }} } ST [ ST DON ST [{ ST OBX ST [{ PRT ST }} ]} ST [{ NTE ST
}} [ ST [{ BUI ST }} [{ NTE ST }} ] ST ] ST EOM;
```

```
DRC_O47 := SOM MSH ST [{ ARV ST }} [{ SFT ST }} [ UAC ST ] [ ST PID ST [ PD1
ST ] [{ PRT ST }} [{ ST OBX ST [{ PRT ST }} ]} ST [{ NTE ST }} [{ AL1 ST }} [{
ARV ST }} [ ST PV1 ST [{ PRT ST }} [{ NTE ST }} ] ST ] ST { ST OBR ST [{ PRT
ST }} [{ NTE ST }} } ST EOM;
```

```
DRG_O43 := SOM MSH ST [{ SFT ST }} [ UAC ST ] [ ST PID ST [ PD1 ST ] [{ PRT ST
}} [{ ST OBX ST [{ PRT ST }} ]} ST [{ NTE ST }} [{ AL1 ST }} [{ ARV ST }} [ ST
PV1 ST [{ PRT ST }} [{ NTE ST }} ] ST ] ST EOM;
```

```
EAC_U07 := SOM MSH ST [{ SFT ST }} [ UAC ST ] EQU ST { ST ECD ST [ TQ1 ST ] [{
ST SAC ST [{ ST [{ OBR ST }} [{ PRT ST }} ]} ST [{ SPM ST }} [{ DST ST }} ]}
ST [ CNS ST ] } ST [ ROL ST ] EOM;
```

Appendix C: BNF Message Descriptions

EAN_U09 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST { ST NDS ST [NTE ST] }
ST [ROL ST] EOM;

EAR_U08 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST { ST ECD ST [ST SAC ST
[{ SPM ST }]] ST ECR ST } ST [ROL ST] EOM;

EHC_E01 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST IVC ST [PYE ST] [{ CTD
ST }] [AUT ST] [{ LOC ST }] [{ PRT ST }] [{ ROL ST }] { ST PSS ST { ST PSG
ST [{ LOC ST }] [{ PRT ST }] [{ ROL ST }] [{ ST PID ST [{ GSP ST }] [{ GSR ST
}] [{ GSC ST }] [{ PRT ST }] [PV1 ST] [PV2 ST] [{ ACC ST }] { ST IN1 ST [{
GSP ST }] [{ GSR ST }] [IN2 ST] } ST [{ ST DG1 ST [{ NTE ST }] }] ST [{ OBX
ST }] [{ PRT ST }] } ST { ST PSL ST [{ NTE ST }] [{ ADJ ST }] [AUT ST] [{
LOC ST }] [{ PRT ST }] [{ ROL ST }] } ST [{ ST PR1 ST [{ NTE ST }] [{ PRT ST
}] [{ ROL ST }] }] ST [{ IPR ST }] } ST } ST > ST EOM;

EHC_E02 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST IVC ST PYE ST [{ CTD ST
}] [{ NTE ST }] [{ ST PSS ST [{ ST PSG ST [{ PSL ST }] }] ST }] ST > ST EOM;

EHC_E04 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST IVC ST [{ NTE ST }] [{ ST
PSS ST [{ ST PSG ST [{ PSL ST }] }] ST }] ST > ST EOM;

EHC_E10 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] MSA ST [{ ERR ST }] { ST IPR
ST [{ NTE ST }] PYE ST IN1 ST [{ GSP ST }] [{ GSR ST }] [IN2 ST] IVC ST { ST
PSS ST { ST PSG ST { ST PSL ST [{ ADJ ST }] } ST } ST } ST } ST EOM;

EHC_E12 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] RFI ST [{ CTD ST }] IVC ST PSS
ST PSG ST [PID ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{
PSL ST }] { ST [CTD ST] OBR ST [{ PRT ST }] [NTE ST] [{ OBX ST }] [{ PRT
ST }] } ST EOM;

EHC_E13 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] MSA ST [{ ERR ST }] RFI ST [{
CTD ST }] IVC ST PSS ST PSG ST [PID ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST
}] [{ PRT ST }] [PSL ST] { ST [CTD ST] OBR ST [{ PRT ST }] [NTE ST] { ST
OBX ST [{ PRT ST }] [NTE ST] [TXA ST] } ST } ST EOM;

EHC_E15 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST PMT ST PYE ST > ST [{ ST
IPR ST IVC ST { ST PSS ST { ST PSG ST { ST PSL ST [{ ADJ ST }] } ST } ST } ST
}] ST [{ ST ADJ ST [PRT ST] [ROL ST] }] ST EOM;

EHC_E20 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST IVC ST { CTD ST } [{ LOC
ST }] [{ ROL ST }] { ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT
ST }] [{ ACC ST }] { ST IN1 ST [{ GSP ST }] [{ GSR ST }] [IN2 ST] } ST [{ ST
DG1 ST [{ NTE ST }] }] ST [{ OBX ST }] [{ PRT ST }] } ST { ST PSL ST [{ NTE ST
}] [{ ADJ ST }] [{ LOC ST }] [{ PRT ST }] [{ ROL ST }] } ST > ST EOM;

EHC_E21 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST IVC ST { ST PSL ST [{ NTE ST }] } [AUT ST] } ST > ST EOM;

EHC_E24 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] MSA ST [{ ERR ST }] < ST IVC ST { ST PSL ST [AUT ST] [{ ADJ ST }] } ST > ST EOM;

ESR_U02 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST [ROL ST] EOM;

ESU_U01 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST [{ ISD ST }] [ROL ST] EOM;

INR_U06 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST { INV ST } [ROL ST] EOM;

INR_U14 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST [{ INV ST }] EOM;

INU_U05 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST { INV ST } [ROL ST] EOM;

LSU_U12 := SOM MSH ST [{ SFT ST }] [UAC ST] EQU ST { EQP ST } [ROL ST] EOM;

MDM_T01 := SOM MSH ST [{ SFT ST }] [UAC ST] EVN ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] PV1 ST [{ PRT ST }] [{ ST ORC ST [{ PRT ST }] } [{ ST TQ1 ST [{ TQ2 ST }] }] ST OBR ST [{ PRT ST }] [{ NTE ST }] } ST TXA ST [{ CON ST }] EOM;

MDM_T02 := SOM MSH ST [{ SFT ST }] [UAC ST] EVN ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] PV1 ST [{ PRT ST }] [{ ST ORC ST [{ PRT ST }] } [{ ST TQ1 ST [{ TQ2 ST }] }] ST OBR ST [{ PRT ST }] [{ NTE ST }] } ST TXA ST [{ CON ST }] { ST OBX ST [{ PRT ST }] [{ NTE ST }] } ST EOM;

MFK_M01 := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [{ ERR ST }] MFI ST [{ MFA ST }] EOM;

MFN_M02 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST STF ST [{ GSP ST }] [{ GSR ST }] [{ PRA ST }] [{ ORG ST }] [{ AFF ST }] [{ LAN ST }] [{ EDU ST }] [{ CER ST }] [{ NTE ST }] } ST EOM;

MFN_M04 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST [{ NTE ST }] { ST MFE ST [{ NTE ST }] CDM ST [{ NTE ST }] [{ PRC ST }] } ST EOM;

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MFN_M05 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST LOC ST [{ LCH ST }] [{ LRL ST }] { ST LDP ST [{ LCH ST }] [{ LCC ST }] } ST } ST EOM;

MFN_M06 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST CM0 ST [{ ST CM1 ST [{ CM2 ST }] }] ST } ST EOM;

MFN_M07 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST CM0 ST [{ CM2 ST }] } ST EOM;

MFN_M08 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST OM1 ST [{ OMC ST }] [{ PRT ST }] [OM2 ST] [OM3 ST] [{ OM4 ST }] } ST EOM;

MFN_M09 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST OM1 ST [{ OMC ST }] [{ PRT ST }] [ST OM3 ST [{ OM4 ST }]] ST } ST EOM;

MFN_M10 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST OM1 ST [{ OMC ST }] [{ PRT ST }] [ST OM5 ST [{ OM4 ST }]] ST } ST EOM;

MFN_M11 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST OM1 ST [{ OMC ST }] [{ PRT ST }] [ST OM6 ST OM2 ST] ST } ST EOM;

MFN_M12 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST OM1 ST [{ PRT ST }] [ST OM7 ST [{ PRT ST }]] ST } ST EOM;

MFN_M13 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { MFE ST } EOM;

MFN_M15 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST IIM ST } ST EOM;

MFN_M16 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST ITM ST [{ NTE ST }] [{ ST STZ ST [{ NTE ST }] }] ST [{ ST VND ST [{ ST PKG ST [{ PCE ST }] }] ST }] ST [{ ST IVT ST [{ ILT ST }] [{ NTE ST }] }] ST } ST EOM;

MFN_M17 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST DMI ST } ST EOM;

MFN_M18 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST { ST PM1 ST { ST MCP ST [{ DPS ST }] } ST } ST } ST EOM;

MFN_M19 := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST CTR ST [{ NTE ST }] { ST ITM ST { ST VND ST [{ ST PKG ST }] ST } ST } ST } ST EOM;

MFN_Znn := SOM MSH ST [{ SFT ST }] [UAC ST] MFI ST { ST MFE ST Hxx ST } ST EOM;

NMD_N02 := SOM MSH ST [{ SFT ST }] [UAC ST] { ST [ST NCK ST [{ NTE ST }]] ST [ST NST ST [{ NTE ST }]] ST [ST NSC ST [{ NTE ST }]] ST } ST EOM;

OMB_O27 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [{ NTE ST }] [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] [ST PV1 ST [PV2 ST] [{ PRT ST }]] ST [{ ST IN1 ST [IN2 ST] [IN3 ST] }] ST [GT1 ST] [{ AL1 ST }]] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST BPO ST [SPM ST] [{ NTE ST }] [{ DG1 ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ FT1 ST }] [BLG ST] } ST EOM;

OMD_O03 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [{ NTE ST }] [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] [ST PV1 ST [PV2 ST] [{ PRT ST }]] ST [{ ST IN1 ST [IN2 ST] [IN3 ST] }] ST [GT1 ST] [{ AL1 ST }]] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ST { ODS ST } [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST] ST } ST [{ ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST { ODT ST } [{ NTE ST }] }] ST EOM;

OMG_O19 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [{ NTE ST }] [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [ST [{ OH1 ST }] [{ OH2 ST }] [OH3 ST] [{ OH4 ST }]] ST [{ NTE ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] [{ OH2 ST }] [OH3 ST] }] ST [{ ARV ST }] [ST PV1 ST [PV2 ST] [{ PRT ST }]] ST [{ ST IN1 ST [IN2 ST] [IN3 ST] }] ST [GT1 ST] [{ AL1 ST }]] ST { ST ORC ST [{ NTE ST }] [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST OBR ST [{ NTE ST }] [{ PRT ST }] [CTD ST] [{ DG1 ST }] [REL ST] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ ST SPM ST [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] }] ST [{ ST SAC ST [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] }] ST }] ST [SGH ST] [ST [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ARV ST }] [{ PRT ST }]] ST [ST PV1 ST [PV2 ST] [{ PRT ST }]] ST [{ AL1 ST }] { ST ORC ST [{ PRT ST }] OBR ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST [{ NTE ST }] [{ ST PRT ST [{ DEV ST }] }] ST [CTD ST] { ST OBX ST [{ PRT ST }] [{ NTE ST }] } ST } ST } ST [SGT ST] [{ FT1 ST }] [{ CTI ST }] [BLG ST] } ST [{ ST DEV ST [{ OBX ST }] }] ST EOM;

OMI_O23 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [{ NTE ST }] [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [ST [{ OH1 ST }] [{ OH2 ST }] [OH3 ST] [{ OH4 ST }]] ST [{ ARV ST }] [{ NTE ST }] [ST PV1 ST [PV2 ST] [{ PRT ST }]] ST [{ ST IN1 ST [IN2 ST] [IN3 ST] }] ST [GT1 ST] [{ AL1 ST }]] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST OBR ST [{ NTE ST }] [{ PRT ST }] [CTD ST] [{ DG1 ST }] [REL ST] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST { IPC ST } } ST [{ ST DEV ST [{ OBX ST }] }] ST EOM;

OML_O21 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] [{ NTE ST }] [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [ST [{ OH1 ST }] [{ OH2 ST }] [OH3 ST] [{ OH4 ST }]] ST [{ NTE ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] [{ OH2 ST }] [OH3 ST] }] ST [{ ARV ST }] [ST PV1

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```
ST [ PV2 ST ] [ { PRT ST } ] ST [ { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ] ST [ GT1
ST ] [ { AL1 ST } ] ST { ST ORC ST [ { NTE ST } ] [ { PRT ST } ] [ { ST TQ1 ST [ {
TQ2 ST } ] } ] ST [ ST OBR ST [ TCD ST ] [ { NTE ST } ] [ { PRT ST } ] [ CTD ST ] [ {
DG1 ST } ] [ REL ST ] [ { ST OBX ST [ { PRT ST } ] [ TCD ST ] [ { NTE ST } ] } ] ST
[ { ST SPM ST [ { NTE ST } ] [ { ST OBX ST [ { PRT ST } ] } ] ST [ { ST SAC ST [ { NTE
ST } ] [ { ST OBX ST [ { PRT ST } ] } ] ST } ] ST [ IPC ST ] [ SGH ST ] [ { ST
[ ST PID ST [ PD1 ST ] [ { GSP ST } ] [ { GSR ST } ] [ { GSC ST } ] [ { PRT ST } ] [ {
ARV ST } ] } ] ST [ ST PV1 ST [ PV2 ST ] [ { PRT ST } ] } ] ST [ { AL1 ST } ] { ST ORC
ST [ { PRT ST } ] OBR ST [ { NTE ST } ] [ { ST PRT ST [ { DEV ST } ] } ] ST [ { ST TQ1
ST [ { TQ2 ST } ] } ] ST { ST OBX ST [ { PRT ST } ] [ { NTE ST } ] } ST } ST } ST [
SGT ST ] } ST [ { FT1 ST } ] [ { CTI ST } ] [ BLG ST ] } ST [ { ST DEV ST [ { OBX ST
} ] } ] ST EOM;
```

```
OML_O33 := SOM MSH ST [ { ARV ST } ] [ { SFT ST } ] [ UAC ST ] [ { NTE ST } ] [ ST
PID ST [ PD1 ST ] [ { GSP ST } ] [ { GSR ST } ] [ { GSC ST } ] [ { PRT ST } ] [ ST [ {
OH1 ST } ] [ { OH2 ST } ] [ OH3 ST ] [ { OH4 ST } ] } ] ST [ { NTE ST } ] [ { ST NK1 ST
[ { GSP ST } ] [ { GSR ST } ] [ { OH2 ST } ] [ OH3 ST ] } ] ST [ { ARV ST } ] [ ST PV1
ST [ PV2 ST ] [ { PRT ST } ] } ] ST [ { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ] ST [ GT1
ST ] [ { AL1 ST } ] } ] ST { ST SPM ST [ { NTE ST } ] [ { ST OBX ST [ { PRT ST } ] } ]
ST [ { ST SAC ST [ { NTE ST } ] } ] ST { ST ORC ST [ { NTE ST } ] [ { PRT ST } ] [ { ST
TQ1 ST [ { TQ2 ST } ] } ] ST [ ST OBR ST [ TCD ST ] [ { NTE ST } ] [ { PRT ST } ] [ {
DG1 ST } ] [ REL ST ] [ { ST OBX ST [ { PRT ST } ] [ TCD ST ] [ { NTE ST } ] } ] ST [
IPC ST ] [ SGH ST ] [ { ST [ ST PID ST [ PD1 ST ] [ { GSP ST } ] [ { GSR ST } ] [ {
GSC ST } ] [ { PRT ST } ] [ { ARV ST } ] } ] ST [ ST PV1 ST [ PV2 ST ] [ { PRT ST } ] }
ST [ { AL1 ST } ] { ST ORC ST [ { PRT ST } ] OBR ST [ { NTE ST } ] [ { ST PRT ST [ {
DEV ST } ] } ] ST [ { ST TQ1 ST [ { TQ2 ST } ] } ] ST { ST OBX ST [ { PRT ST } ] [ {
NTE ST } ] } ST } ST } ST [ SGT ST ] } ST [ { FT1 ST } ] [ { CTI ST } ] [ BLG ST ]
} ST } ST [ { ST DEV ST [ { OBX ST } ] } ] ST EOM;
```

```
OML_O35 := SOM MSH ST [ { ARV ST } ] [ { SFT ST } ] [ UAC ST ] [ { NTE ST } ] [ ST
PID ST [ PD1 ST ] [ { GSP ST } ] [ { GSR ST } ] [ { GSC ST } ] [ { PRT ST } ] [ ST [ {
OH1 ST } ] [ { OH2 ST } ] [ OH3 ST ] [ { OH4 ST } ] } ] ST [ { NTE ST } ] [ { ST NK1 ST
[ { GSP ST } ] [ { GSR ST } ] [ { OH2 ST } ] [ OH3 ST ] } ] ST [ { ARV ST } ] [ ST PV1
ST [ PV2 ST ] [ { PRT ST } ] } ] ST [ { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ] ST [ GT1
ST ] [ { AL1 ST } ] } ] ST { ST SPM ST [ { NTE ST } ] [ { ST OBX ST [ { PRT ST } ] } ]
ST { ST SAC ST [ { NTE ST } ] { ST ORC ST [ { NTE ST } ] [ { PRT ST } ] [ { ST TQ1 ST
[ { TQ2 ST } ] } ] ST [ ST OBR ST [ TCD ST ] [ { NTE ST } ] [ { PRT ST } ] [ { DG1 ST
} ] [ REL ST ] [ { ST OBX ST [ { PRT ST } ] [ TCD ST ] [ { NTE ST } ] } ] ST [ IPC ST
] [ SGH ST ] [ { ST [ ST PID ST [ PD1 ST ] [ { GSP ST } ] [ { GSR ST } ] [ { GSC ST
} ] [ { PRT ST } ] [ { ARV ST } ] } ] ST [ ST PV1 ST [ PV2 ST ] [ { PRT ST } ] } ] ST [ {
AL1 ST } ] { ST ORC ST [ { PRT ST } ] OBR ST [ { NTE ST } ] [ { ST PRT ST [ { DEV ST
} ] } ] ST [ { ST TQ1 ST [ { TQ2 ST } ] } ] ST { ST OBX ST [ { PRT ST } ] [ { NTE ST } ]
} ST } ST } ST [ SGT ST ] } ST [ { FT1 ST } ] [ { CTI ST } ] [ BLG ST ] } ST } ST
} ST [ { ST DEV ST [ { OBX ST } ] } ] ST EOM;
```

```
OML_O39 := SOM MSH ST [ { ARV ST } ] [ { SFT ST } ] [ UAC ST ] [ { NTE ST } ] [ ST
PID ST [ PD1 ST ] [ { GSP ST } ] [ { GSR ST } ] [ { GSC ST } ] [ { PRT ST } ] [ ST [ {
OH1 ST } ] [ { OH2 ST } ] [ OH3 ST ] [ { OH4 ST } ] } ] ST [ { NTE ST } ] [ { ST NK1 ST
[ { GSP ST } ] [ { GSR ST } ] [ { OH2 ST } ] [ OH3 ST ] } ] ST [ { ARV ST } ] [ ST PV1
ST [ PV2 ST ] [ { PRT ST } ] } ] ST [ { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ] ST [ GT1
ST ] [ { AL1 ST } ] } ] ST { ST ORC ST [ { NTE ST } ] [ { PRT ST } ] [ { ST TQ1 ST [ {
TQ2 ST } ] } ] ST [ ST OBR ST [ TCD ST ] [ { NTE ST } ] [ { PRT ST } ] [ CTD ST ] [ {
DG1 ST } ] [ REL ST ] [ { ST OBX ST [ { PRT ST } ] [ TCD ST ] [ { NTE ST } ] } ] ST
```



```
[{ ST SHP ST [{ ST OBX ST [{ PRT ST }] }] ST { ST PAC ST [{ ST SPM ST [{ NTE
ST }] [{ ST OBX ST [{ PRT ST }] }] ST [{ ST SAC ST [{ NTE ST }] [{ ST OBX ST
[{ PRT ST }] }] ST }] ST } ST } ST } ST } ST [{ FT1 ST }] [{ CTI ST }] [ BLG
ST ] } ST [{ ST DEV ST [{ OBX ST }] }] ST EOM;
```

```
OML_O59 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST
PID ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NTE
ST }] [{ NK1 ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST [{ ST IN1 ST [ IN2
ST ] [ IN3 ST ] }] ST [ GT1 ST ] [{ AL1 ST }] ] ST { ST ORC ST [{ NTE ST }] [{
PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST OBR ST [ TCD ST ] [{ NTE ST }]
[{ PRT ST }] [ CTD ST ] [{ DG1 ST }] [ REL ST ] [{ ST OBX ST [{ PRT ST }] [
TCD ST ] [{ NTE ST }] }] ST [{ ST SPM ST [{ NTE ST }] [{ ST OBX ST [{ PRT ST
}] }] ST [{ ST SAC ST [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] }] ST }] ST } ST
[ IPC ST ] [ SGH ST ] [{ ST [ ST PID ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }]
[{ GSC ST }] [{ PRT ST }] ] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST [{ AL1
ST }] { ST ORC ST [{ PRT ST }] OBR ST [{ NTE ST }] [{ ST PRT ST [{ DEV ST }]
}] ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST { ST OBX ST [{ PRT ST }] [{ NTE ST }] }
ST } ST } ST [ SGT ST ] ] ST [{ FT1 ST }] [{ CTI ST }] [ BLG ST ] } ST EOM;
```

```
OMN_O07 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST
PID ST [ PD1 ST ] [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] [ ST PV1 ST [ PV2 ST
] [{ PRT ST }] ] ST [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ GT1 ST ] [{ AL1
ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST RQD ST [
RQ1 ST ] [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [ BLG ST ]
} ST EOM;
```

```
OMP_O09 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST
PID ST [ ST PD1 ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] ] ST [{
NTE ST }] [{ ARV ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ARV ST }] ] ST
[{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ GT1 ST ] [{ AL1 ST }] ] ST { ST ORC
ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST RXO ST [{ PRT ST }] [{ NTE ST }] { RXR ST }
[{ ST RXC ST [{ NTE ST }] }] ST [{ CDO ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE
ST }] }] ST [{ FT1 ST }] [ BLG ST ] } ST EOM;
```

```
OMQ_O57 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST
PID ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NTE
ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ ARV ST }] [ ST PV1 ST [
PV2 ST ] [{ PRT ST }] ] ST [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ GT1 ST ]
[{ AL1 ST }] ] ST { ST ORC ST [{ PRT ST }] OBX ST [{ PRT ST }] TXA ST [ CTD ST ]
[{ DG1 ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ ST [ ST PID ST
[ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] ]
ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST [{ AL1 ST }] { ST ORC ST [{ PRT ST
}] OBR ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST [{ NTE ST }] [{ ST PRT ST [{ DEV ST
}] }] ST [ CTD ST ] { ST OBX ST [{ PRT ST }] [{ NTE ST }] } ST } ST } ST [{
FT1 ST }] [{ CTI ST }] [ BLG ST ] } ST EOM;
```

```
OMS_O05 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST
PID ST [ PD1 ST ] [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] [ ST PV1 ST [ PV2 ST
] [{ PRT ST }] ] ST [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ GT1 ST ] [{ AL1
ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST RQD ST [
RQ1 ST ] [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [ BLG ST ]
} ST EOM;
```

