

Annex E

FIS Air/Ground PICS/OICS

November 2001

ATNP WGA-SGA2/03 WP xx

AERONAUTICAL TELECOMMUNICATION NETWORK PANEL

WGA - Application and Implementation

SGA2 - Air/Ground Applications

Airborne Flight Information Services PICS/OICS Proforma

File Ref.	FISPOA_21_Ed2Ed3.XLS
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Version No.	2.1

Date of Issue 7th November, 2001

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DOCUMENT CONTROL LOG

Sections	Date	Amendment Number	Reason for change and/or Change Note Number	
All		0.A	New document	Edition 2 compliant P/OICS
All	5th March 1999	0.B	Input Brussels SG2 Meeting (20th meeting)	
All	18 May 1999	0.C	Input Naples WG3 Meeting	
All	24th August 1999	0.D	Input Gran Canary WG3 Meeting	
All	10th November 1999	0.E	Input Tokyo WG3 Meeting	
All	21st August 2000	0.F	Input Berlin WG3 Meeting (Editorial changes + PDR 99040001)	
V2 sections	27th February 2001	1.A	Output Laurel SGA2 Meeting / Input WGA Honolulu Meeting	Edition 3 compliant P/OICS
All V1 sections	11th June 2001	2.0	PDR M1030001 - ATIS V1 ASN.1 replaced by ATIS V2 ASN.1	Editions 2 and 3 compliant P/OICS
All sections	7th November 2001	2.1	PDR M1110002 - OKI comments	

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Table I-1: PICS/OICS Identification

Ref No	PICS/OICS Identification	Implementation PICS/OICS
I-1.1	Date of Statement (DD/MM/YY)	
I-1.2	PICS/OICS Serial Number	
	Profile Identification	Profile Details
I-1.3	Profile Name	
I-1.4	Version	
I-1.5	Profile Authority Name	
I-1.6	Profile Applicability (Areas, Countries, Organisations etc where the profile can be applied)	
I-1.7	Date of effect	
I-1.8	Other Information	

Table I-2: Supplier and Implementation Identification

Ref No	Supplier Information	Supplier Details
I-2.1	Organization Name	
I-2.2	Contact Name(s)	
I-2.3	Address	
I-2.4	Telephone Number	
I-2.5	Telex Number	
I-2.6	Fax Number	
I-2.7	E-mail Address	
I-2.8	Other Information	
	Implementation Information	Implementation Details
I-2.9	Implementation Name	
I-2.10	Implementation Version	
I-2.11	Hardware Name	
I-2.12	Hardware Version	
I-2.13	Operating System Name	
I-2.14	Operating System Version	
I-2.15	Special Configuration	
I-2.16	Other Information	

Table I-3: FIS Protocol Identification

Ref No		OPLINKP	Profile	Implementation
I-3.1	Protocol Standard (Title, reference, date)	ICAO Doc 9705 Edition Three - November 2000		
I-3.2	FIS Protocol Version	Version 1 Version 2		
I-3.3	Addenda, amendments and corrigenda implemented			
I-3.4	Defect Reports implemented	M0060002 M0110002 M0110003 M1030001 M1030002 M1110002		

Table S-1: FIS Protocol Options

Source: Chapter 8 - Subsetting Rules		DPLINKP Profil	Profile	IMP	Associated	Notes
Ref No	Protocol Option	Status	Status	Support	Predicate	
S-1.1	DFIS Protocol Version 1	C.1			V1	
S-1.2	DFIS Protocol Version 2	C.1			V2	
S-1.3	FIS-air-ASE	M			FIS/Air	
S-1.4	FIS-ground-ASE	—			FIS/Ground	
S-1.5	FIS Update Contract Function supported by the FIS-ground-user				FIS-ground-user/UC	
S-1.6	FIS Update Contract supported by the FIS-air-ASE				FIS-air-ASE/UC	
S-1.7	FIS Cancel Contracts supported by the FIS-air-ASE	O			FIS-air-ASE/CC	
S-1.7	D-ATIS service operated by the FIS-user	C.2			D-ATIS	
S-1.8	D-METAR service operated by the FIS-use	C.2			D-METAR	