Appendix C: BNF Message Descriptions

```
OPL_O37 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] { PRT
ST } [ ST GT1 ST [{ NTE ST }] ] ST { ST { NK1 ST } [ ST PID ST [ PD1 ST ] [{
GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] [{ ST OBX ST [{
PRT ST }] ] ST [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [{ AL1 ST }] ] ST {
ST SPM ST [{ ST OBX ST [{ PRT ST }] ] ST [{ ST SAC ST [{ ST OBX ST [{ PRT ST
}] ] ST } ST { ST ORC ST [{ PRT ST }] OBR ST [{ PRT ST }] [{ ST TQ1 ST [{
TQ2 ST }] ] ST [ TCD ST ] [{ DG1 ST }] [{ ST OBX ST [{ PRT ST }] ] ST } ST }
ST [ SGH ST ] [ ST { NK1 ST } [ ST PID ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }]
[{ GSC ST }] [{ PRT ST }] [{ ARV ST }] ] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST
}] ] ST [ AL1 ST ] { ST OBR ST [ ORC ST ] [{ ST PRT ST [{ DEV ST }] ] ST [ ST
TQ1 ST [{ TQ2 ST }] ] ST { ST OBX ST [{ PRT ST }] } ST } ST ] ST [ SGT ST ] [{
FT1 ST }] [{ CTI ST }] [ BLG ST ] } ST EOM;
```

```
OPR_O38 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST { ST { NK1 ST } [ ST PID ST [{ PRT ST }] [{ ARV ST }] ] ST
[{ ST SPM ST [{ ST OBX ST [{ PRT ST }] ] ST [{ SAC ST }] [{ ST ORC ST [{ PRT
ST }] OBR ST [{ PRT ST }] ] ST [{ ST TQ1 ST [{ TQ2 ST }] ] ST } ST } ST ]
ST EOM;
```

```
OPU_R25 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [ NTE ST ] PV1 ST [
PV2 ST ] [{ PRT ST }] [{ ST OBX ST [{ NTE ST }] [{ PRT ST }] ] ST { ST { ST
NK1 ST [{ GSP ST }] [{ GSR ST }] } ST [ ST PID ST [ PD1 ST ] [{ GSP ST }] [{
GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST ] [{
OH4 ST }] [{ ARV ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] ] ST ] ST { ST
SPM ST [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] ] ST [{ ST SAC ST [ INV ST ] ]
ST { ST OBR ST [{ PRT ST }] [ ST ORC ST [{ PRT ST }] ] ST [{ NTE ST }] [{ PRT
ST }] [{ ST TQ1 ST [{ TQ2 ST }] ] ST { ST OBX ST [{ PRT ST }] [{ NTE ST }] }
ST } ST } ST } ST EOM;
```

```
ORA_R33 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] [ ST ORC ST
[{ PRT ST }] ] ST EOM;
```

```
ORA_R41 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] [{ PRT ST }]
EOM;
```

```
ORB_O28 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ ST ORC ST [{ PRT ST
}] ] [{ ST TQ1 ST [{ TQ2 ST }] ] ST [ BPO ST ] ] ST ] ST ] ST EOM;
```

```
ORD_O04 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] ] ST { ST
ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] ] ST [{ ODS ST }] [{ NTE ST }]
} ST [{ ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] ] ST [{ ODT ST }] [{
NTE ST }] ] ST ] ST EOM;
```

```
ORG_O20 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ NTE ST }] [{ PRT ST }] [{ ARV ST }] ] ST { ST
```

```
ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST OBR ST [{ PRT ST }]
[{ NTE ST }] ] ST [{ CTI ST }] [{ ST SPM ST [{ SAC ST }] }] ST } ST ] ST EOM;
```

```
ORI_O24 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ ARV ST }] [{ NTE ST }] [{ PRT ST }] ] ST { ST
ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST OBR ST [{ NTE ST }] [{ PRT
ST }] { IPC ST } } ST ] ST EOM;
```

```
ORL_O22 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ ST ORC ST [{ PRT ST }]
[{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST OBR ST [{ PRT ST }] [{ ST SPM ST [{ SAC
ST }] }] ST ] ST ]] ST ] ST EOM;
```

```
ORL_O34 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST PID ST [{ PRT ST }] [{ ARV ST }] { ST SPM ST [{ ST OBX ST [{
PRT ST }] }] ST [{ SAC ST }] [{ ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST
}] }] ST [ ST OBR ST [{ PRT ST }] ] ST ]] ST } ST ] ST EOM;
```

```
ORL_O36 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST PID ST [{ PRT ST }] [{ ARV ST }] { ST SPM ST [{ ST OBX ST [{
PRT ST }] }] ST [{ NTE ST }] { ST SAC ST [{ ST ORC ST [{ PRT ST }] [{ ST TQ1
ST [{ TQ2 ST }] }] ST [ ST OBR ST [{ PRT ST }] ] ST ]] ST } ST } ST ] ST EOM;
```

```
ORL_O40 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ ST ORC ST [{ PRT ST
}] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST OBR ST [{ PRT ST }] [{ ST SHP ST { ST
PAC ST [{ ST SPM ST [{ ST SAC ST }] ST }] ST } ST ]] ST ] ST ]] ST ] ST ] ST
EOM;
```

```
ORL_O53 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] ] ST [{ ST ORC ST [{ PRT ST }] [{
ST TQ1 ST [{ TQ2 ST }] }] ST [ ST OBR ST [{ PRT ST }] [{ ST SPM ST [{ SAC ST
}] }] ST ] ST ]] ST ] ST EOM;
```

```
ORL_O54 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] ] ST { ST SPM ST [{ ST OBX ST [{
PRT ST }] }] ST [{ SAC ST }] [{ ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST
}] }] ST [ ST OBR ST [{ PRT ST }] ] ST ]] ST } ST ] ST EOM;
```

```
ORL_O55 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] ] ST { ST SPM ST [{ ST OBX ST [{
PRT ST }] }] ST [{ NTE ST }] { ST SAC ST [{ ST ORC ST [{ PRT ST }] [{ ST TQ1
ST [{ TQ2 ST }] }] ST [ ST OBR ST [{ PRT ST }] ] ST ]] ST } ST } ST ] ST EOM;
```

```
ORL_O56 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] ] ST [{ ST ORC ST [{ PRT ST }] [{
```

Appendix C: BNF Message Descriptions

```
ST TQ1 ST [{ TQ2 ST }] ST [ ST OBR ST [{ PRT ST }] [{ ST SHP ST { ST PAC ST  
[{ ST SPM ST [{ ST SAC ST }] ST }] ST } ST }] ST ] ST EOM;
```

```
ORN_O08 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]  
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] ] ST { ST  
ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] ] ST RQD ST [ RQ1 ST ] [{ NTE  
ST }] } ST ] ST EOM;
```

```
ORP_O10 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }]  
[ ST [ ST PID ST [{ PRT ST }] [{ NTE ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST  
TQ1 ST [{ TQ2 ST }] ] ST [ ST RXO ST [{ PRT ST }] [{ NTE ST }] { RXR ST } [{  
ST RXC ST [{ NTE ST }] ] ST ] ST } ST ] ST EOM;
```

```
ORS_O06 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]  
[{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ NTE ST }] ] ST { ST  
ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] ] ST RQD ST [ RQ1 ST ] [{ NTE  
ST }] } ST ] ST EOM;
```

```
ORU_R01 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] { ST [ ST PID ST [ PD1 ST ]  
[{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST ]  
[ OH4 ST ] [{ ARV ST }] [{ ST OBX ST [{ PRT ST }] ] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST  
ST ] ] ST { ST [ ST ORC ST [{ PRT ST }] [ ST OBX ST [{ PRT ST }] TXA ST ] ST ] ST OBR ST  
[{ NTE ST }] [{ ST PRT ST [{ DEV ST }] ] ST [{ ST TQ1 ST [{ TQ2 ST }] ] ST [ CTD ST ]  
[{ ST OBX ST [{ PRT ST }] [{ NTE ST }] ] ST [{ FT1 ST }] [{ CTI ST }] [{ ST SPM ST  
[{ ST OBX ST [{ PRT ST }] ] ST } ST ] ST [{ ST DEV ST [{ OBX ST }] ] ST } ST [ DSC ST ]  
EOM;
```

```
ORU_R30 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] PID ST [ PD1 ST ]  
[{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ OH1 ST }] [{ OH2 ST }] [ OH3 ST ]  
[ OH4 ST ] [{ ARV ST }] [{ ST OBX ST [{ PRT ST }] ] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST  
ST ] ] ST ORC ST [{ PRT ST }] OBR ST [{ NTE ST }] [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST  
ST ] ] ST { ST OBX ST [{ PRT ST }] [{ NTE ST }] } ST [{ ST DEV ST [{ OBX ST }] ] ST  
EOM;
```

```
ORX_O58 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]  
[{ NTE ST }] [ ST [ ST PID ST [{ NTE ST }] [{ PRT ST }] [{ ARV ST }] ] ST { ST  
ORC ST [{ PRT ST }] TXA ST [{ CTI ST }] } ST ] ST EOM;
```

```
OSM_R26 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] { ST SHP ST { PRT ST }  
[{ ST OBX ST [{ PRT ST }] ] ST { ST PAC ST [{ PRT ST }] [{ ST SPM ST [{ PRT ST  
ST ] ] ST [ ST PID ST [{ PRT ST }] [{ ARV ST }] [{ ST OBX ST [{ PRT ST }] ] ST  
[ ST NK1 ST [{ GSP ST }] [{ GSR ST }] ] ST ] ST [ ST PV1 ST [{ PRT ST }] ] ST  
[ ST OBX ST [{ PRT ST }] ] ST [ PID ST ] [{ PRT ST }] [{ ST NK1 ST [{ GSP ST  
ST ] ] ST } ST ] ST } ST EOM;
```

```
OSU_O51 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ PID
ST ] [{ PRT ST }] [{ ARV ST }] { ST ORC ST [{ PRT ST }] } ST EOM;
```

```
OSU_O52 := SOM MSH ST MSA ST [{ ARV ST }] [{ ERR ST }] [{ SFT ST }] [ UAC ST ]
[{ NTE ST }] [ ST PID ST [{ PRT ST }] ] ST [{ ARV ST }] { ST ORC ST [{ PRT ST
}] } ST EOM;
```

```
OUL_R22 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [ NTE ST ] [ ST PID
ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }]
[{ NTE ST }] [{ ST OBX ST [{ PRT ST }] }] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST
}] ] ST ] ST [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST { ST SPM ST [{ ST
OBX ST [{ PRT ST }] }] ST [{ ST SAC ST [ INV ST ] }] ST { ST OBR ST [{ PRT ST
}] [ ST ORC ST [{ PRT ST }] [ ST OBX ST [{ PRT ST }] TXA ST ] ST ] ST [{ NTE
ST }] [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [{ ST OBX ST [{ PRT ST }] ]
TCD ST ] [{ SID ST }] [{ INV ST }] [{ NTE ST }] }] ST [{ CTI ST }] } ST } ST
[{ ST DEV ST [{ OBX ST }] }] ST [ DSC ST ] EOM;
```

```
OUL_R23 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [ NTE ST ] [ ST PID
ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ OH1 ST }]
[{ OH2 ST }] [ OH3 ST ] [ OH4 ST ] [{ ARV ST }] [{ NTE ST }] [{ ST OBX ST [{
PRT ST }] }] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST ] ST [{ ST NK1 ST [{
GSP ST }] [{ GSR ST }] }] ST { ST SPM ST [{ ST OBX ST [{ PRT ST }] }] ST { ST
SAC ST [ INV ST ] { ST OBR ST [{ PRT ST }] [ ST ORC ST [{ PRT ST }] [ ST OBX
ST [{ PRT ST }] TXA ST ] ST ] ST [{ NTE ST }] [{ PRT ST }] [{ ST TQ1 ST [{ TQ2
ST }] }] ST [{ ST OBX ST [{ PRT ST }] ] TCD ST ] [{ SID ST }] [{ INV ST }] [{
NTE ST }] }] ST [{ CTI ST }] } ST } ST } ST [{ ST DEV ST [{ OBX ST }] }] ST [
DSC ST ] EOM;
```

```
OUL_R24 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [ NTE ST ] [ ST PID
ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ OH1 ST }]
[{ OH2 ST }] [ OH3 ST ] [ OH4 ST ] [{ ARV ST }] [{ NTE ST }] [{ ST OBX ST [{
PRT ST }] }] ST [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST ] ST [{ ST NK1 ST [{
GSP ST }] [{ GSR ST }] }] ST { ST OBR ST [{ PRT ST }] [ ST ORC ST [{ PRT ST }]
[ ST OBX ST [{ PRT ST }] TXA ST ] ST ] ST [{ NTE ST }] [{ PRT ST }] [{ ST TQ1
ST [{ TQ2 ST }] }] ST [{ ST SPM ST [{ ST OBX ST [{ PRT ST }] }] ST [{ ST SAC
ST [ INV ST ] }] ST ]] ST [{ ST OBX ST [{ PRT ST }] ] TCD ST ] [{ SID ST }] [{
INV ST }] [{ NTE ST }] }] ST [{ CTI ST }] [{ ST DEV ST [{ OBX ST }] }] ST } ST
[ DSC ST ] EOM;
```

```
PEX_P07 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] EVN ST PID ST [ PD1
ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }] [{ NTE
ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST { ST PES ST { ST PEO ST { ST
PCR ST [ ST RXE ST [{ PRT ST }] { ST TQ1 ST [{ TQ2 ST }] } ST [{ RXR ST }] ]
ST [{ ST RXA ST [ RXR ST ] [{ PRT ST }] }] ST [{ PRB ST }] [{ ST OBX ST [{ PRT
ST }] }] ST [{ NTE ST }] [ ST NK1 ST [{ GSP ST }] [{ GSR ST }] [ ST RXE ST [{
PRT ST }] { ST TQ1 ST [{ TQ2 ST }] } ST [{ RXR ST }] ] ST [{ ST RXA ST [ RXR
ST ] [{ PRT ST }] }] ST [{ PRB ST }] [{ ST OBX ST [{ PRT ST }] }] ST ] ST [{
ST CSR ST [{ CSP ST }] }] ST } ST } ST } ST EOM;
```

Appendix C: BNF Message Descriptions

```
PGL_PC6 := SOM MSH ST [{ SFT ST }] [ UAC ST ] PID ST [{ GSP ST }] [{ GSR ST }]
[ { GSC ST } ] { ST PRD ST [{ CTD ST } ] } ST [ ST PV1 ST [ PV2 ST ] ] ST { ST
PTH ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
GOL ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
PRB ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
OBX ST [{ PRT ST }] [{ NTE ST }] }] ST }} ST [{ ST ORC ST [ ST < ST OBR ST |
ST Hxx ST > ST [{ NTE ST }] [{ VAR ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST
}}] [{ VAR ST }] }] ST ] ST }} ST } ST EOM;
```

```
PMU_B01 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EVN ST STF ST [{ GSP ST }] [{
GSR ST }] [{ PRA ST }] [{ ORG ST }] [{ AFF ST }] [{ LAN ST }] [{ EDU ST }] [{
CER ST }] [ ST [{ NK1 ST }] [{ GSP ST }] [{ GSR ST }] }] ST [{ PRT ST }] [{
ROL ST }] EOM;
```

```
PMU_B03 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EVN ST STF ST EOM;
```

```
PMU_B04 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EVN ST STF ST [{ PRA ST }] [{
ORG ST }] EOM;
```

```
PMU_B07 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EVN ST STF ST [ PRA ST ] [{ ST
CER ST [{ PRT ST }] [{ ROL ST }] }] ST EOM;
```

```
PMU_B08 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EVN ST STF ST [ PRA ST ] [{ CER
ST }] EOM;
```

```
PPG_PCG := SOM MSH ST [{ SFT ST }] [ UAC ST ] PID ST [{ GSP ST }] [{ GSR ST }]
[ { GSC ST } ] { ST PRD ST [{ CTD ST } ] } ST [ ST PV1 ST [ PV2 ST ] ] ST { ST
PTH ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
GOL ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ ST PRB ST [{ NTE ST }] [{ VAR ST }]
[ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST OBX ST [{ PRT ST }] [{ NTE ST }]
}}] ST }} ST [{ ST ORC ST [ ST < ST OBR ST | ST Hxx ST > ST [{ NTE ST }] [{ VAR
ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] [{ VAR ST }] }] ST ] ST }} ST }}
ST } ST EOM;
```

```
PPP_PCB := SOM MSH ST [{ SFT ST }] [ UAC ST ] PID ST [{ GSP ST }] [{ GSR ST }]
[ { GSC ST } ] { ST PRD ST [{ CTD ST } ] } ST [ ST PV1 ST [ PV2 ST ] ] ST { ST
PTH ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
PRB ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ ST GOL ST [{ NTE ST }] [{ VAR ST }]
[ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST OBX ST [{ PRT ST }] [{ NTE ST }]
}}] ST }} ST [{ ST ORC ST [ ST < ST OBR ST | ST Hxx ST > ST [{ NTE ST }] [{ VAR
ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] [{ VAR ST }] }] ST ] ST }} ST }}
ST } ST EOM;
```

```
PPR_PC1 := SOM MSH ST [{ SFT ST }] [ UAC ST ] PID ST [{ GSP ST }] [{ GSR ST }]
[ { GSC ST } ] { ST PRD ST [{ CTD ST } ] } ST [ ST PV1 ST [ PV2 ST ] ] ST { ST
PRB ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] }] ST [{ ST
```

```
PTH ST [{ VAR ST }] ST [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] ST [{ ST
GOL ST [{ NTE ST }] [{ VAR ST }] [{ ST ROL ST PRT ST [{ VAR ST }] ST [{ ST
OBX ST [{ PRT ST }] [{ NTE ST }] ST }] ST [{ ST ORC ST [ ST < ST OBR ST |
ST Hxx ST > ST [{ NTE ST }] [{ VAR ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST
}] [{ VAR ST }] ST ] ST }] ST } ST EOM;
```

```
QBP_E03 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST QPD ST RCP ST > ST EOM;
```

```
QBP_E22 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] < ST QPD ST RCP ST > ST EOM;
```

```
QBP_O33 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST RCP ST EOM;
```

```
QBP_O34 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST RCP ST EOM;
```

```
QBP_Q11 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] QPD ST [ ST [ Hxx
ST ] ] ST RCP ST [ DSC ST ] EOM;
```

```
QBP_Q13 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST [ PID ST ] [ RDF ST ] RCP
ST [ RDF ST ] [ DSC ST ] EOM;
```

```
QBP_Q15 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST [ Hxx ST ] RCP ST [ DSC
ST ] EOM;
```

```
QBP_Q21 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST RCP ST [ DSC ST ] EOM;
```

```
QBP_Qnn := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST [ RDF ST ] RCP ST [ DSC
ST ] EOM;
```

```
QBP_Z73 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST RCP ST EOM;
```

```
QCN_J01 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QID ST EOM;
```

```
QSB_Q16 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST RCP ST [ DSC ST ] EOM;
```

```
QVR_Q17 := SOM MSH ST [{ SFT ST }] [ UAC ST ] QPD ST [ ST [ Hxx ST ] ] ST RCP
ST [ DSC ST ] EOM;
```

```
RAS_O17 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST
PID ST PD1 ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NTE ST }]
[{ ARV ST }] [{ AL1 ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ARV ST }] ]
ST ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [ TQ2 ST ] ST [ ST RXO ST
[{ PRT ST }] [ ST { NTE ST } { RXR ST } [ ST RXC ST [ { NTE ST } ] ST ] ST ]
```

Appendix C: BNF Message Descriptions

```
ST [ ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR  
ST } [{ RXC ST }] [{ CDO ST }] ] ST { ST { RXA ST } [{ PRT ST }] RXR ST [{ ST  
OBX ST [{ PRT ST }] [{ NTE ST }] }] ST } ST [{ CTI ST }] } ST EOM;
```

```
RCV_O59 := SOM MSH ST [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST PID ST [ PD1  
ST ] [{ PRT ST }] [{ NTE ST }] [{ AL1 ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST  
}] ] ST ] ST { ST ORC ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST [ ST {  
NTE ST } { RXR ST } [{ ST RXC ST [{ NTE ST }] }] ST ] ST ] ST [{ PRT ST }] [  
ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST }  
[{ RXC ST }] ] ST RXD ST [{ PRT ST }] [{ NTE ST }] { RXR ST } [{ RXC ST }] [{  
ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ FT1 ST }] } ST EOM;
```

```
RDE_O11 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST  
PID ST [ PD1 ST ] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NTE  
ST }] [{ ARV ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ARV ST }] ] ST [{ ST  
IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ GT1 ST ] [{ AL1 ST }] ] ST { ST ORC ST [{  
PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST [{ PRT ST }] [{ NTE ST  
}] { RXR ST } [{ ST RXC ST [{ NTE ST }] }] ST ] ST RXE ST [{ PRT ST }] [{ NTE  
ST }] { ST TQ1 ST [{ TQ2 ST }] } ST [{ ST RXV ST [{ PRT ST }] [{ NTE ST }] }  
ST TQ1 ST [{ TQ2 ST }] } ST ] ST { RXR ST } [{ RXC ST }] [{ CDO ST }] [{ ST  
OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ FT1 ST }] [ BLG ST ] [{ CTI ST }] }  
ST EOM;
```

```
RDE_O49 := SOM MSH ST [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST PID ST [ PD1  
ST ] [{ PRT ST }] [{ NTE ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] ] ST [{ ST  
IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ GT1 ST ] [{ AL1 ST }] ] ST { ST ORC ST [{  
PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST [{ PRT ST }] [{ NTE ST  
}] { RXR ST } [{ ST RXC ST [{ NTE ST }] }] ST ] ST [{ PRT ST }] RXE ST [{ PRT  
ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }] [{ ST  
OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ FT1 ST }] [ BLG ST ] [{ CTI ST }] }  
ST EOM;
```

```
RDS_O13 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST  
PID ST PD1 ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ ARV ST }]  
[{ NTE ST }] [{ AL1 ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ARV ST }] ]  
ST ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST  
[{ PRT ST }] [ ST { NTE ST } { RXR ST } [{ ST RXC ST [{ NTE ST }] }] ST ] ST ]  
ST [ ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR  
ST } [{ RXC ST }] ] ST RXD ST [{ PRT ST }] [{ NTE ST }] { RXR ST } [{ RXC ST  
}] [{ CDO ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST [{ FT1 ST }] } ST  
EOM;
```

```
RDY_K15 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] QAK ST QPD  
ST [{ DSP ST }] [ DSC ST ] EOM;
```

```
RDY_Z80 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] QAK ST QPD  
ST [{ DSP ST }] [ DSC ST ] EOM;
```



```
REF_I12 := SOM MSH ST [{ SFT ST }] [ UAC ST ] [ RF1 ST ] [ ST AUT ST [ CTD ST ] ] ST { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ GT1 ST }] [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ ACC ST ] [{ DG1 ST }] [{ DRG ST }] [{ AL1 ST }] [{ ST PR1 ST [ ST AUT ST [ CTD ST ] ] ST }] ST [{ ST OBR ST [{ PRT ST }] [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST }] ST [ ST PV1 ST [ PV2 ST ] ] ST [{ NTE ST }] EOM;
```

```
RGV_O15 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NTE ST }] [{ AL1 ST }] [{ ARV ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ARV ST }] ] ST ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST [{ PRT ST }] ] [ ST { NTE ST } { RXR ST } [{ ST RXC ST [{ NTE ST }] }] ST ] ST ] ST [ ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }] ] ST { ST RXG ST [{ PRT ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }] [{ CDO ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST } ST } ST EOM;
```

```
RPA_I08 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [ RF1 ST ] [ ST AUT ST [ CTD ST ] ] ST { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ GT1 ST }] [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [ ACC ST ] [{ DG1 ST }] [{ DRG ST }] [{ AL1 ST }] { ST PR1 ST [ ST AUT ST [ CTD ST ] ] ST } ST [{ ST OBR ST [{ PRT ST }] [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST }] ST [ ST PV1 ST [ PV2 ST ] ] ST [{ NTE ST }] EOM;
```

```
RPI_I01 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [ ST [{ GT1 ST }] { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ST ] ST [{ NTE ST }] EOM;
```

```
RPI_I04 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [ ST [{ GT1 ST }] { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ST ] ST [{ NTE ST }] EOM;
```

```
RPL_I02 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST { ST PRD ST [{ CTD ST }] } ST [{ NTE ST }] [{ DSP ST }] [ DSC ST ] EOM;
```

```
RPR_I03 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST { ST PRD ST [{ CTD ST }] } ST [{ PID ST }] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST EOM;
```

```
RQA_I08 := SOM MSH ST [{ SFT ST }] [ UAC ST ] [ RF1 ST ] [ ST AUT ST [ CTD ST ] ] ST { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [ ST [{ GT1 ST }] { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ST ] ST [ ACC ST ] [{ DG1 ST }] [{ DRG ST }] [{ AL1 ST }] [{ ST PR1 ST [ ST AUT ST [ CTD ST ] ] ST }] ST [{ ST OBR ST [{ PRT ST ]}]
```

Appendix C: BNF Message Descriptions

```
[{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST ] ST [ ST PV1 ST [ PV2 ST ] ] ST [{ NTE ST }] EOM;
```

```
RQI_I01 := SOM MSH ST [{ SFT ST }] [ UAC ST ] { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [ ST [{ GT1 ST }] { ST IN1 ST [ IN2 ST ] [ IN3 ST ] } ST ] ST [{ NTE ST }] EOM;
```

```
RQP_I04 := SOM MSH ST [{ SFT ST }] [ UAC ST ] { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [{ GT1 ST }] [{ NTE ST }] EOM;
```

```
RRA_O18 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ NTE ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST { ST RXA ST [{ PRT ST }] } ST RXR ST ] ST } ST ] ST EOM;
```

```
RRD_O14 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ NTE ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXD ST [{ PRT ST }] [{ NTE ST }] { RXR ST } [{ RXC ST }] ] ST } ST ] ST EOM;
```

```
RRE_O12 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ NTE ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }] ] ST } ST ] ST EOM;
```

```
RRE_O50 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ NTE ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }] ] ST [{ PRT ST }] } ST ] ST EOM;
```

```
RRG_O16 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] [{ NTE ST }] [ ST [ ST PID ST [{ PRT ST }] [{ NTE ST }] ] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXG ST [{ PRT ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }] ] ST } ST ] ST EOM;
```

```
RRI_I12 := SOM MSH ST [{ SFT ST }] [ UAC ST ] [ MSA ST ] [ RF1 ST ] [ ST AUT ST [ CTD ST ] ] ST { ST PRD ST [{ CTD ST }] } ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [ ACC ST ] [{ DG1 ST }] [{ DRG ST }] [{ AL1 ST }] [{ ST PR1 ST [ ST AUT ST [ CTD ST ] ] ST }] ST [{ ST OBR ST [{ PRT ST }] [{ NTE ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }] ST }] ST [ ST PV1 ST [ PV2 ST ] ] ST [{ NTE ST }] EOM;
```

```
RSP_E03 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] MSA ST [{ ERR ST }] < ST QAK ST QPD ST [{ IPR ST }] > ST EOM;
```

RSP_E22 := SOM MSH ST [{ SFT ST }] [{ UAC ST }] MSA ST [{ ERR ST }] < ST QAK ST QPD ST [ST IVC ST PSG ST { ST PSL ST } ST] ST > ST EOM;

RSP_K11 := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [{ ERR ST }] QAK ST QPD ST [ST Hxx ST] ST [DSC ST] EOM;

RSP_K21 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] MSA ST [ERR ST] QAK ST QPD ST [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ARV ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST QRI ST] ST [DSC ST] EOM;

RSP_K22 := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [ERR ST] QAK ST QPD ST [{ ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ ST NK1 ST [{ GSP ST }] [{ GSR ST }] }] ST [QRI ST]] ST [DSC ST] EOM;

RSP_K23 := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [ERR ST] QAK ST QPD ST [ST PID ST] ST [DSC ST] EOM;

RSP_K25 := SOM MSH ST [{ SFT ST }] [UAC ST] MSA ST [{ ERR ST }] QAK ST QPD ST RCP ST { ST STF ST [{ GSP ST }] [{ GSR ST }] [{ PRA ST }] [{ ORG ST }] [{ AFF ST }] [{ LAN ST }] [{ EDU ST }] [{ CER ST }] [{ ST [{ NK1 ST }] [{ GSP ST }] [{ GSR ST }]] ST [{ PRT ST }] [{ ROL ST }] } ST [DSC ST] EOM;

RSP_K31 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [UAC ST] QAK ST QPD ST RCP ST { ST [ST PID ST [PD1 ST] [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NTE ST }] [{ ARV ST }] [{ AL1 ST }] [ST PV1 ST [PV2 ST] [{ PRT ST }] [{ ARV ST }]] ST] ST { ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }]] ST [ST RXO ST [{ PRT ST }] [{ NTE ST }] { RXR ST } [{ ST RXC ST [{ NTE ST }]] ST] ST [ST RXE ST [{ PRT ST }] [{ NTE ST }] { ST TQ1 ST [{ TQ2 ST }] } ST { RXR ST } [{ RXC ST }]] ST RXD ST [{ PRT ST }] { RXR ST } [{ RXC ST }] [{ CDO ST }] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }]] ST } ST } ST [DSC ST] EOM;

RSP_K32 := SOM MSH ST [{ SFT ST }] MSA ST [ERR ST] QAK ST QPD ST [{ ST PID ST [PD1 ST] [{ NK1 ST }] [{ GSP ST }] [{ GSR ST }] PV1 ST [PV2 ST] [QRI ST] }] ST [DSC ST] EOM;

RSP_O33 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] MSA ST [ERR ST] QAK ST QPD ST [ST PID ST [{ PRT ST }] [{ ARV ST }]] ST EOM;

RSP_O34 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [UAC ST] MSA ST [ERR ST] QAK ST QPD ST [ST PID ST [PD1 ST] [{ PRT ST }] [{ ST OBX ST [{ PRT ST }]] ST [{ NTE ST }] [{ AL1 ST }] [{ ARV ST }] [ST PV1 ST [{ PRT ST }] [{ NTE ST }]] ST] ST [ST DON ST [{ ST OBX ST [{ PRT ST }]] ST [{ NTE ST }]] ST EOM;