OPLINKP Profile:

- C.1 An implementation shall support one and only one of these two options.
 C.2 if V1 (D-ATIS M, D-METAR N/A) else if V2 (at least one must be supported)

Table S-2: FIS-ASE Conformant Configurations

Source: Chapter 8: Subsetting Rules		OPLINKP Profile Config	Profile Status	IMP Support	Notes
Ref No	List of Predicates: Ground ASE				
S-2.1	I. FIS/ground	—			
S-2.2	II. FIS/ground + FIS-ground-user/UC				
	List of Predicates: Air ASE				
S-2.3	I. FIS/air	C.1			
S-2.4	II. FIS/air + FIS-air-ASE/UC	C.1			
S-2.5	II. FIS/air + FIS-air-ASE/UC + FIS-air-ASE/CC	C.1			

OPLINKP Profile:

C.1 At least one configuration must be supported.

Table S-3: Supported FIS Service Primitives

Source: Chapter 3 - Abstract Service		Sender (req, [cnf])			Receiver (ind, [rsp])			Notes
Ref No	Service Primitives	OPLINKP Status	Profile Status	IMP Support	OPLINKP Status	Profile Status	IMP Support	
S-3.1	Ability of the airborne system to operate the FIS-demand-contract service	M			—			See Table S-4
S-3.2	Ability of the airborne system to operate the FIS-update-contract service	C.1			—			See Table S-5
S-3.3	Ability of the airborne system to operate the FIS-report service	—			M			See Table S-6
S-3.4	Ability of the airborne system to operate the FIS-cancel-contracts service	C.2			—	—	—	See Table S-7
S-3.5	Ability of the airborne system to operate the FIS-cancel-update-contract service	C.1			C.1			See Table S-8
S-3.6	Ability of the airborne system to operate the FIS-user-abort service	M			M			—
S-3.7	Ability of the airborne system to operate the FIS-provider-abort service	—			M			See Table S-9

OPLINKP Profile:C.1 if (FIS-air-ASE/UC and (V1 or (V2 and D-ATIS))) then **M** else —C.2 if (FIS-air-ASE/CC) **M** else —

Table S-4: FIS-demand-contract Service Parameters

Source: Chapter 3 - Abstract Service		OICS					ASN.1 Description
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile		Implementation		
		Status	Cons	Status	Cons		
S-4.1	Ability of the airborne system to specify the contacted ground system with an ICAO Facility Designation						
S-4.1.01	ICAO Facility Designation = IA5 String SIZE (4..8)	M					
S-4.2	Ability of the airborne system to identify demand contracts with contract numbers						
S-4.2.01	FIS Contract Number = INTEGER (1..256)	M				See ContractNumber	
S-4.3	Ability of the airborne system to request a Class Of Communication Service for a demand contract						
S-4.3.01	one of the abstract values 'A' to 'H'	O					
S-4.4	Ability of the airborne system to specify the terms of the demand contract						
S-4.4.01	FIS Contract Details	M		—		—	See FISRequestData
S-4.5	Ability of the airborne system to understand the result of the demand contract establishment						
S-4.5.01	accepted	M		—		—	
S-4.5.02	positive acknowledgement	O		—		—	
S-4.5.03	rejected	M		—		—	
S-4.6	Ability of the airborne system to understand the reason of the demand contract rejection						
S-4.6.01	Reject Reason	M		—		—	See FISRejectReason
S-4.7	Ability of the airborne system to interpret the contents of an FIS report						
S-4.7.01	FIS Information	M		—		—	See FISReportData
S-4.8	Capability of the airborne system to request security						
S-4.8.01	one of the abstract values 'no security' or 'secured exchange'	C					