Appendix C: BNF Message Descriptions

```
RSP_Z82 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [ ERR ST ] QAK ST QPD ST
RCP ST { ST [ ST PID ST [ PD1 ST ] [{ NTE ST }] [ ST { AL1 ST } PV1 ST [ PV2
ST ] ] ST ] ST { ST ORC ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST [{ NTE
ST }] { RXR ST } [ ST { RXC ST } [{ NTE ST }] ] ST ] ST [ ST RXE ST [{ ST TQ1
ST [{ TQ2 ST }] }] ST { RXR ST } [{ RXC ST }] ] ST RXD ST { RXR ST } [{ RXC ST
}] { ST [ OBX ST ] [{ NTE ST }] } ST } ST } ST [ DSC ST ] EOM;
```

```
RSP_Z84 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [ ERR ST ] QAK ST QPD ST
[ ST RDF ST [{ RDT ST }] ] ST [ DSC ST ] EOM;
```

```
RSP_Z86 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [ ERR ST ] QAK ST QPD ST
{ ST [ ST PID ST [ PD1 ST ] [{ NTE ST }] [{ AL1 ST }] ] ST { ST ORC ST [{ ST
TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO ST { RXR ST } [{ RXC ST }] ] ST [ ST RXE ST
[{ ST TQ1 ST [{ TQ2 ST }] }] ST { RXR ST } [{ RXC ST }] ] ST [ ST RXD ST { RXR
ST } [{ RXC ST }] ] ST [ ST RXG ST { RXR ST } [{ RXC ST }] ] ST [ ST RXA ST {
RXR ST } [{ RXC ST }] ] ST { ST [ OBX ST ] [{ NTE ST }] } ST } ST } ST [ DSC
ST ] EOM;
```

```
RSP_Z88 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [ ERR ST ] QAK ST QPD ST
RCP ST { ST [ ST PID ST [ PD1 ST ] [{ NTE ST }] [ ST { AL1 ST } [ ST PV1 ST [
PV2 ST ] ] ST ] ST ] ST { ST ORC ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST [ ST RXO
ST [{ NTE ST }] { RXR ST } [ ST { RXC ST } [{ NTE ST }] ] ST ] ST [ ST RXE ST
[{ ST TQ1 ST [{ TQ2 ST }] }] ST { RXR ST } [{ RXC ST }] ] ST RXD ST { RXR ST }
[{ RXC ST }] { ST [ OBX ST ] [{ NTE ST }] } ST } ST } ST DSC ST EOM;
```

```
RSP_Z90 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [ ERR ST ] QAK ST QPD ST
RCP ST { ST [ ST PID ST [ PD1 ST ] [{ NK1 ST }] [{ NTE ST }] [ ST PV1 ST [ PV2
ST ] ] ST ] ST ] ST { ST ORC ST [{ ST TQ1 ST [{ TQ2 ST }] }] ST OBR ST [{ NTE ST
}] [ CTD ST ] { ST [ OBX ST ] [{ NTE ST }] } ST } ST [{ ST SPM ST [{ OBX ST }]
}] ST } ST DSC ST EOM;
```

```
RSP_Znn := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] QAK ST QPD
ST [ Hxx ST ] [ DSC ST ] EOM;
```

```
RTB_K13 := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] QAK ST QPD
ST [ ST RDF ST [{ RDT ST }] ] ST [ DSC ST ] EOM;
```

```
RTB_Knn := SOM MSH ST [{ SFT ST }] [ UAC ST ] MSA ST [{ ERR ST }] QAK ST QPD
ST Hxx ST [ DSC ST ] EOM;
```

```
RTB_Z74 := SOM MSH ST MSA ST [{ ERR ST }] [{ SFT ST }] [ UAC ST ] QAK ST QPD
ST [ ST RDF ST [{ RDT ST }] ] ST [ DSC ST ] EOM;
```

```
SDR_S31 := SOM MSH ST [{ SFT ST }] [ UAC ST ] < ST SDD ST [{ SCD ST }] > ST
EOM;
```

```
SDR_S32 := SOM MSH ST [{ SFT ST }] [ UAC ST ] < ST SDD ST [{ SCD ST }] > ST
EOM;
```

```
SIU_S12 := SOM MSH ST SCH ST [{ TQ1 ST }] [{ NTE ST }] [{ ST PID ST [ PD1 ST ]
[{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] PV1 ST [ PV2 ST ] [{ PRT
ST }] [{ OBX ST }] [{ PRT ST }] [{ DG1 ST }] }] ST { ST RGS ST [{ ST AIS ST [{
NTE ST }] }] ST [{ ST AIG ST [{ NTE ST }] }] ST [{ ST AIL ST [{ NTE ST }] }]
ST [{ ST AIP ST [{ NTE ST }] }] ST } ST EOM;
```

```
SLR_S28 := SOM MSH ST [{ SFT ST }] [ UAC ST ] { SLT ST } EOM;
```

```
SRM_S01 := SOM MSH ST ARQ ST [ APR ST ] [{ NTE ST }] [{ ST PID ST [{ GSP ST }]
[{ GSR ST }] [{ GSC ST }] [{ PRT ST }] PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ST
OBX ST [{ PRT ST }] }] ST [{ DG1 ST }] }] ST { ST RGS ST [{ ST AIS ST [ APR ST
] [{ NTE ST }] }] ST [{ ST AIG ST [ APR ST ] [{ NTE ST }] }] ST [{ ST AIL ST [
APR ST ] [{ NTE ST }] }] ST [{ ST AIP ST [ APR ST ] [{ NTE ST }] }] ST } ST
EOM;
```

```
SRR_S01 := SOM MSH ST MSA ST [{ ERR ST }] [ ST SCH ST [{ TQ1 ST }] [{ NTE ST
}] [{ ST PID ST [{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [ ST PV1
ST [ PV2 ST ] [{ PRT ST }] ] ST [{ DG1 ST }] }] ST { ST RGS ST [{ ST AIS ST [{
NTE ST }] }] ST [{ ST AIG ST [{ NTE ST }] }] ST [{ ST AIL ST [{ NTE ST }] }]
ST [{ ST AIP ST [{ NTE ST }] }] ST } ST EOM;
```

```
SSR_U04 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EQU ST { ST SAC ST [{ SPM ST }]
} ST [ ROL ST ] EOM;
```

```
SSU_U03 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EQU ST { ST SAC ST [{ OBX ST }]
[{ NTE ST }] [{ PRT ST }] [{ ST SPM ST [{ OBX ST }] [{ PRT ST }] }] ST } ST [
ROL ST ] EOM;
```

```
STC_S33 := SOM MSH ST [{ SFT ST }] [ UAC ST ] { SCP ST } EOM;
```

```
TCU_U10 := SOM MSH ST [{ SFT ST }] [ UAC ST ] EQU ST { ST [ SPM ST ] { TCC ST
} } ST [ ROL ST ] EOM;
```

```
/* */
VXU_V04 := SOM MSH ST [{ ARV ST }] [{ SFT ST }] [ UAC ST ] PID ST [ PD1 ST ]
[{ GSP ST }] [{ GSR ST }] [{ GSC ST }] [{ PRT ST }] [{ NK1 ST }] [{ GSP ST }]
[{ GSR ST }] [{ ARV ST }] [ ST PV1 ST [ PV2 ST ] [{ PRT ST }] [{ ARV ST }] ]
ST [{ GT1 ST }] [{ ST IN1 ST [ IN2 ST ] [ IN3 ST ] }] ST [{ ST OBX ST [{ PRT
ST }] [{ NTE ST }] }] ST [{ ST ORC ST [{ PRT ST }] [{ ST TQ1 ST [{ TQ2 ST }]
}] ST RXA ST [{ PRT ST }] [ RXR ST ] [{ ST OBX ST [{ PRT ST }] [{ NTE ST }] }]
ST } ST EOM;
```

ST := <CR>;

C.2.2 Segment Definitions

```
/*-- Segments --*/
Segments :=
| ABS      /* Abstract */
| ACC      /* Accident */
| ADD      /* Addendum */
| ADJ      /* Adjustment */
| AFF      /* Professional Affiliation */
| AIG      /* Appointment Information - General Resource */
| AIL      /* Appointment Information - Location Resource */
| AIP      /* Appointment Information - Personnel Resource */
| AIS      /* Appointment Information */
| AL1      /* Patient Allergy Information */
| APR      /* Appointment Preferences */
| ARQ      /* Appointment Request */
| ARV      /* Access Restriction */
| AUT      /* Authorization Information */
| BHS      /* Batch Header */
| BLC      /* Blood Code */
| BLG      /* Billing */
| BPO      /* Blood product order */
| BPX      /* Blood product dispense status */
| BTS      /* Batch Trailer */
| BTX      /* Blood Product Transfusion/Disposition */
| BUI      /* Blood Unit Information */
| CDM      /* Charge Description Master */
| CDO      /* Cumulative Dosage */
| CER      /* Certificate Detail */
| CM0      /* Clinical Study Master */
| CM1      /* Clinical Study Phase Master */
| CM2      /* Clinical Study Schedule Master */
| CNS      /* Clear Notification */
| CON      /* Consent Segment */
| CSP      /* Clinical Study Phase */
| CSR      /* Clinical Study Registration */
| CSS      /* Clinical Study Data Schedule Segment */
| CTD      /* Contact Data */
| CTI      /* Clinical Trial Identification */
| CTR      /* Contract Master Outbound */
| DB1      /* Disability */
| DEV      /* Device */
| DG1      /* Diagnosis */
| DMI      /* DRG Master File Information */
| DON      /* Donation */
| DPS      /* Diagnosis and Procedure Code Segment */
| DRG      /* Diagnosis Related Group */
| DSC      /* Continuation Pointer */
| DSP      /* Display Data */
| DST      /* Transport Destination */
| ECD      /* Equipment Command */
```

	ECR	/* Equipment Command Response */
	EDU	/* Educational Detail */
	EQP	/* Equipment/log Service */
	EQU	/* Equipment Detail */
	ERR	/* Error */
	EVN	/* Event Type */
	FAC	/* Facility */
	FHS	/* File Header */
	FT1	/* Financial Transaction */
	FTS	/* File Trailer */
	GOL	/* Goal Detail */
	GP1	/* Grouping/Reimbursement - Visit */
	GP2	/* Grouping/Reimbursement - Procedure Line Item */
	GSC	/* Sex Parameter for Clinical Use */
	GSP	/* Person Gender and Sex */
	GSR	/* Recorded Gender and Sex */
	GT1	/* Guarantor */
	IAM	/* Patient Adverse Reaction Information */
	IAR	/* allergy reaction */
	IIM	/* Inventory Item Master */
	ILT	/* Material Lot */
	IN1	/* Insurance */
	IN2	/* Insurance Additional Information */
	IN3	/* Insurance Additional Information, Certification */
	INV	/* Inventory Detail */
	IPC	/* Imaging Procedure Control Segment */
	IPR	/* Invoice Processing Results */
	ISD	/* Interaction Status Detail */
	ITM	/* Material Item */
	IVC	/* Invoice Segment */
	IVT	/* Material Location */
	LAN	/* Language Detail */
	LCC	/* Location Charge Code */
	LCH	/* Location Characteristic */
	LDP	/* Location Department */
	LOC	/* Location Identification */
	LRL	/* Location Relationship */
	MCP	/* Master File Coverage */
	MFA	/* Master File Acknowledgment */
	MFE	/* Master File Entry */
	MFI	/* Master File Identification */
	MRG	/* Merge Patient Information */
	MSA	/* Message Acknowledgment */
	MSH	/* Message Header */
	NCK	/* System Clock */
	NDS	/* Notification Detail */
	NK1	/* Next of Kin / Associated Parties */
	NPU	/* Bed Status Update */
	NSC	/* Application Status Change */
	NST	/* Application control level statistics */
	NTE	/* Notes and Comments */
	OBR	/* Observation Request */
	OBX	/* Observation/Result */
	ODS	/* Dietary Orders, Supplements, and Preferences */
	ODT	/* Diet Tray Instructions */
	OH1	/* Person Employment Status */
	OH2	/* Past or Present Job */

Appendix C: BNF Message Descriptions

OH3	/* Usual Work */
OH4	/* Combat Zone Work */
OM1	/* General Segment */
OM2	/* Numeric Observation */
OM3	/* Categorical Service/Test/Observation */
OM4	/* Observations that Require Specimens */
OM5	/* Observation Batteries (Sets) */
OM6	/* Observations that are Calculated from Other Observations */
OM7	/* Additional Basic Attributes */
OMC	/* Supporting Clinical Information */
ORC	/* Common Order */
ORG	/* Practitioner Organization Unit */
OVR	/* Override Segment */
PAC	/* Shipment Package */
PCE	/* Patient Charge Cost Center Exceptions */
PCR	/* Possible Causal Relationship */
PD1	/* Patient Additional Demographic */
PDA	/* Patient Death and Autopsy */
PDC	/* Product Detail Country */
PEO	/* Product Experience Observation */
PES	/* Product Experience Sender */
PID	/* Patient Identification */
PKG	/* Item Packaging */
PM1	/* Payer Master File */
PMT	/* Payment Information */
PR1	/* Procedures */
PRA	/* Practitioner Detail */
PRB	/* Problem Details */
PRC	/* Pricing */
PRD	/* Provider Data */
PRT	/* Participation Information */
PSG	/* Product/Service Group */
PSH	/* Product Summary Header */
PSL	/* Product/Service Line Item */
PSS	/* Product/Service Section */
PTH	/* Pathway */
PV1	/* Patient Visit */
PV2	/* Patient Visit - Additional Information */
PYE	/* Payee Information */
QAK	/* Query Acknowledgment */
QID	/* Query Identification */
QPD	/* Query Parameter Definition */
QRI	/* Query Response Instance */
RCP	/* Response Control Parameter */
RDF	/* Table Row Definition */
RDT	/* Table Row Data */
REL	/* Clinical Relationship Segment */
RF1	/* Referral Information */
RFI	/* Request for Information */
RGS	/* Resource Group */
RMI	/* Risk Management Incident */
ROL	/* Role */
RQ1	/* Requisition Detail-1 */
RQD	/* Requisition Detail */
RXA	/* Pharmacy/Treatment Administration */
RXC	/* Pharmacy/Treatment Component Order */
RXD	/* Pharmacy/Treatment Dispense */


```
| RXE      /* Pharmacy/Treatment Encoded Order */
| RXG      /* Pharmacy/Treatment Give */
| RXO      /* Pharmacy/Treatment Order */
| RXR      /* Pharmacy/Treatment Route */
| RXV      /* Pharmacy/Treatment Infusion */
| SAC      /* Specimen Container detail */
| SCD      /* Anti-Microbial Cycle Data */
| SCH      /* Scheduling Activity Information */
| SCP      /* Sterilizer Configuration (Anti-Microbial Devices) */
| SDD      /* Sterilization Device Data */
| SFT      /* Software Segment */
| SGH      /* Segment Group Header */
| SGT      /* Segment Group Trailer */
| SHP      /* Shipment */
| SID      /* Substance Identifier */
| SLT      /* Sterilization Lot */
| SPM      /* Specimen */
| STF      /* Staff Identification */
| STZ      /* Sterilization Parameter */
| TCC      /* Test Code Configuration */
| TCD      /* Test Code Detail */
| TQ1      /* Timing/Quantity */
| TQ2      /* Timing/Quantity Relationship */
| TXA      /* Transcription Document Header */
| UAC      /* User Authentication Credential Segment */
| UB1      /* Uniform Billing Data 1 */
| UB2      /* Uniform Billing Data 2 */
| VAR      /* Variance */
| VND      /* Purchasing Vendor */
| ZL7      /* (proposed example only) */
```

/* Abstract */

```
ABS := ABS-1 F-SEP ABS-2 F-SEP ABS-3 F-SEP ABS-4 F-SEP ABS-5 F-SEP ABS-6 F-SEP
ABS-7 F-SEP ABS-8 F-SEP ABS-9 F-SEP ABS-10 F-SEP ABS-11 F-SEP ABS-12 F-SEP
ABS-13 F-SEP ABS-14
```

/* Accident */

```
ACC := ACC-1 F-SEP ACC-2 F-SEP ACC-3 F-SEP ACC-4 F-SEP ACC-5 F-SEP ACC-6 F-SEP
ACC-7 F-SEP ACC-8 F-SEP ACC-9 F-SEP ACC-10 F-SEP ACC-11 F-SEP ACC-12 F-SEP
ACC-13
```

/* Addendum */

```
ADD := ADD-1
```

/* Adjustment */

```
ADJ := ADJ-1 F-SEP ADJ-2 F-SEP ADJ-3 F-SEP ADJ-4 F-SEP ADJ-5 F-SEP ADJ-6 F-SEP
ADJ-7 F-SEP ADJ-8 F-SEP ADJ-9 F-SEP ADJ-10 F-SEP ADJ-11 F-SEP ADJ-12 F-SEP
ADJ-13 F-SEP ADJ-14 F-SEP ADJ-15
```

Appendix C: BNF Message Descriptions

```
/* Professional Affiliation */
AFF := AFF-1 F-SEP AFF-2 F-SEP AFF-3 F-SEP AFF-4 F-SEP AFF-5

/* Appointment Information - General Resource */
AIG := AIG-1 F-SEP AIG-2 F-SEP AIG-3 F-SEP AIG-4 F-SEP AIG-5 F-SEP AIG-6 F-SEP
AIG-7 F-SEP AIG-8 F-SEP AIG-9 F-SEP AIG-10 F-SEP AIG-11 F-SEP AIG-12 F-SEP
AIG-13 F-SEP AIG-14

/* Appointment Information - Location Resource */
AIL := AIL-1 F-SEP AIL-2 F-SEP AIL-3 F-SEP AIL-4 F-SEP AIL-5 F-SEP AIL-6 F-SEP
AIL-7 F-SEP AIL-8 F-SEP AIL-9 F-SEP AIL-10 F-SEP AIL-11 F-SEP AIL-12

/* Appointment Information - Personnel Resource */
AIP := AIP-1 F-SEP AIP-2 F-SEP AIP-3 F-SEP AIP-4 F-SEP AIP-5 F-SEP AIP-6 F-SEP
AIP-7 F-SEP AIP-8 F-SEP AIP-9 F-SEP AIP-10 F-SEP AIP-11 F-SEP AIP-12

/* Appointment Information */
AIS := AIS-1 F-SEP AIS-2 F-SEP AIS-3 F-SEP AIS-4 F-SEP AIS-5 F-SEP AIS-6 F-SEP
AIS-7 F-SEP AIS-8 F-SEP AIS-9 F-SEP AIS-10 F-SEP AIS-11 F-SEP AIS-12

/* Patient Allergy Information */
AL1 := AL1-1 F-SEP AL1-2 F-SEP AL1-3 F-SEP AL1-4 F-SEP AL1-5 F-SEP AL1-6

/* Appointment Preferences */
APR := APR-1 F-SEP APR-2 F-SEP APR-3 F-SEP APR-4 F-SEP APR-5

/* Appointment Request */
ARQ := ARQ-1 F-SEP ARQ-2 F-SEP ARQ-3 F-SEP ARQ-4 F-SEP ARQ-5 F-SEP ARQ-6 F-SEP
ARQ-7 F-SEP ARQ-8 F-SEP ARQ-9 F-SEP ARQ-10 F-SEP ARQ-11 F-SEP ARQ-12 F-SEP
ARQ-13 F-SEP ARQ-14 F-SEP ARQ-15 F-SEP ARQ-16 F-SEP ARQ-17 F-SEP ARQ-18 F-SEP
ARQ-19 F-SEP ARQ-20 F-SEP ARQ-21 F-SEP ARQ-22 F-SEP ARQ-23 F-SEP ARQ-24 F-SEP
ARQ-25 F-SEP ARQ-26

/* Access Restriction */
ARV := ARV-1 F-SEP ARV-2 F-SEP ARV-3 F-SEP ARV-4 F-SEP ARV-5 F-SEP ARV-6 F-SEP
ARV-7 F-SEP ARV-8 F-SEP ARV-9 F-SEP ARV-10

/* Authorization Information */
AUT := AUT-1 F-SEP AUT-2 F-SEP AUT-3 F-SEP AUT-4 F-SEP AUT-5 F-SEP AUT-6 F-SEP
AUT-7 F-SEP AUT-8 F-SEP AUT-9 F-SEP AUT-10 F-SEP AUT-11 F-SEP AUT-12 F-SEP
AUT-13 F-SEP AUT-14 F-SEP AUT-15 F-SEP AUT-16 F-SEP AUT-17 F-SEP AUT-18 F-SEP
AUT-19 F-SEP AUT-20 F-SEP AUT-21 F-SEP AUT-22 F-SEP AUT-23 F-SEP AUT-24 F-SEP
AUT-25 F-SEP AUT-26 F-SEP AUT-27 F-SEP AUT-28 F-SEP AUT-29

/* Batch Header */
```

```
BHS := BHS-1 F-SEP BHS-2 F-SEP BHS-3 F-SEP BHS-4 F-SEP BHS-5 F-SEP BHS-6 F-SEP
BHS-7 F-SEP BHS-8 F-SEP BHS-9 F-SEP BHS-10 F-SEP BHS-11 F-SEP BHS-12 F-SEP
BHS-13 F-SEP BHS-14 F-SEP BHS-15 F-SEP BHS-16 F-SEP BHS-17
```

```
/* Blood Code */
BLC := BLC-1 F-SEP BLC-2
```

```
/* Billing */
BLG := BLG-1 F-SEP BLG-2 F-SEP BLG-3 F-SEP BLG-4
```

```
/* Blood product order */
BPO := BPO-1 F-SEP BPO-2 F-SEP BPO-3 F-SEP BPO-4 F-SEP BPO-5 F-SEP BPO-6 F-SEP
BPO-7 F-SEP BPO-8 F-SEP BPO-9 F-SEP BPO-10 F-SEP BPO-11 F-SEP BPO-12 F-SEP
BPO-13 F-SEP BPO-14
```

```
/* Blood product dispense status */
BPX := BPX-1 F-SEP BPX-2 F-SEP BPX-3 F-SEP BPX-4 F-SEP BPX-5 F-SEP BPX-6 F-SEP
BPX-7 F-SEP BPX-8 F-SEP BPX-9 F-SEP BPX-10 F-SEP BPX-11 F-SEP BPX-12 F-SEP
BPX-13 F-SEP BPX-14 F-SEP BPX-15 F-SEP BPX-16 F-SEP BPX-17 F-SEP BPX-18 F-SEP
BPX-19 F-SEP BPX-20 F-SEP BPX-21 F-SEP BPX-22
```

```
/* Batch Trailer */
BTS := BTS-1 F-SEP BTS-2 F-SEP BTS-3
```

```
/* Blood Product Transfusion/Disposition */
BTX := BTX-1 F-SEP BTX-2 F-SEP BTX-3 F-SEP BTX-4 F-SEP BTX-5 F-SEP BTX-6 F-SEP
BTX-7 F-SEP BTX-8 F-SEP BTX-9 F-SEP BTX-10 F-SEP BTX-11 F-SEP BTX-12 F-SEP
BTX-13 F-SEP BTX-14 F-SEP BTX-15 F-SEP BTX-16 F-SEP BTX-17 F-SEP BTX-18 F-SEP
BTX-19 F-SEP BTX-20 F-SEP BTX-21
```

```
/* Blood Unit Information */
BUI := BUI-1 F-SEP BUI-2 F-SEP BUI-3 F-SEP BUI-4 F-SEP BUI-5 F-SEP BUI-6 F-SEP
BUI-7 F-SEP BUI-8 F-SEP BUI-9 F-SEP BUI-10 F-SEP BUI-11 F-SEP BUI-12 F-SEP
BUI-13
```

```
/* Charge Description Master */
CDM := CDM-1 F-SEP CDM-2 F-SEP CDM-3 F-SEP CDM-4 F-SEP CDM-5 F-SEP CDM-6 F-SEP
CDM-7 F-SEP CDM-8 F-SEP CDM-9 F-SEP CDM-10 F-SEP CDM-11 F-SEP CDM-12 F-SEP
CDM-13
```

```
/* Cumulative Dosage */
CDO := CDO-1 F-SEP CDO-2 F-SEP CDO-3 F-SEP CDO-4
```

```
/* Certificate Detail */
CER := CER-1 F-SEP CER-2 F-SEP CER-3 F-SEP CER-4 F-SEP CER-5 F-SEP CER-6 F-SEP
CER-7 F-SEP CER-8 F-SEP CER-9 F-SEP CER-10 F-SEP CER-11 F-SEP CER-12 F-SEP
```