C if V2 M else N/A

Table S-5: FIS-update-contract Service Parameters

Source: Chapter 3 - Abstract Service		OICS					ASN.1 Description
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	
S-5.1	Ability of the airborne system to identify the contacted ground system with an ICAO Facility Designation						
S-5.1.01	ICAO Facility Designation = IA5 String SIZE (4..8)	M					—
S-5.2	Ability of the airborne system to identify update contracts with contract numbers						
S-5.2.01	FIS Contract Number = INTEGER (1..256)	M					See ContractNumber
S-5.3	Ability of the airborne system to request a Class Of Communication Service for an update contract						
S-4.3.01	one of the abstract values 'A' to 'H'	O					
S-5.4	Ability of the airborne system to specify the terms of the update contract						
S-5.4.01	FIS Contract Details	M		—		—	See FISRequestData
S-5.5	Ability of the airborne system to understand the result of the update contract establishment						—
S-5.5.01	accepted	M		—		—	—
S-5.5.02	positive acknowledgement	O		—		—	—
S-5.5.03	rejected	M		—		—	—
S-5.6	Ability of the airborne system to understand the reason of the demand contract rejection						—
S-5.6.01	can not comply	M		—		—	—
S-5.6.02	FIS service unavailable	M		—		—	—
S-5.6.03	error detected in the FIS request	M		—		—	—
S-5.6.04	undefined	M		—		—	—
S-5.7	Ability of the airborne system to interpret the contents of an FIS report						
S-5.7.01	FIS Information	M		—		—	See FISReportData
S-5.8	Capability of the airborne system to request security						—
S-4.8.01	one of the abstract values 'no security' or 'secured exchange'	C					

C if V2 M else N/A

Table S-6: FIS-report Service Parameters

Source: Chapter 3 - Abstract Service		OICS					
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status Cons		Implementation Status Cons		ASN.1 Description
S-6.1	Ability of the airborne system to identify update contracts with contract numbers						
S-6.1.01	FIS Contract Number = INTEGER (1..256)	M					See ContractNumber
S-6.2	Ability of the airborne system to interpret the contents of a FIS report						
S-6.2.01	FIS Information	M		—		—	See FISReportData

Table S-7: FIS-cancel-contracts Service Parameters

Source: Chapter 3 - Abstract Service		OICS					
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status		Implementation Status		ASN.1 Description
S-7.1	Ability of the airborne system to specify the type of FIS service (e.g. ATIS, METAR) for which the cancellation of contracts is requested						
S-7.1.01	FIS Service Type	M		—		—	See FISCancelContracts

Table S-8: FIS-cancel-update-contract Service Parameters

Source: Chapter 3 - Abstract Service		OICS					ASN.1 Description
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status Cons		Implementation Status Cons		
S-8.1	Ability of the airborne system to specify/interpret the update contract to be cancelled						
S-8.1.01	FIS Contract Number = INTEGER (1..256)	M		—		—	See ContractNumber

Table S-9: FIS-provider-abort Service Parameters

Source: Chapter 3 - Abstract Service		OICS					Description of the fallback function
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	
S-9.1	Activation of a fallback function by the airborne system upon detection of a FIS provider abort						
S-9.1.01	timer expiration	M		—		—	
S-9.1.02	protocol error	M		—		—	
S-9.1.03	sequence error	M		—		—	
S-9.1.04	decoding error	M		—		—	
S-9.1.05	unrecoverable internal error	M		—		—	
S-9.1.06	invalid contract number	M		—		—	
S-9.1.07	dialogue end not supported	M		—		—	
S-9.1.08	undefined	M		—		—	
S-9.1.09	invalid QOS parameter	M		—		—	
S-9.1.10	cannot establish contact with the peer	M		—		—	
S-9.1.11	contact refused by the peer	M		—		—	
S-9.1.12	communication system failure	M		—		—	

Table S-10: Technical Timers

Source: Chapter 5 - Protocol Definition			OICS						Notes
			Operational Use						
Ref No	FIS Service	Timer	OPLINKP		Profile		Implementation		
			Status	Value	Status	Value	Status	Value	
S-10.1	FIS-demand-contact								
S10.1.01		t-DC-1	M	6 minutes					
S-10.2	FIS-demand-contact								
S10.2.01		t-DC-2	M	9 minutes					
S-10.3	FIS-update-contact								
S10.3.01		t-UC-1	C.1	6 minutes					
S-10.4	FIS-update-contact								
S10.4.01		t-UC-2	C.1	9 minutes					
S-10.5	FIS-cancel-update-contract								
S10.5.01		t-UC-3	C.1	9 minutes					
S-10.6	FIS-cancel-contracts								
S10.6.01		t-CL-1	C.2	6 minutes					
S-10.7	general								
S10.7.01		t-LI-1	M	6 minutes					
S-10.8	general								
S10.8.01		t-inactivity	M	—					a

Notes:

a The t-inactivity timer value is set on configuration basis.