Appendix C: BNF Message Descriptions

CER-13 F-SEP CER-14 F-SEP CER-15 F-SEP CER-16 F-SEP CER-17 F-SEP CER-18 F-SEP
CER-19 F-SEP CER-20 F-SEP CER-21 F-SEP CER-22 F-SEP CER-23 F-SEP CER-24 F-SEP
CER-25 F-SEP CER-26 F-SEP CER-27 F-SEP CER-28 F-SEP CER-29 F-SEP CER-30 F-SEP
CER-31

/* Clinical Study Master */
CM0 := CM0-1 F-SEP CM0-2 F-SEP CM0-3 F-SEP CM0-4 F-SEP CM0-5 F-SEP CM0-6 F-SEP
CM0-7 F-SEP CM0-8 F-SEP CM0-9 F-SEP CM0-10 F-SEP CM0-11

/* Clinical Study Phase Master */
CM1 := CM1-1 F-SEP CM1-2 F-SEP CM1-3

/* Clinical Study Schedule Master */
CM2 := CM2-1 F-SEP CM2-2 F-SEP CM2-3 F-SEP CM2-4

/* Clear Notification */
CNS := CNS-1 F-SEP CNS-2 F-SEP CNS-3 F-SEP CNS-4 F-SEP CNS-5 F-SEP CNS-6

/* Consent Segment */
CON := CON-1 F-SEP CON-2 F-SEP CON-3 F-SEP CON-4 F-SEP CON-5 F-SEP CON-6 F-SEP
CON-7 F-SEP CON-8 F-SEP CON-9 F-SEP CON-10 F-SEP CON-11 F-SEP CON-12 F-SEP
CON-13 F-SEP CON-14 F-SEP CON-15 F-SEP CON-16 F-SEP CON-17 F-SEP CON-18 F-SEP
CON-19 F-SEP CON-20 F-SEP CON-21 F-SEP CON-22 F-SEP CON-23 F-SEP CON-24 F-SEP
CON-25

/* Clinical Study Phase */
CSP := CSP-1 F-SEP CSP-2 F-SEP CSP-3 F-SEP CSP-4

/* Clinical Study Registration */
CSR := CSR-1 F-SEP CSR-2 F-SEP CSR-3 F-SEP CSR-4 F-SEP CSR-5 F-SEP CSR-6 F-SEP
CSR-7 F-SEP CSR-8 F-SEP CSR-9 F-SEP CSR-10 F-SEP CSR-11 F-SEP CSR-12 F-SEP
CSR-13 F-SEP CSR-14 F-SEP CSR-15 F-SEP CSR-16 F-SEP CSR-17

/* Clinical Study Data Schedule Segment */
CSS := CSS-1 F-SEP CSS-2 F-SEP CSS-3

/* Contact Data */
CTD := CTD-1 F-SEP CTD-2 F-SEP CTD-3 F-SEP CTD-4 F-SEP CTD-5 F-SEP CTD-6 F-SEP
CTD-7

/* Clinical Trial Identification */
CTI := CTI-1 F-SEP CTI-2 F-SEP CTI-3 F-SEP CTI-4

/* Contract Master Outbound */

```
CTR := CTR-1 F-SEP CTR-2 F-SEP CTR-3 F-SEP CTR-4 F-SEP CTR-5 F-SEP CTR-6 F-SEP
CTR-7 F-SEP CTR-8 F-SEP CTR-9 F-SEP CTR-10 F-SEP CTR-11 F-SEP CTR-12 F-SEP
CTR-13 F-SEP CTR-14 F-SEP CTR-15 F-SEP CTR-16 F-SEP CTR-17 F-SEP CTR-18 F-SEP
CTR-19 F-SEP CTR-20 F-SEP CTR-21
```

```
/* Disability */
DB1 := DB1-1 F-SEP DB1-2 F-SEP DB1-3 F-SEP DB1-4 F-SEP DB1-5 F-SEP DB1-6 F-SEP
DB1-7 F-SEP DB1-8
```

```
/* Device */
DEV := DEV-1 F-SEP DEV-2 F-SEP DEV-3 F-SEP DEV-4 F-SEP DEV-5 F-SEP DEV-6 F-SEP
DEV-7 F-SEP DEV-8 F-SEP DEV-9 F-SEP DEV-10 F-SEP DEV-11 F-SEP DEV-12 F-SEP
DEV-13 F-SEP DEV-14 F-SEP DEV-15 F-SEP DEV-16 F-SEP DEV-17
```

```
/* Diagnosis */
DG1 := DG1-1 F-SEP DG1-2 F-SEP DG1-3 F-SEP DG1-4 F-SEP DG1-5 F-SEP DG1-6 F-SEP
DG1-7 F-SEP DG1-8 F-SEP DG1-9 F-SEP DG1-10 F-SEP DG1-11 F-SEP DG1-12 F-SEP
DG1-13 F-SEP DG1-14 F-SEP DG1-15 F-SEP DG1-16 F-SEP DG1-17 F-SEP DG1-18 F-SEP
DG1-19 F-SEP DG1-20 F-SEP DG1-21 F-SEP DG1-22 F-SEP DG1-23 F-SEP DG1-24 F-SEP
DG1-25 F-SEP DG1-26
```

```
/* DRG Master File Information */
DMI := DMI-1 F-SEP DMI-2 F-SEP DMI-3 F-SEP DMI-4 F-SEP DMI-5
```

```
/* Donation */
DON := DON-1 F-SEP DON-2 F-SEP DON-3 F-SEP DON-4 F-SEP DON-5 F-SEP DON-6 F-SEP
DON-7 F-SEP DON-8 F-SEP DON-9 F-SEP DON-10 F-SEP DON-11 F-SEP DON-12 F-SEP
DON-13 F-SEP DON-14 F-SEP DON-15 F-SEP DON-16 F-SEP DON-17 F-SEP DON-18 F-SEP
DON-19 F-SEP DON-20 F-SEP DON-21 F-SEP DON-22 F-SEP DON-23 F-SEP DON-24 F-SEP
DON-25 F-SEP DON-26 F-SEP DON-27 F-SEP DON-28 F-SEP DON-29 F-SEP DON-30 F-SEP
DON-31 F-SEP DON-32 F-SEP DON-33 F-SEP DON-34
```

```
/* Diagnosis and Procedure Code Segment */
DPS := DPS-1 F-SEP DPS-2 F-SEP DPS-3 F-SEP DPS-4 F-SEP DPS-5
```

```
/* Diagnosis Related Group */
DRG := DRG-1 F-SEP DRG-2 F-SEP DRG-3 F-SEP DRG-4 F-SEP DRG-5 F-SEP DRG-6 F-SEP
DRG-7 F-SEP DRG-8 F-SEP DRG-9 F-SEP DRG-10 F-SEP DRG-11 F-SEP DRG-12 F-SEP
DRG-13 F-SEP DRG-14 F-SEP DRG-15 F-SEP DRG-16 F-SEP DRG-17 F-SEP DRG-18 F-SEP
DRG-19 F-SEP DRG-20 F-SEP DRG-21 F-SEP DRG-22 F-SEP DRG-23 F-SEP DRG-24 F-SEP
DRG-25 F-SEP DRG-26 F-SEP DRG-27 F-SEP DRG-28 F-SEP DRG-29 F-SEP DRG-30 F-SEP
DRG-31 F-SEP DRG-32 F-SEP DRG-33
```

```
/* Continuation Pointer */
DSC := DSC-1 F-SEP DSC-2
```

```
/* Display Data */
```

Appendix C: BNF Message Descriptions

DSP := DSP-1 F-SEP DSP-2 F-SEP DSP-3 F-SEP DSP-4 F-SEP DSP-5

/* Transport Destination */
DST := DST-1 F-SEP DST-2

/* Equipment Command */
ECD := ECD-1 F-SEP ECD-2 F-SEP ECD-3 F-SEP ECD-4 F-SEP ECD-5

/* Equipment Command Response */
ECR := ECR-1 F-SEP ECR-2 F-SEP ECR-3

/* Educational Detail */
EDU := EDU-1 F-SEP EDU-2 F-SEP EDU-3 F-SEP EDU-4 F-SEP EDU-5 F-SEP EDU-6 F-SEP
EDU-7 F-SEP EDU-8 F-SEP EDU-9

/* Equipment/log Service */
EQP := EQP-1 F-SEP EQP-2 F-SEP EQP-3 F-SEP EQP-4 F-SEP EQP-5

/* Equipment Detail */
EQU := EQU-1 F-SEP EQU-2 F-SEP EQU-3 F-SEP EQU-4 F-SEP EQU-5 F-SEP EQU-6

/* Error */
ERR := ERR-1 F-SEP ERR-2 F-SEP ERR-3 F-SEP ERR-4 F-SEP ERR-5 F-SEP ERR-6 F-SEP
ERR-7 F-SEP ERR-8 F-SEP ERR-9 F-SEP ERR-10 F-SEP ERR-11 F-SEP ERR-12

/* Event Type */
EVN := EVN-1 F-SEP EVN-2 F-SEP EVN-3 F-SEP EVN-4 F-SEP EVN-5 F-SEP EVN-6 F-SEP
EVN-7

/* Facility */
FAC := FAC-1 F-SEP FAC-2 F-SEP FAC-3 F-SEP FAC-4 F-SEP FAC-5 F-SEP FAC-6 F-SEP
FAC-7 F-SEP FAC-8 F-SEP FAC-9 F-SEP FAC-10 F-SEP FAC-11 F-SEP FAC-12

/* File Header */
FHS := FHS-1 F-SEP FHS-2 F-SEP FHS-3 F-SEP FHS-4 F-SEP FHS-5 F-SEP FHS-6 F-SEP
FHS-7 F-SEP FHS-8 F-SEP FHS-9 F-SEP FHS-10 F-SEP FHS-11 F-SEP FHS-12 F-SEP
FHS-13 F-SEP FHS-14 F-SEP FHS-15 F-SEP FHS-16 F-SEP FHS-17

/* Financial Transaction */
FT1 := FT1-1 F-SEP FT1-2 F-SEP FT1-3 F-SEP FT1-4 F-SEP FT1-5 F-SEP FT1-6 F-SEP
FT1-7 F-SEP FT1-8 F-SEP FT1-9 F-SEP FT1-10 F-SEP FT1-11 F-SEP FT1-12 F-SEP
FT1-13 F-SEP FT1-14 F-SEP FT1-15 F-SEP FT1-16 F-SEP FT1-17 F-SEP FT1-18 F-SEP
FT1-19 F-SEP FT1-20 F-SEP FT1-21 F-SEP FT1-22 F-SEP FT1-23 F-SEP FT1-24 F-SEP
FT1-25 F-SEP FT1-26 F-SEP FT1-27 F-SEP FT1-28 F-SEP FT1-29 F-SEP FT1-30 F-SEP
FT1-31 F-SEP FT1-32 F-SEP FT1-33 F-SEP FT1-34 F-SEP FT1-35 F-SEP FT1-36 F-SEP

FT1-37 F-SEP FT1-38 F-SEP FT1-39 F-SEP FT1-40 F-SEP FT1-41 F-SEP FT1-42 F-SEP
FT1-43 F-SEP FT1-44 F-SEP FT1-45 F-SEP FT1-46 F-SEP FT1-47 F-SEP FT1-48 F-SEP
FT1-49 F-SEP FT1-50 F-SEP FT1-51 F-SEP FT1-52 F-SEP FT1-53 F-SEP FT1-54 F-SEP
FT1-55 F-SEP FT1-56

/* File Trailer */
FTS := FTS-1 F-SEP FTS-2

/* Goal Detail */
GOL := GOL-1 F-SEP GOL-2 F-SEP GOL-3 F-SEP GOL-4 F-SEP GOL-5 F-SEP GOL-6 F-SEP
GOL-7 F-SEP GOL-8 F-SEP GOL-9 F-SEP GOL-10 F-SEP GOL-11 F-SEP GOL-12 F-SEP
GOL-13 F-SEP GOL-14 F-SEP GOL-15 F-SEP GOL-16 F-SEP GOL-17 F-SEP GOL-18 F-SEP
GOL-19 F-SEP GOL-20 F-SEP GOL-21 F-SEP GOL-22

/* Grouping/Reimbursement - Visit */
GP1 := GP1-1 F-SEP GP1-2 F-SEP GP1-3 F-SEP GP1-4 F-SEP GP1-5

/* Grouping/Reimbursement - Procedure Line Item */
GP2 := GP2-1 F-SEP GP2-2 F-SEP GP2-3 F-SEP GP2-4 F-SEP GP2-5 F-SEP GP2-6 F-SEP
GP2-7 F-SEP GP2-8 F-SEP GP2-9 F-SEP GP2-10 F-SEP GP2-11 F-SEP GP2-12 F-SEP
GP2-13 F-SEP GP2-14

/* Sex Parameter for Clinical Use */
GSC := GSC-1 F-SEP GSC-2 F-SEP GSC-3 F-SEP GSC-4 F-SEP GSC-5 F-SEP GSC-6 F-SEP
GSC-7 F-SEP GSC-8

/* Person Gender and Sex */
GSP := GSP-1 F-SEP GSP-2 F-SEP GSP-3 F-SEP GSP-4 F-SEP GSP-5 F-SEP GSP-6 F-SEP
GSP-7

/* Recorded Gender and Sex */
GSR := GSR-1 F-SEP GSR-2 F-SEP GSR-3 F-SEP GSR-4 F-SEP GSR-5 F-SEP GSR-6 F-SEP
GSR-7 F-SEP GSR-8 F-SEP GSR-9 F-SEP GSR-10

/* Guarantor */
GT1 := GT1-1 F-SEP GT1-2 F-SEP GT1-3 F-SEP GT1-4 F-SEP GT1-5 F-SEP GT1-6 F-SEP
GT1-7 F-SEP GT1-8 F-SEP GT1-9 F-SEP GT1-10 F-SEP GT1-11 F-SEP GT1-12 F-SEP
GT1-13 F-SEP GT1-14 F-SEP GT1-15 F-SEP GT1-16 F-SEP GT1-17 F-SEP GT1-18 F-SEP
GT1-19 F-SEP GT1-20 F-SEP GT1-21 F-SEP GT1-22 F-SEP GT1-23 F-SEP GT1-24 F-SEP
GT1-25 F-SEP GT1-26 F-SEP GT1-27 F-SEP GT1-28 F-SEP GT1-29 F-SEP GT1-30 F-SEP
GT1-31 F-SEP GT1-32 F-SEP GT1-33 F-SEP GT1-34 F-SEP GT1-35 F-SEP GT1-36 F-SEP
GT1-37 F-SEP GT1-38 F-SEP GT1-39 F-SEP GT1-40 F-SEP GT1-41 F-SEP GT1-42 F-SEP
GT1-43 F-SEP GT1-44 F-SEP GT1-45 F-SEP GT1-46 F-SEP GT1-47 F-SEP GT1-48 F-SEP
GT1-49 F-SEP GT1-50 F-SEP GT1-51 F-SEP GT1-52 F-SEP GT1-53 F-SEP GT1-54 F-SEP
GT1-55 F-SEP GT1-56 F-SEP GT1-57

/* Patient Adverse Reaction Information */

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```
IAM := IAM-1 F-SEP IAM-2 F-SEP IAM-3 F-SEP IAM-4 F-SEP IAM-5 F-SEP IAM-6 F-SEP  
IAM-7 F-SEP IAM-8 F-SEP IAM-9 F-SEP IAM-10 F-SEP IAM-11 F-SEP IAM-12 F-SEP  
IAM-13 F-SEP IAM-14 F-SEP IAM-15 F-SEP IAM-16 F-SEP IAM-17 F-SEP IAM-18 F-SEP  
IAM-19 F-SEP IAM-20 F-SEP IAM-21 F-SEP IAM-22 F-SEP IAM-23 F-SEP IAM-24 F-SEP  
IAM-25 F-SEP IAM-26 F-SEP IAM-27 F-SEP IAM-28 F-SEP IAM-29 F-SEP IAM-30
```

```
/* allergy reaction */  
IAR := IAR-1 F-SEP IAR-2 F-SEP IAR-3 F-SEP IAR-4
```

```
/* Inventory Item Master */  
IIM := IIM-1 F-SEP IIM-2 F-SEP IIM-3 F-SEP IIM-4 F-SEP IIM-5 F-SEP IIM-6 F-SEP  
IIM-7 F-SEP IIM-8 F-SEP IIM-9 F-SEP IIM-10 F-SEP IIM-11 F-SEP IIM-12 F-SEP  
IIM-13 F-SEP IIM-14 F-SEP IIM-15
```

```
/* Material Lot */  
ILT := ILT-1 F-SEP ILT-2 F-SEP ILT-3 F-SEP ILT-4 F-SEP ILT-5 F-SEP ILT-6 F-SEP  
ILT-7 F-SEP ILT-8 F-SEP ILT-9 F-SEP ILT-10
```

```
/* Insurance */  
IN1 := IN1-1 F-SEP IN1-2 F-SEP IN1-3 F-SEP IN1-4 F-SEP IN1-5 F-SEP IN1-6 F-SEP  
IN1-7 F-SEP IN1-8 F-SEP IN1-9 F-SEP IN1-10 F-SEP IN1-11 F-SEP IN1-12 F-SEP  
IN1-13 F-SEP IN1-14 F-SEP IN1-15 F-SEP IN1-16 F-SEP IN1-17 F-SEP IN1-18 F-SEP  
IN1-19 F-SEP IN1-20 F-SEP IN1-21 F-SEP IN1-22 F-SEP IN1-23 F-SEP IN1-24 F-SEP  
IN1-25 F-SEP IN1-26 F-SEP IN1-27 F-SEP IN1-28 F-SEP IN1-29 F-SEP IN1-30 F-SEP  
IN1-31 F-SEP IN1-32 F-SEP IN1-33 F-SEP IN1-34 F-SEP IN1-35 F-SEP IN1-36 F-SEP  
IN1-37 F-SEP IN1-38 F-SEP IN1-39 F-SEP IN1-40 F-SEP IN1-41 F-SEP IN1-42 F-SEP  
IN1-43 F-SEP IN1-44 F-SEP IN1-45 F-SEP IN1-46 F-SEP IN1-47 F-SEP IN1-48 F-SEP  
IN1-49 F-SEP IN1-50 F-SEP IN1-51 F-SEP IN1-52 F-SEP IN1-53 F-SEP IN1-54 F-SEP  
IN1-55 F-SEP IN1-56
```

```
/* Insurance Additional Information */  
IN2 := IN2-1 F-SEP IN2-2 F-SEP IN2-3 F-SEP IN2-4 F-SEP IN2-5 F-SEP IN2-6 F-SEP  
IN2-7 F-SEP IN2-8 F-SEP IN2-9 F-SEP IN2-10 F-SEP IN2-11 F-SEP IN2-12 F-SEP  
IN2-13 F-SEP IN2-14 F-SEP IN2-15 F-SEP IN2-16 F-SEP IN2-17 F-SEP IN2-18 F-SEP  
IN2-19 F-SEP IN2-20 F-SEP IN2-21 F-SEP IN2-22 F-SEP IN2-23 F-SEP IN2-24 F-SEP  
IN2-25 F-SEP IN2-26 F-SEP IN2-27 F-SEP IN2-28 F-SEP IN2-29 F-SEP IN2-30 F-SEP  
IN2-31 F-SEP IN2-32 F-SEP IN2-33 F-SEP IN2-34 F-SEP IN2-35 F-SEP IN2-36 F-SEP  
IN2-37 F-SEP IN2-38 F-SEP IN2-39 F-SEP IN2-40 F-SEP IN2-41 F-SEP IN2-42 F-SEP  
IN2-43 F-SEP IN2-44 F-SEP IN2-45 F-SEP IN2-46 F-SEP IN2-47 F-SEP IN2-48 F-SEP  
IN2-49 F-SEP IN2-50 F-SEP IN2-51 F-SEP IN2-52 F-SEP IN2-53 F-SEP IN2-54 F-SEP  
IN2-55 F-SEP IN2-56 F-SEP IN2-57 F-SEP IN2-58 F-SEP IN2-59 F-SEP IN2-60 F-SEP  
IN2-61 F-SEP IN2-62 F-SEP IN2-63 F-SEP IN2-64 F-SEP IN2-65 F-SEP IN2-66 F-SEP  
IN2-67 F-SEP IN2-68 F-SEP IN2-69 F-SEP IN2-70 F-SEP IN2-71 F-SEP IN2-72 F-SEP  
IN2-73
```

```
/* Insurance Additional Information, Certification */  
IN3 := IN3-1 F-SEP IN3-2 F-SEP IN3-3 F-SEP IN3-4 F-SEP IN3-5 F-SEP IN3-6 F-SEP  
IN3-7 F-SEP IN3-8 F-SEP IN3-9 F-SEP IN3-10 F-SEP IN3-11 F-SEP IN3-12 F-SEP  
IN3-13 F-SEP IN3-14 F-SEP IN3-15 F-SEP IN3-16 F-SEP IN3-17 F-SEP IN3-18 F-SEP  
IN3-19 F-SEP IN3-20 F-SEP IN3-21 F-SEP IN3-22 F-SEP IN3-23 F-SEP IN3-24 F-SEP
```


IN3-25 F-SEP IN3-26 F-SEP IN3-27 F-SEP IN3-28 F-SEP IN3-29 F-SEP IN3-30 F-SEP
IN3-31

/* Inventory Detail */
INV := INV-1 F-SEP INV-2 F-SEP INV-3 F-SEP INV-4 F-SEP INV-5 F-SEP INV-6 F-SEP
INV-7 F-SEP INV-8 F-SEP INV-9 F-SEP INV-10 F-SEP INV-11 F-SEP INV-12 F-SEP
INV-13 F-SEP INV-14 F-SEP INV-15 F-SEP INV-16 F-SEP INV-17 F-SEP INV-18 F-SEP
INV-19 F-SEP INV-20 F-SEP INV-21 F-SEP INV-22

/* Imaging Procedure Control Segment */
IPC := IPC-1 F-SEP IPC-2 F-SEP IPC-3 F-SEP IPC-4 F-SEP IPC-5 F-SEP IPC-6 F-SEP
IPC-7 F-SEP IPC-8 F-SEP IPC-9 F-SEP IPC-10

/* Invoice Processing Results */
IPR := IPR-1 F-SEP IPR-2 F-SEP IPR-3 F-SEP IPR-4 F-SEP IPR-5 F-SEP IPR-6 F-SEP
IPR-7 F-SEP IPR-8

/* Interaction Status Detail */
ISD := ISD-1 F-SEP ISD-2 F-SEP ISD-3

/* Material Item */
ITM := ITM-1 F-SEP ITM-2 F-SEP ITM-3 F-SEP ITM-4 F-SEP ITM-5 F-SEP ITM-6 F-SEP
ITM-7 F-SEP ITM-8 F-SEP ITM-9 F-SEP ITM-10 F-SEP ITM-11 F-SEP ITM-12 F-SEP
ITM-13 F-SEP ITM-14 F-SEP ITM-15 F-SEP ITM-16 F-SEP ITM-17 F-SEP ITM-18 F-SEP
ITM-19 F-SEP ITM-20 F-SEP ITM-21 F-SEP ITM-22 F-SEP ITM-23 F-SEP ITM-24 F-SEP
ITM-25 F-SEP ITM-26 F-SEP ITM-27 F-SEP ITM-28 F-SEP ITM-29 F-SEP ITM-30 F-SEP
ITM-31 F-SEP ITM-32 F-SEP ITM-33 F-SEP ITM-34 F-SEP ITM-35 F-SEP ITM-36 F-SEP
ITM-37 F-SEP ITM-38

/* Invoice Segment */
IVC := IVC-1 F-SEP IVC-2 F-SEP IVC-3 F-SEP IVC-4 F-SEP IVC-5 F-SEP IVC-6 F-SEP
IVC-7 F-SEP IVC-8 F-SEP IVC-9 F-SEP IVC-10 F-SEP IVC-11 F-SEP IVC-12 F-SEP
IVC-13 F-SEP IVC-14 F-SEP IVC-15 F-SEP IVC-16 F-SEP IVC-17 F-SEP IVC-18 F-SEP
IVC-19 F-SEP IVC-20 F-SEP IVC-21 F-SEP IVC-22 F-SEP IVC-23 F-SEP IVC-24 F-SEP
IVC-25 F-SEP IVC-26 F-SEP IVC-27 F-SEP IVC-28 F-SEP IVC-29 F-SEP IVC-30

/* Material Location */
IVT := IVT-1 F-SEP IVT-2 F-SEP IVT-3 F-SEP IVT-4 F-SEP IVT-5 F-SEP IVT-6 F-SEP
IVT-7 F-SEP IVT-8 F-SEP IVT-9 F-SEP IVT-10 F-SEP IVT-11 F-SEP IVT-12 F-SEP
IVT-13 F-SEP IVT-14 F-SEP IVT-15 F-SEP IVT-16 F-SEP IVT-17 F-SEP IVT-18 F-SEP
IVT-19 F-SEP IVT-20 F-SEP IVT-21 F-SEP IVT-22 F-SEP IVT-23 F-SEP IVT-24 F-SEP
IVT-25 F-SEP IVT-26

/* Language Detail */
LAN := LAN-1 F-SEP LAN-2 F-SEP LAN-3 F-SEP LAN-4

/* Location Charge Code */

Appendix C: BNF Message Descriptions

LCC := LCC-1 F-SEP LCC-2 F-SEP LCC-3 F-SEP LCC-4

/* Location Characteristic */

LCH := LCH-1 F-SEP LCH-2 F-SEP LCH-3 F-SEP LCH-4 F-SEP LCH-5

/* Location Department */

LDP := LDP-1 F-SEP LDP-2 F-SEP LDP-3 F-SEP LDP-4 F-SEP LDP-5 F-SEP LDP-6 F-SEP
LDP-7 F-SEP LDP-8 F-SEP LDP-9 F-SEP LDP-10 F-SEP LDP-11 F-SEP LDP-12

/* Location Identification */

LOC := LOC-1 F-SEP LOC-2 F-SEP LOC-3 F-SEP LOC-4 F-SEP LOC-5 F-SEP LOC-6 F-SEP
LOC-7 F-SEP LOC-8 F-SEP LOC-9

/* Location Relationship */

LRL := LRL-1 F-SEP LRL-2 F-SEP LRL-3 F-SEP LRL-4 F-SEP LRL-5 F-SEP LRL-6

/* Master File Coverage */

MCP := MCP-1 F-SEP MCP-2 F-SEP MCP-3 F-SEP MCP-4 F-SEP MCP-5

/* Master File Acknowledgment */

MFA := MFA-1 F-SEP MFA-2 F-SEP MFA-3 F-SEP MFA-4 F-SEP MFA-5 F-SEP MFA-6

/* Master File Entry */

MFE := MFE-1 F-SEP MFE-2 F-SEP MFE-3 F-SEP MFE-4 F-SEP MFE-5 F-SEP MFE-6 F-SEP
MFE-7

/* Master File Identification */

MFI := MFI-1 F-SEP MFI-2 F-SEP MFI-3 F-SEP MFI-4 F-SEP MFI-5 F-SEP MFI-6

/* Merge Patient Information */

MRG := MRG-1 F-SEP MRG-2 F-SEP MRG-3 F-SEP MRG-4 F-SEP MRG-5 F-SEP MRG-6 F-SEP
MRG-7

/* Message Acknowledgment */

MSA := MSA-1 F-SEP MSA-2 F-SEP MSA-3 F-SEP MSA-4 F-SEP MSA-5 F-SEP MSA-6 F-SEP
MSA-7 F-SEP MSA-8

/* Message Header */

MSH := MSH-1 F-SEP MSH-2 F-SEP MSH-3 F-SEP MSH-4 F-SEP MSH-5 F-SEP MSH-6 F-SEP
MSH-7 F-SEP MSH-8 F-SEP MSH-9 F-SEP MSH-10 F-SEP MSH-11 F-SEP MSH-12 F-SEP
MSH-13 F-SEP MSH-14 F-SEP MSH-15 F-SEP MSH-16 F-SEP MSH-17 F-SEP MSH-18 F-SEP
MSH-19 F-SEP MSH-20 F-SEP MSH-21 F-SEP MSH-22 F-SEP MSH-23 F-SEP MSH-24 F-SEP
MSH-25 F-SEP MSH-26 F-SEP MSH-27 F-SEP MSH-28

```
/* System Clock */
NCK := NCK-1
```

```
/* Notification Detail */
NDS := NDS-1 F-SEP NDS-2 F-SEP NDS-3 F-SEP NDS-4
```

```
/* Next of Kin / Associated Parties */
NK1 := NK1-1 F-SEP NK1-2 F-SEP NK1-3 F-SEP NK1-4 F-SEP NK1-5 F-SEP NK1-6 F-SEP
NK1-7 F-SEP NK1-8 F-SEP NK1-9 F-SEP NK1-10 F-SEP NK1-11 F-SEP NK1-12 F-SEP
NK1-13 F-SEP NK1-14 F-SEP NK1-15 F-SEP NK1-16 F-SEP NK1-17 F-SEP NK1-18 F-SEP
NK1-19 F-SEP NK1-20 F-SEP NK1-21 F-SEP NK1-22 F-SEP NK1-23 F-SEP NK1-24 F-SEP
NK1-25 F-SEP NK1-26 F-SEP NK1-27 F-SEP NK1-28 F-SEP NK1-29 F-SEP NK1-30 F-SEP
NK1-31 F-SEP NK1-32 F-SEP NK1-33 F-SEP NK1-34 F-SEP NK1-35 F-SEP NK1-36 F-SEP
NK1-37 F-SEP NK1-38 F-SEP NK1-39 F-SEP NK1-40 F-SEP NK1-41
```

```
/* Bed Status Update */
NPU := NPU-1 F-SEP NPU-2
```

```
/* Application Status Change */
NSC := NSC-1 F-SEP NSC-2 F-SEP NSC-3 F-SEP NSC-4 F-SEP NSC-5 F-SEP NSC-6 F-SEP
NSC-7 F-SEP NSC-8 F-SEP NSC-9
```

```
/* Application control level statistics */
NST := NST-1 F-SEP NST-2 F-SEP NST-3 F-SEP NST-4 F-SEP NST-5 F-SEP NST-6 F-SEP
NST-7 F-SEP NST-8 F-SEP NST-9 F-SEP NST-10 F-SEP NST-11 F-SEP NST-12 F-SEP
NST-13 F-SEP NST-14 F-SEP NST-15
```

```
/* Notes and Comments */
NTE := NTE-1 F-SEP NTE-2 F-SEP NTE-3 F-SEP NTE-4 F-SEP NTE-5 F-SEP NTE-6 F-SEP
NTE-7 F-SEP NTE-8 F-SEP NTE-9
```

```
/* Observation Request */
OBR := OBR-1 F-SEP OBR-2 F-SEP OBR-3 F-SEP OBR-4 F-SEP OBR-5 F-SEP OBR-6 F-SEP
OBR-7 F-SEP OBR-8 F-SEP OBR-9 F-SEP OBR-10 F-SEP OBR-11 F-SEP OBR-12 F-SEP
OBR-13 F-SEP OBR-14 F-SEP OBR-15 F-SEP OBR-16 F-SEP OBR-17 F-SEP OBR-18 F-SEP
OBR-19 F-SEP OBR-20 F-SEP OBR-21 F-SEP OBR-22 F-SEP OBR-23 F-SEP OBR-24 F-SEP
OBR-25 F-SEP OBR-26 F-SEP OBR-27 F-SEP OBR-28 F-SEP OBR-29 F-SEP OBR-30 F-SEP
OBR-31 F-SEP OBR-32 F-SEP OBR-33 F-SEP OBR-34 F-SEP OBR-35 F-SEP OBR-36 F-SEP
OBR-37 F-SEP OBR-38 F-SEP OBR-39 F-SEP OBR-40 F-SEP OBR-41 F-SEP OBR-42 F-SEP
OBR-43 F-SEP OBR-44 F-SEP OBR-45 F-SEP OBR-46 F-SEP OBR-47 F-SEP OBR-48 F-SEP
OBR-49 F-SEP OBR-50 F-SEP OBR-51 F-SEP OBR-52 F-SEP OBR-53 F-SEP OBR-54 F-SEP
OBR-55
```

```
/* Observation/Result */
OBX := OBX-1 F-SEP OBX-2 F-SEP OBX-3 F-SEP OBX-4 F-SEP OBX-5 F-SEP OBX-6 F-SEP
OBX-7 F-SEP OBX-8 F-SEP OBX-9 F-SEP OBX-10 F-SEP OBX-11 F-SEP OBX-12 F-SEP
OBX-13 F-SEP OBX-14 F-SEP OBX-15 F-SEP OBX-16 F-SEP OBX-17 F-SEP OBX-18 F-SEP
OBX-19 F-SEP OBX-20 F-SEP OBX-21 F-SEP OBX-22 F-SEP OBX-23 F-SEP OBX-24 F-SEP
```

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OBX-25 F-SEP OBX-26 F-SEP OBX-27 F-SEP OBX-28 F-SEP OBX-29 F-SEP OBX-30 F-SEP
OBX-31 F-SEP OBX-32 F-SEP OBX-33

/* Dietary Orders, Supplements, and Preferences */
ODS := ODS-1 F-SEP ODS-2 F-SEP ODS-3 F-SEP ODS-4

/* Diet Tray Instructions */
ODT := ODT-1 F-SEP ODT-2 F-SEP ODT-3

/* Person Employment Status */
OH1 := OH1-1 F-SEP OH1-2 F-SEP OH1-3 F-SEP OH1-4 F-SEP OH1-5 F-SEP OH1-6 F-SEP
OH1-7

/* Past or Present Job */
OH2 := OH2-1 F-SEP OH2-2 F-SEP OH2-3 F-SEP OH2-4 F-SEP OH2-5 F-SEP OH2-6 F-SEP
OH2-7 F-SEP OH2-8 F-SEP OH2-9 F-SEP OH2-10 F-SEP OH2-11 F-SEP OH2-12 F-SEP
OH2-13 F-SEP OH2-14 F-SEP OH2-15 F-SEP OH2-16 F-SEP OH2-17 F-SEP OH2-18

/* Usual Work */
OH3 := OH3-1 F-SEP OH3-2 F-SEP OH3-3 F-SEP OH3-4 F-SEP OH3-5 F-SEP OH3-6 F-SEP
OH3-7 F-SEP OH3-8

/* Combat Zone Work */
OH4 := OH4-1 F-SEP OH4-2 F-SEP OH4-3 F-SEP OH4-4 F-SEP OH4-5 F-SEP OH4-6

/* General Segment */
OM1 := OM1-1 F-SEP OM1-2 F-SEP OM1-3 F-SEP OM1-4 F-SEP OM1-5 F-SEP OM1-6 F-SEP
OM1-7 F-SEP OM1-8 F-SEP OM1-9 F-SEP OM1-10 F-SEP OM1-11 F-SEP OM1-12 F-SEP
OM1-13 F-SEP OM1-14 F-SEP OM1-15 F-SEP OM1-16 F-SEP OM1-17 F-SEP OM1-18 F-SEP
OM1-19 F-SEP OM1-20 F-SEP OM1-21 F-SEP OM1-22 F-SEP OM1-23 F-SEP OM1-24 F-SEP
OM1-25 F-SEP OM1-26 F-SEP OM1-27 F-SEP OM1-28 F-SEP OM1-29 F-SEP OM1-30 F-SEP
OM1-31 F-SEP OM1-32 F-SEP OM1-33 F-SEP OM1-34 F-SEP OM1-35 F-SEP OM1-36 F-SEP
OM1-37 F-SEP OM1-38 F-SEP OM1-39 F-SEP OM1-40 F-SEP OM1-41 F-SEP OM1-42 F-SEP
OM1-43 F-SEP OM1-44 F-SEP OM1-45 F-SEP OM1-46 F-SEP OM1-47 F-SEP OM1-48 F-SEP
OM1-49 F-SEP OM1-50 F-SEP OM1-51 F-SEP OM1-52 F-SEP OM1-53 F-SEP OM1-54 F-SEP
OM1-55 F-SEP OM1-56 F-SEP OM1-57 F-SEP OM1-58 F-SEP OM1-59

/* Numeric Observation */
OM2 := OM2-1 F-SEP OM2-2 F-SEP OM2-3 F-SEP OM2-4 F-SEP OM2-5 F-SEP OM2-6 F-SEP
OM2-7 F-SEP OM2-8 F-SEP OM2-9 F-SEP OM2-10

/* Categorical Service/Test/Observation */
OM3 := OM3-1 F-SEP OM3-2 F-SEP OM3-3 F-SEP OM3-4 F-SEP OM3-5 F-SEP OM3-6 F-SEP
OM3-7

/* Observations that Require Specimens */

```
OM4 := OM4-1 F-SEP OM4-2 F-SEP OM4-3 F-SEP OM4-4 F-SEP OM4-5 F-SEP OM4-6 F-SEP
OM4-7 F-SEP OM4-8 F-SEP OM4-9 F-SEP OM4-10 F-SEP OM4-11 F-SEP OM4-12 F-SEP
OM4-13 F-SEP OM4-14 F-SEP OM4-15 F-SEP OM4-16 F-SEP OM4-17 F-SEP OM4-18
```

```
/* Observation Batteries (Sets) */
```

```
OM5 := OM5-1 F-SEP OM5-2 F-SEP OM5-3
```

```
/* Observations that are Calculated from Other Observations */
```

```
OM6 := OM6-1 F-SEP OM6-2
```

```
/* Additional Basic Attributes */
```

```
OM7 := OM7-1 F-SEP OM7-2 F-SEP OM7-3 F-SEP OM7-4 F-SEP OM7-5 F-SEP OM7-6 F-SEP
OM7-7 F-SEP OM7-8 F-SEP OM7-9 F-SEP OM7-10 F-SEP OM7-11 F-SEP OM7-12 F-SEP
OM7-13 F-SEP OM7-14 F-SEP OM7-15 F-SEP OM7-16 F-SEP OM7-17 F-SEP OM7-18 F-SEP
OM7-19 F-SEP OM7-20 F-SEP OM7-21 F-SEP OM7-22 F-SEP OM7-23 F-SEP OM7-24
```

```
/* Supporting Clinical Information */
```

```
OMC := OMC-1 F-SEP OMC-2 F-SEP OMC-3 F-SEP OMC-4 F-SEP OMC-5 F-SEP OMC-6 F-SEP
OMC-7 F-SEP OMC-8 F-SEP OMC-9 F-SEP OMC-10 F-SEP OMC-11 F-SEP OMC-12 F-SEP
OMC-13
```

```
/* Common Order */
```

```
ORC := ORC-1 F-SEP ORC-2 F-SEP ORC-3 F-SEP ORC-4 F-SEP ORC-5 F-SEP ORC-6 F-SEP
ORC-7 F-SEP ORC-8 F-SEP ORC-9 F-SEP ORC-10 F-SEP ORC-11 F-SEP ORC-12 F-SEP
ORC-13 F-SEP ORC-14 F-SEP ORC-15 F-SEP ORC-16 F-SEP ORC-17 F-SEP ORC-18 F-SEP
ORC-19 F-SEP ORC-20 F-SEP ORC-21 F-SEP ORC-22 F-SEP ORC-23 F-SEP ORC-24 F-SEP
ORC-25 F-SEP ORC-26 F-SEP ORC-27 F-SEP ORC-28 F-SEP ORC-29 F-SEP ORC-30 F-SEP
ORC-31 F-SEP ORC-32 F-SEP ORC-33 F-SEP ORC-34 F-SEP ORC-35 F-SEP ORC-36 F-SEP
ORC-37 F-SEP ORC-38
```

```
/* Practitioner Organization Unit */
```

```
ORG := ORG-1 F-SEP ORG-2 F-SEP ORG-3 F-SEP ORG-4 F-SEP ORG-5 F-SEP ORG-6 F-SEP
ORG-7 F-SEP ORG-8 F-SEP ORG-9 F-SEP ORG-10 F-SEP ORG-11 F-SEP ORG-12 F-SEP
ORG-13
```

```
/* Override Segment */
```

```
OVR := OVR-1 F-SEP OVR-2 F-SEP OVR-3 F-SEP OVR-4 F-SEP OVR-5
```

```
/* Shipment Package */
```

```
PAC := PAC-1 F-SEP PAC-2 F-SEP PAC-3 F-SEP PAC-4 F-SEP PAC-5 F-SEP PAC-6 F-SEP
PAC-7 F-SEP PAC-8 F-SEP PAC-9
```

```
/* Patient Charge Cost Center Exceptions */
```

```
PCE := PCE-1 F-SEP PCE-2 F-SEP PCE-3 F-SEP PCE-4
```

```
/* Possible Causal Relationship */
```

Appendix C: BNF Message Descriptions

PCR := PCR-1 F-SEP PCR-2 F-SEP PCR-3 F-SEP PCR-4 F-SEP PCR-5 F-SEP PCR-6 F-SEP
PCR-7 F-SEP PCR-8 F-SEP PCR-9 F-SEP PCR-10 F-SEP PCR-11 F-SEP PCR-12 F-SEP
PCR-13 F-SEP PCR-14 F-SEP PCR-15 F-SEP PCR-16 F-SEP PCR-17 F-SEP PCR-18 F-SEP
PCR-19 F-SEP PCR-20 F-SEP PCR-21 F-SEP PCR-22 F-SEP PCR-23

/* Patient Additional Demographic */
PD1 := PD1-1 F-SEP PD1-2 F-SEP PD1-3 F-SEP PD1-4 F-SEP PD1-5 F-SEP PD1-6 F-SEP
PD1-7 F-SEP PD1-8 F-SEP PD1-9 F-SEP PD1-10 F-SEP PD1-11 F-SEP PD1-12 F-SEP
PD1-13 F-SEP PD1-14 F-SEP PD1-15 F-SEP PD1-16 F-SEP PD1-17 F-SEP PD1-18 F-SEP
PD1-19 F-SEP PD1-20 F-SEP PD1-21 F-SEP PD1-22 F-SEP PD1-23

/* Patient Death and Autopsy */
PDA := PDA-1 F-SEP PDA-2 F-SEP PDA-3 F-SEP PDA-4 F-SEP PDA-5 F-SEP PDA-6 F-SEP
PDA-7 F-SEP PDA-8 F-SEP PDA-9

/* Product Detail Country */
PDC := PDC-1 F-SEP PDC-2 F-SEP PDC-3 F-SEP PDC-4 F-SEP PDC-5 F-SEP PDC-6 F-SEP
PDC-7 F-SEP PDC-8 F-SEP PDC-9 F-SEP PDC-10 F-SEP PDC-11 F-SEP PDC-12 F-SEP
PDC-13 F-SEP PDC-14 F-SEP PDC-15

/* Product Experience Observation */
PEO := PEO-1 F-SEP PEO-2 F-SEP PEO-3 F-SEP PEO-4 F-SEP PEO-5 F-SEP PEO-6 F-SEP
PEO-7 F-SEP PEO-8 F-SEP PEO-9 F-SEP PEO-10 F-SEP PEO-11 F-SEP PEO-12 F-SEP
PEO-13 F-SEP PEO-14 F-SEP PEO-15 F-SEP PEO-16 F-SEP PEO-17 F-SEP PEO-18 F-SEP
PEO-19 F-SEP PEO-20 F-SEP PEO-21 F-SEP PEO-22 F-SEP PEO-23 F-SEP PEO-24 F-SEP
PEO-25

/* Product Experience Sender */
PES := PES-1 F-SEP PES-2 F-SEP PES-3 F-SEP PES-4 F-SEP PES-5 F-SEP PES-6 F-SEP
PES-7 F-SEP PES-8 F-SEP PES-9 F-SEP PES-10 F-SEP PES-11 F-SEP PES-12 F-SEP
PES-13

/* Patient Identification */
PID := PID-1 F-SEP PID-2 F-SEP PID-3 F-SEP PID-4 F-SEP PID-5 F-SEP PID-6 F-SEP
PID-7 F-SEP PID-8 F-SEP PID-9 F-SEP PID-10 F-SEP PID-11 F-SEP PID-12 F-SEP
PID-13 F-SEP PID-14 F-SEP PID-15 F-SEP PID-16 F-SEP PID-17 F-SEP PID-18 F-SEP
PID-19 F-SEP PID-20 F-SEP PID-21 F-SEP PID-22 F-SEP PID-23 F-SEP PID-24 F-SEP
PID-25 F-SEP PID-26 F-SEP PID-27 F-SEP PID-28 F-SEP PID-29 F-SEP PID-30 F-SEP
PID-31 F-SEP PID-32 F-SEP PID-33 F-SEP PID-34 F-SEP PID-35 F-SEP PID-36 F-SEP
PID-37 F-SEP PID-38 F-SEP PID-39 F-SEP PID-40

/* Item Packaging */
PKG := PKG-1 F-SEP PKG-2 F-SEP PKG-3 F-SEP PKG-4 F-SEP PKG-5 F-SEP PKG-6 F-SEP
PKG-7 F-SEP PKG-8 F-SEP PKG-9 F-SEP PKG-10 F-SEP PKG-11

/* Payer Master File */
PM1 := PM1-1 F-SEP PM1-2 F-SEP PM1-3 F-SEP PM1-4 F-SEP PM1-5 F-SEP PM1-6 F-SEP
PM1-7 F-SEP PM1-8 F-SEP PM1-9 F-SEP PM1-10 F-SEP PM1-11 F-SEP PM1-12 F-SEP

PM1-13 F-SEP PM1-14 F-SEP PM1-15 F-SEP PM1-16 F-SEP PM1-17 F-SEP PM1-18 F-SEP
PM1-19 F-SEP PM1-20 F-SEP PM1-21 F-SEP PM1-22 F-SEP PM1-23 F-SEP PM1-24

/* Payment Information */
PMT := PMT-1 F-SEP PMT-2 F-SEP PMT-3 F-SEP PMT-4 F-SEP PMT-5 F-SEP PMT-6 F-SEP
PMT-7 F-SEP PMT-8 F-SEP PMT-9 F-SEP PMT-10 F-SEP PMT-11 F-SEP PMT-12

/* Procedures */
PR1 := PR1-1 F-SEP PR1-2 F-SEP PR1-3 F-SEP PR1-4 F-SEP PR1-5 F-SEP PR1-6 F-SEP
PR1-7 F-SEP PR1-8 F-SEP PR1-9 F-SEP PR1-10 F-SEP PR1-11 F-SEP PR1-12 F-SEP
PR1-13 F-SEP PR1-14 F-SEP PR1-15 F-SEP PR1-16 F-SEP PR1-17 F-SEP PR1-18 F-SEP
PR1-19 F-SEP PR1-20 F-SEP PR1-21 F-SEP PR1-22 F-SEP PR1-23 F-SEP PR1-24 F-SEP
PR1-25

/* Practitioner Detail */
PRA := PRA-1 F-SEP PRA-2 F-SEP PRA-3 F-SEP PRA-4 F-SEP PRA-5 F-SEP PRA-6 F-SEP
PRA-7 F-SEP PRA-8 F-SEP PRA-9 F-SEP PRA-10 F-SEP PRA-11 F-SEP PRA-12

/* Problem Details */
PRB := PRB-1 F-SEP PRB-2 F-SEP PRB-3 F-SEP PRB-4 F-SEP PRB-5 F-SEP PRB-6 F-SEP
PRB-7 F-SEP PRB-8 F-SEP PRB-9 F-SEP PRB-10 F-SEP PRB-11 F-SEP PRB-12 F-SEP
PRB-13 F-SEP PRB-14 F-SEP PRB-15 F-SEP PRB-16 F-SEP PRB-17 F-SEP PRB-18 F-SEP
PRB-19 F-SEP PRB-20 F-SEP PRB-21 F-SEP PRB-22 F-SEP PRB-23 F-SEP PRB-24 F-SEP
PRB-25 F-SEP PRB-26 F-SEP PRB-27 F-SEP PRB-28

/* Pricing */
PRC := PRC-1 F-SEP PRC-2 F-SEP PRC-3 F-SEP PRC-4 F-SEP PRC-5 F-SEP PRC-6 F-SEP
PRC-7 F-SEP PRC-8 F-SEP PRC-9 F-SEP PRC-10 F-SEP PRC-11 F-SEP PRC-12 F-SEP
PRC-13 F-SEP PRC-14 F-SEP PRC-15 F-SEP PRC-16 F-SEP PRC-17 F-SEP PRC-18

/* Provider Data */
PRD := PRD-1 F-SEP PRD-2 F-SEP PRD-3 F-SEP PRD-4 F-SEP PRD-5 F-SEP PRD-6 F-SEP
PRD-7 F-SEP PRD-8 F-SEP PRD-9 F-SEP PRD-10 F-SEP PRD-11 F-SEP PRD-12 F-SEP
PRD-13 F-SEP PRD-14

/* Participation Information */
PRT := PRT-1 F-SEP PRT-2 F-SEP PRT-3 F-SEP PRT-4 F-SEP PRT-5 F-SEP PRT-6 F-SEP
PRT-7 F-SEP PRT-8 F-SEP PRT-9 F-SEP PRT-10 F-SEP PRT-11 F-SEP PRT-12 F-SEP
PRT-13 F-SEP PRT-14 F-SEP PRT-15 F-SEP PRT-16 F-SEP PRT-17 F-SEP PRT-18 F-SEP
PRT-19 F-SEP PRT-20 F-SEP PRT-21 F-SEP PRT-22 F-SEP PRT-23 F-SEP PRT-24

/* Product/Service Group */
PSG := PSG-1 F-SEP PSG-2 F-SEP PSG-3 F-SEP PSG-4 F-SEP PSG-5 F-SEP PSG-6

/* Product Summary Header */

Appendix C: BNF Message Descriptions

PSH := PSH-1 F-SEP PSH-2 F-SEP PSH-3 F-SEP PSH-4 F-SEP PSH-5 F-SEP PSH-6 F-SEP
PSH-7 F-SEP PSH-8 F-SEP PSH-9 F-SEP PSH-10 F-SEP PSH-11 F-SEP PSH-12 F-SEP
PSH-13 F-SEP PSH-14

/* Product/Service Line Item */
PSL := PSL-1 F-SEP PSL-2 F-SEP PSL-3 F-SEP PSL-4 F-SEP PSL-5 F-SEP PSL-6 F-SEP
PSL-7 F-SEP PSL-8 F-SEP PSL-9 F-SEP PSL-10 F-SEP PSL-11 F-SEP PSL-12 F-SEP
PSL-13 F-SEP PSL-14 F-SEP PSL-15 F-SEP PSL-16 F-SEP PSL-17 F-SEP PSL-18 F-SEP
PSL-19 F-SEP PSL-20 F-SEP PSL-21 F-SEP PSL-22 F-SEP PSL-23 F-SEP PSL-24 F-SEP
PSL-25 F-SEP PSL-26 F-SEP PSL-27 F-SEP PSL-28 F-SEP PSL-29 F-SEP PSL-30 F-SEP
PSL-31 F-SEP PSL-32 F-SEP PSL-33 F-SEP PSL-34 F-SEP PSL-35 F-SEP PSL-36 F-SEP
PSL-37 F-SEP PSL-38 F-SEP PSL-39 F-SEP PSL-40 F-SEP PSL-41 F-SEP PSL-42 F-SEP
PSL-43 F-SEP PSL-44 F-SEP PSL-45 F-SEP PSL-46 F-SEP PSL-47 F-SEP PSL-48

/* Product/Service Section */
PSS := PSS-1 F-SEP PSS-2 F-SEP PSS-3 F-SEP PSS-4 F-SEP PSS-5

/* Pathway */
PTH := PTH-1 F-SEP PTH-2 F-SEP PTH-3 F-SEP PTH-4 F-SEP PTH-5 F-SEP PTH-6 F-SEP
PTH-7

/* Patient Visit */
PV1 := PV1-1 F-SEP PV1-2 F-SEP PV1-3 F-SEP PV1-4 F-SEP PV1-5 F-SEP PV1-6 F-SEP
PV1-7 F-SEP PV1-8 F-SEP PV1-9 F-SEP PV1-10 F-SEP PV1-11 F-SEP PV1-12 F-SEP
PV1-13 F-SEP PV1-14 F-SEP PV1-15 F-SEP PV1-16 F-SEP PV1-17 F-SEP PV1-18 F-SEP
PV1-19 F-SEP PV1-20 F-SEP PV1-21 F-SEP PV1-22 F-SEP PV1-23 F-SEP PV1-24 F-SEP
PV1-25 F-SEP PV1-26 F-SEP PV1-27 F-SEP PV1-28 F-SEP PV1-29 F-SEP PV1-30 F-SEP
PV1-31 F-SEP PV1-32 F-SEP PV1-33 F-SEP PV1-34 F-SEP PV1-35 F-SEP PV1-36 F-SEP
PV1-37 F-SEP PV1-38 F-SEP PV1-39 F-SEP PV1-40 F-SEP PV1-41 F-SEP PV1-42 F-SEP
PV1-43 F-SEP PV1-44 F-SEP PV1-45 F-SEP PV1-46 F-SEP PV1-47 F-SEP PV1-48 F-SEP
PV1-49 F-SEP PV1-50 F-SEP PV1-51 F-SEP PV1-52 F-SEP PV1-53 F-SEP PV1-54

/* Patient Visit - Additional Information */
PV2 := PV2-1 F-SEP PV2-2 F-SEP PV2-3 F-SEP PV2-4 F-SEP PV2-5 F-SEP PV2-6 F-SEP
PV2-7 F-SEP PV2-8 F-SEP PV2-9 F-SEP PV2-10 F-SEP PV2-11 F-SEP PV2-12 F-SEP
PV2-13 F-SEP PV2-14 F-SEP PV2-15 F-SEP PV2-16 F-SEP PV2-17 F-SEP PV2-18 F-SEP
PV2-19 F-SEP PV2-20 F-SEP PV2-21 F-SEP PV2-22 F-SEP PV2-23 F-SEP PV2-24 F-SEP
PV2-25 F-SEP PV2-26 F-SEP PV2-27 F-SEP PV2-28 F-SEP PV2-29 F-SEP PV2-30 F-SEP
PV2-31 F-SEP PV2-32 F-SEP PV2-33 F-SEP PV2-34 F-SEP PV2-35 F-SEP PV2-36 F-SEP
PV2-37 F-SEP PV2-38 F-SEP PV2-39 F-SEP PV2-40 F-SEP PV2-41 F-SEP PV2-42 F-SEP
PV2-43 F-SEP PV2-44 F-SEP PV2-45 F-SEP PV2-46 F-SEP PV2-47 F-SEP PV2-48 F-SEP
PV2-49 F-SEP PV2-50

/* Payee Information */
PYE := PYE-1 F-SEP PYE-2 F-SEP PYE-3 F-SEP PYE-4 F-SEP PYE-5 F-SEP PYE-6 F-SEP
PYE-7

/* Query Acknowledgment */
QAK := QAK-1 F-SEP QAK-2 F-SEP QAK-3 F-SEP QAK-4 F-SEP QAK-5 F-SEP QAK-6


```
/* Query Identification */
QID := QID-1 F-SEP QID-2
```

```
/* Query Parameter Definition */
QPD := QPD-1 F-SEP QPD-2 F-SEP QPD-3
```

```
/* Query Response Instance */
QRI := QRI-1 F-SEP QRI-2 F-SEP QRI-3
```

```
/* Response Control Parameter */
RCP := RCP-1 F-SEP RCP-2 F-SEP RCP-3 F-SEP RCP-4 F-SEP RCP-5 F-SEP RCP-6 F-SEP
RCP-7
```

```
/* Table Row Definition */
RDF := RDF-1 F-SEP RDF-2
```

```
/* Table Row Data */
RDT := RDT-1
```

```
/* Clinical Relationship Segment */
REL := REL-1 F-SEP REL-2 F-SEP REL-3 F-SEP REL-4 F-SEP REL-5 F-SEP REL-6 F-SEP
REL-7 F-SEP REL-8 F-SEP REL-9 F-SEP REL-10 F-SEP REL-11 F-SEP REL-12 F-SEP
REL-13 F-SEP REL-14 F-SEP REL-15 F-SEP REL-16 F-SEP REL-17 F-SEP REL-18
```

```
/* Referral Information */
RF1 := RF1-1 F-SEP RF1-2 F-SEP RF1-3 F-SEP RF1-4 F-SEP RF1-5 F-SEP RF1-6 F-SEP
RF1-7 F-SEP RF1-8 F-SEP RF1-9 F-SEP RF1-10 F-SEP RF1-11 F-SEP RF1-12 F-SEP
RF1-13 F-SEP RF1-14 F-SEP RF1-15 F-SEP RF1-16 F-SEP RF1-17 F-SEP RF1-18 F-SEP
RF1-19 F-SEP RF1-20 F-SEP RF1-21 F-SEP RF1-22 F-SEP RF1-23 F-SEP RF1-24 F-SEP
RF1-25
```

```
/* Request for Information */
RFI := RFI-1 F-SEP RFI-2 F-SEP RFI-3 F-SEP RFI-4
```

```
/* Resource Group */
RGS := RGS-1 F-SEP RGS-2 F-SEP RGS-3
```

```
/* Risk Management Incident */
RMI := RMI-1 F-SEP RMI-2 F-SEP RMI-3
```

```
/* Role */
ROL := ROL-1 F-SEP ROL-2 F-SEP ROL-3 F-SEP ROL-4 F-SEP ROL-5 F-SEP ROL-6 F-SEP
ROL-7 F-SEP ROL-8 F-SEP ROL-9 F-SEP ROL-10 F-SEP ROL-11 F-SEP ROL-12 F-SEP
ROL-13 F-SEP ROL-14
```

Appendix C: BNF Message Descriptions

```
/* Requisition Detail-1 */
RQ1 := RQ1-1 F-SEP RQ1-2 F-SEP RQ1-3 F-SEP RQ1-4 F-SEP RQ1-5 F-SEP RQ1-6 F-SEP
RQ1-7
```

```
/* Requisition Detail */
RQD := RQD-1 F-SEP RQD-2 F-SEP RQD-3 F-SEP RQD-4 F-SEP RQD-5 F-SEP RQD-6 F-SEP
RQD-7 F-SEP RQD-8 F-SEP RQD-9 F-SEP RQD-10
```

```
/* Pharmacy/Treatment Administration */
RXA := RXA-1 F-SEP RXA-2 F-SEP RXA-3 F-SEP RXA-4 F-SEP RXA-5 F-SEP RXA-6 F-SEP
RXA-7 F-SEP RXA-8 F-SEP RXA-9 F-SEP RXA-10 F-SEP RXA-11 F-SEP RXA-12 F-SEP
RXA-13 F-SEP RXA-14 F-SEP RXA-15 F-SEP RXA-16 F-SEP RXA-17 F-SEP RXA-18 F-SEP
RXA-19 F-SEP RXA-20 F-SEP RXA-21 F-SEP RXA-22 F-SEP RXA-23 F-SEP RXA-24 F-SEP
RXA-25 F-SEP RXA-26 F-SEP RXA-27 F-SEP RXA-28 F-SEP RXA-29
```

```
/* Pharmacy/Treatment Component Order */
RXC := RXC-1 F-SEP RXC-2 F-SEP RXC-3 F-SEP RXC-4 F-SEP RXC-5 F-SEP RXC-6 F-SEP
RXC-7 F-SEP RXC-8 F-SEP RXC-9 F-SEP RXC-10 F-SEP RXC-11
```

```
/* Pharmacy/Treatment Dispense */
RXD := RXD-1 F-SEP RXD-2 F-SEP RXD-3 F-SEP RXD-4 F-SEP RXD-5 F-SEP RXD-6 F-SEP
RXD-7 F-SEP RXD-8 F-SEP RXD-9 F-SEP RXD-10 F-SEP RXD-11 F-SEP RXD-12 F-SEP
RXD-13 F-SEP RXD-14 F-SEP RXD-15 F-SEP RXD-16 F-SEP RXD-17 F-SEP RXD-18 F-SEP
RXD-19 F-SEP RXD-20 F-SEP RXD-21 F-SEP RXD-22 F-SEP RXD-23 F-SEP RXD-24 F-SEP
RXD-25 F-SEP RXD-26 F-SEP RXD-27 F-SEP RXD-28 F-SEP RXD-29 F-SEP RXD-30 F-SEP
RXD-31 F-SEP RXD-32 F-SEP RXD-33 F-SEP RXD-34 F-SEP RXD-35
```

```
/* Pharmacy/Treatment Encoded Order */
RXE := RXE-1 F-SEP RXE-2 F-SEP RXE-3 F-SEP RXE-4 F-SEP RXE-5 F-SEP RXE-6 F-SEP
RXE-7 F-SEP RXE-8 F-SEP RXE-9 F-SEP RXE-10 F-SEP RXE-11 F-SEP RXE-12 F-SEP
RXE-13 F-SEP RXE-14 F-SEP RXE-15 F-SEP RXE-16 F-SEP RXE-17 F-SEP RXE-18 F-SEP
RXE-19 F-SEP RXE-20 F-SEP RXE-21 F-SEP RXE-22 F-SEP RXE-23 F-SEP RXE-24 F-SEP
RXE-25 F-SEP RXE-26 F-SEP RXE-27 F-SEP RXE-28 F-SEP RXE-29 F-SEP RXE-30 F-SEP
RXE-31 F-SEP RXE-32 F-SEP RXE-33 F-SEP RXE-34 F-SEP RXE-35 F-SEP RXE-36 F-SEP
RXE-37 F-SEP RXE-38 F-SEP RXE-39 F-SEP RXE-40 F-SEP RXE-41 F-SEP RXE-42 F-SEP
RXE-43 F-SEP RXE-44 F-SEP RXE-45
```

```
/* Pharmacy/Treatment Give */
RXG := RXG-1 F-SEP RXG-2 F-SEP RXG-3 F-SEP RXG-4 F-SEP RXG-5 F-SEP RXG-6 F-SEP
RXG-7 F-SEP RXG-8 F-SEP RXG-9 F-SEP RXG-10 F-SEP RXG-11 F-SEP RXG-12 F-SEP
RXG-13 F-SEP RXG-14 F-SEP RXG-15 F-SEP RXG-16 F-SEP RXG-17 F-SEP RXG-18 F-SEP
RXG-19 F-SEP RXG-20 F-SEP RXG-21 F-SEP RXG-22 F-SEP RXG-23 F-SEP RXG-24 F-SEP
RXG-25 F-SEP RXG-26 F-SEP RXG-27 F-SEP RXG-28 F-SEP RXG-29 F-SEP RXG-30 F-SEP
RXG-31 F-SEP RXG-32 F-SEP RXG-33
```

```
/* Pharmacy/Treatment Order */
RXO := RXO-1 F-SEP RXO-2 F-SEP RXO-3 F-SEP RXO-4 F-SEP RXO-5 F-SEP RXO-6 F-SEP
RXO-7 F-SEP RXO-8 F-SEP RXO-9 F-SEP RXO-10 F-SEP RXO-11 F-SEP RXO-12 F-SEP
```

RXO-13 F-SEP RXO-14 F-SEP RXO-15 F-SEP RXO-16 F-SEP RXO-17 F-SEP RXO-18 F-SEP
RXO-19 F-SEP RXO-20 F-SEP RXO-21 F-SEP RXO-22 F-SEP RXO-23 F-SEP RXO-24 F-SEP
RXO-25 F-SEP RXO-26 F-SEP RXO-27 F-SEP RXO-28 F-SEP RXO-29 F-SEP RXO-30 F-SEP
RXO-31 F-SEP RXO-32 F-SEP RXO-33 F-SEP RXO-34 F-SEP RXO-35 F-SEP RXO-36

/* Pharmacy/Treatment Route */
RXR := RXR-1 F-SEP RXR-2 F-SEP RXR-3 F-SEP RXR-4 F-SEP RXR-5 F-SEP RXR-6

/* Pharmacy/Treatment Infusion */
RXV := RXV-1 F-SEP RXV-2 F-SEP RXV-3 F-SEP RXV-4 F-SEP RXV-5 F-SEP RXV-6 F-SEP
RXV-7 F-SEP RXV-8 F-SEP RXV-9 F-SEP RXV-10 F-SEP RXV-11 F-SEP RXV-12 F-SEP
RXV-13 F-SEP RXV-14 F-SEP RXV-15 F-SEP RXV-16 F-SEP RXV-17 F-SEP RXV-18 F-SEP
RXV-19 F-SEP RXV-20 F-SEP RXV-21 F-SEP RXV-22

/* Specimen Container detail */
SAC := SAC-1 F-SEP SAC-2 F-SEP SAC-3 F-SEP SAC-4 F-SEP SAC-5 F-SEP SAC-6 F-SEP
SAC-7 F-SEP SAC-8 F-SEP SAC-9 F-SEP SAC-10 F-SEP SAC-11 F-SEP SAC-12 F-SEP
SAC-13 F-SEP SAC-14 F-SEP SAC-15 F-SEP SAC-16 F-SEP SAC-17 F-SEP SAC-18 F-SEP
SAC-19 F-SEP SAC-20 F-SEP SAC-21 F-SEP SAC-22 F-SEP SAC-23 F-SEP SAC-24 F-SEP
SAC-25 F-SEP SAC-26 F-SEP SAC-27 F-SEP SAC-28 F-SEP SAC-29 F-SEP SAC-30 F-SEP
SAC-31 F-SEP SAC-32 F-SEP SAC-33 F-SEP SAC-34 F-SEP SAC-35 F-SEP SAC-36 F-SEP
SAC-37 F-SEP SAC-38 F-SEP SAC-39 F-SEP SAC-40 F-SEP SAC-41 F-SEP SAC-42 F-SEP
SAC-43 F-SEP SAC-44 F-SEP SAC-45 F-SEP SAC-46 F-SEP SAC-47 F-SEP SAC-48 F-SEP
SAC-49

/* Anti-Microbial Cycle Data */
SCD := SCD-1 F-SEP SCD-2 F-SEP SCD-3 F-SEP SCD-4 F-SEP SCD-5 F-SEP SCD-6 F-SEP
SCD-7 F-SEP SCD-8 F-SEP SCD-9 F-SEP SCD-10 F-SEP SCD-11 F-SEP SCD-12 F-SEP
SCD-13 F-SEP SCD-14 F-SEP SCD-15 F-SEP SCD-16 F-SEP SCD-17 F-SEP SCD-18 F-SEP
SCD-19 F-SEP SCD-20 F-SEP SCD-21 F-SEP SCD-22 F-SEP SCD-23 F-SEP SCD-24 F-SEP
SCD-25 F-SEP SCD-26 F-SEP SCD-27 F-SEP SCD-28 F-SEP SCD-29 F-SEP SCD-30 F-SEP
SCD-31 F-SEP SCD-32 F-SEP SCD-33 F-SEP SCD-34 F-SEP SCD-35 F-SEP SCD-36 F-SEP
SCD-37

/* Scheduling Activity Information */
SCH := SCH-1 F-SEP SCH-2 F-SEP SCH-3 F-SEP SCH-4 F-SEP SCH-5 F-SEP SCH-6 F-SEP
SCH-7 F-SEP SCH-8 F-SEP SCH-9 F-SEP SCH-10 F-SEP SCH-11 F-SEP SCH-12 F-SEP
SCH-13 F-SEP SCH-14 F-SEP SCH-15 F-SEP SCH-16 F-SEP SCH-17 F-SEP SCH-18 F-SEP
SCH-19 F-SEP SCH-20 F-SEP SCH-21 F-SEP SCH-22 F-SEP SCH-23 F-SEP SCH-24 F-SEP
SCH-25 F-SEP SCH-26 F-SEP SCH-27 F-SEP SCH-28

/* Sterilizer Configuration (Anti-Microbial Devices) */
SCP := SCP-1 F-SEP SCP-2 F-SEP SCP-3 F-SEP SCP-4 F-SEP SCP-5 F-SEP SCP-6 F-SEP
SCP-7 F-SEP SCP-8

/* Sterilization Device Data */
SDD := SDD-1 F-SEP SDD-2 F-SEP SDD-3 F-SEP SDD-4 F-SEP SDD-5 F-SEP SDD-6 F-SEP
SDD-7

Appendix C: BNF Message Descriptions

```
/* Software Segment */
SFT := SFT-1 F-SEP SFT-2 F-SEP SFT-3 F-SEP SFT-4 F-SEP SFT-5 F-SEP SFT-6

/* Segment Group Header */
SGH := SGH-1 F-SEP SGH-2

/* Segment Group Trailer */
SGT := SGT-1 F-SEP SGT-2

/* Shipment */
SHP := SHP-1 F-SEP SHP-2 F-SEP SHP-3 F-SEP SHP-4 F-SEP SHP-5 F-SEP SHP-6 F-SEP
SHP-7 F-SEP SHP-8 F-SEP SHP-9 F-SEP SHP-10 F-SEP SHP-11 F-SEP SHP-12

/* Substance Identifier */
SID := SID-1 F-SEP SID-2 F-SEP SID-3 F-SEP SID-4

/* Sterilization Lot */
SLT := SLT-1 F-SEP SLT-2 F-SEP SLT-3 F-SEP SLT-4 F-SEP SLT-5

/* Specimen */
SPM := SPM-1 F-SEP SPM-2 F-SEP SPM-3 F-SEP SPM-4 F-SEP SPM-5 F-SEP SPM-6 F-SEP
SPM-7 F-SEP SPM-8 F-SEP SPM-9 F-SEP SPM-10 F-SEP SPM-11 F-SEP SPM-12 F-SEP
SPM-13 F-SEP SPM-14 F-SEP SPM-15 F-SEP SPM-16 F-SEP SPM-17 F-SEP SPM-18 F-SEP
SPM-19 F-SEP SPM-20 F-SEP SPM-21 F-SEP SPM-22 F-SEP SPM-23 F-SEP SPM-24 F-SEP
SPM-25 F-SEP SPM-26 F-SEP SPM-27 F-SEP SPM-28 F-SEP SPM-29 F-SEP SPM-30 F-SEP
SPM-31 F-SEP SPM-32 F-SEP SPM-33 F-SEP SPM-34 F-SEP SPM-35

/* Staff Identification */
STF := STF-1 F-SEP STF-2 F-SEP STF-3 F-SEP STF-4 F-SEP STF-5 F-SEP STF-6 F-SEP
STF-7 F-SEP STF-8 F-SEP STF-9 F-SEP STF-10 F-SEP STF-11 F-SEP STF-12 F-SEP
STF-13 F-SEP STF-14 F-SEP STF-15 F-SEP STF-16 F-SEP STF-17 F-SEP STF-18 F-SEP
STF-19 F-SEP STF-20 F-SEP STF-21 F-SEP STF-22 F-SEP STF-23 F-SEP STF-24 F-SEP
STF-25 F-SEP STF-26 F-SEP STF-27 F-SEP STF-28 F-SEP STF-29 F-SEP STF-30 F-SEP
STF-31 F-SEP STF-32 F-SEP STF-33 F-SEP STF-34 F-SEP STF-35 F-SEP STF-36 F-SEP
STF-37 F-SEP STF-38 F-SEP STF-39 F-SEP STF-40 F-SEP STF-41

/* Sterilization Parameter */
STZ := STZ-1 F-SEP STZ-2 F-SEP STZ-3 F-SEP STZ-4

/* Test Code Configuration */
TCC := TCC-1 F-SEP TCC-2 F-SEP TCC-3 F-SEP TCC-4 F-SEP TCC-5 F-SEP TCC-6 F-SEP
TCC-7 F-SEP TCC-8 F-SEP TCC-9 F-SEP TCC-10 F-SEP TCC-11 F-SEP TCC-12 F-SEP
TCC-13 F-SEP TCC-14 F-SEP TCC-15

/* Test Code Detail */
```

TCD := TCD-1 F-SEP TCD-2 F-SEP TCD-3 F-SEP TCD-4 F-SEP TCD-5 F-SEP TCD-6 F-SEP
TCD-7 F-SEP TCD-8 F-SEP TCD-9 F-SEP TCD-10 F-SEP TCD-11

/* Timing/Quantity */
TQ1 := TQ1-1 F-SEP TQ1-2 F-SEP TQ1-3 F-SEP TQ1-4 F-SEP TQ1-5 F-SEP TQ1-6 F-SEP
TQ1-7 F-SEP TQ1-8 F-SEP TQ1-9 F-SEP TQ1-10 F-SEP TQ1-11 F-SEP TQ1-12 F-SEP
TQ1-13 F-SEP TQ1-14

/* Timing/Quantity Relationship */
TQ2 := TQ2-1 F-SEP TQ2-2 F-SEP TQ2-3 F-SEP TQ2-4 F-SEP TQ2-5 F-SEP TQ2-6 F-SEP
TQ2-7 F-SEP TQ2-8 F-SEP TQ2-9 F-SEP TQ2-10

/* Transcription Document Header */
TXA := TXA-1 F-SEP TXA-2 F-SEP TXA-3 F-SEP TXA-4 F-SEP TXA-5 F-SEP TXA-6 F-SEP
TXA-7 F-SEP TXA-8 F-SEP TXA-9 F-SEP TXA-10 F-SEP TXA-11 F-SEP TXA-12 F-SEP
TXA-13 F-SEP TXA-14 F-SEP TXA-15 F-SEP TXA-16 F-SEP TXA-17 F-SEP TXA-18 F-SEP
TXA-19 F-SEP TXA-20 F-SEP TXA-21 F-SEP TXA-22 F-SEP TXA-23 F-SEP TXA-24 F-SEP
TXA-25 F-SEP TXA-26 F-SEP TXA-27 F-SEP TXA-28 F-SEP TXA-29 F-SEP TXA-30 F-SEP
TXA-31

/* User Authentication Credential Segment */
UAC := UAC-1 F-SEP UAC-2

/* Uniform Billing Data 1 */
UB1 := UB1-1 F-SEP UB1-2 F-SEP UB1-3 F-SEP UB1-4 F-SEP UB1-5 F-SEP UB1-6 F-SEP
UB1-7 F-SEP UB1-8 F-SEP UB1-9 F-SEP UB1-10 F-SEP UB1-11 F-SEP UB1-12 F-SEP
UB1-13 F-SEP UB1-14 F-SEP UB1-15 F-SEP UB1-16 F-SEP UB1-17 F-SEP UB1-18 F-SEP
UB1-19 F-SEP UB1-20 F-SEP UB1-21 F-SEP UB1-22 F-SEP UB1-23

/* Uniform Billing Data 2 */
UB2 := UB2-1 F-SEP UB2-2 F-SEP UB2-3 F-SEP UB2-4 F-SEP UB2-5 F-SEP UB2-6 F-SEP
UB2-7 F-SEP UB2-8 F-SEP UB2-9 F-SEP UB2-10 F-SEP UB2-11 F-SEP UB2-12 F-SEP
UB2-13 F-SEP UB2-14 F-SEP UB2-15 F-SEP UB2-16 F-SEP UB2-17

/* Variance */
VAR := VAR-1 F-SEP VAR-2 F-SEP VAR-3 F-SEP VAR-4 F-SEP VAR-5 F-SEP VAR-6

/* Purchasing Vendor */
VND := VND-1 F-SEP VND-2 F-SEP VND-3 F-SEP VND-4 F-SEP VND-5 F-SEP VND-6 F-SEP
VND-7 F-SEP VND-8 F-SEP VND-9 F-SEP VND-10 F-SEP VND-11

/* (proposed example only) */
ZL7 := ZL7-1 F-SEP ZL7-2

F-SEP := MSH-1;