OPLINKP Profile:

C.1 if (FIS-air-ASE/UC) **M** else —

C.2 if (FIS-air-ASE/CC) **M** else —

Table S-11: Dialogue Parameters

Source: Chapter 6 - Communication Requirements												Notes
Ref No	Dialogue Parameter	Send					Receive					
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	
S-11.1	The D-ATIS application service priority QOS parameter in the D-START ind is set to the value...											
S11.1.01	... "Normal-priority flight safety messages" (value 10)	M					M					
S-11.2	The D-METAR application service priority QOS parameter in the D-START ind is set to the value...											
S11.2.01	... "Meteorological communications" (value 9)	M					M					a
S-11.3	The Residual Error Rate in the D-START ind is set to the value...											
S11.3.01	... "low" (Transport CRC requested)	M					M					a

a if V2 and METAR

Table M-1: FIS Messages (Top Level)

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
M-1.1	Any FIS downlink message contains...											FISDownlinkAPDU ::= SEQUENCE		
M-1.1.01	... a timestamp	M					—					DateTimeGroup		
M-1.1.02	... a downlink FIS APDU	M					—					DownlinkAPDU		
M-1.2	A downlink FIS APDU contains...											DownlinkAPDU := CHOICE		
M-1.2.01	... a FIS contract establishment request	M					—					[0] FISRequest		
M-1.2.02	...an FIS update contract cancellation request	C.1					—					[1] FISCancelUpdateContract		
M-1.2.03	... a FIS Cancel Update Accept	C.1					—					[2] FISCancelUpdateAccept		
M-1.2.04	... an all contracts cancellation request	C.2					—					[3] FISCancelContracts		
M-1.2.05	... an air-initiated abort a FIS dialogue	M					—					[4] FISAbort		
M-1.2.06	... other data	X					—					Use of Extensibility		
M-1.3	Any FIS uplink message contains...											FISUplinkAPDU ::= SEQUENCE		
M-1.3.01	... a timestamp	—					M					DateTimeGroup		
M-1.3.02	... an uplink FIS APDU	—					M					UplinkAPDU		
M-1.4	A downlink FIS APDU contains...											UplinkAPDU ::= CHOICE		
M-1.4.01	... a FIS contract accept	—					M					[0] FISAccept		
M-1.4.02	... a FIS contract reject	—					M					[1] FISReject		
M-1.4.03	... a FIS report	—					M					[2] FISReport		
M-1.4.04	... a FIS update contract cancel	—					C.1					[3] FISCancelUpdateContract		
M-1.4.05	... a FIS update contract cancel accept	—					C.1					[4] FISCancelUpdateAccept		
M-1.4.06	... a all contracts cancellation request	—					C.2					[5] FISCancelContractsAccept		
M-1.4.07	... a ground-initiated abort of a FIS dialogue	—					M					[6] FISAbort		
M-1.4.08	... other data	—					M					Use of Extensibility		

OPLINKP Profile

- C.1 if (FIS-air-ASE/UC) **M** else -
 C.2 if (FIS-air-ASE/CC) **M** else -

Table M-2: FIS Messages (Second Level)

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Status	Profile Cons	Implementation Status	Implementation Cons	OPLINKP Profile	Status	Profile Cons	Implementation Status	Implementation Cons		
M-2.1	A FIS Provider Abort contains a reason...											FISAbort ::= CHOICE	
M-2.1.01	... defined for ATIS in V1, for ATIS/METAR in V2	M					M					[0] FISProtocolErrorDiag	
M-2.1.02	... not defined in FIS V1 or V2	X					M					Use of Extensibility	
M-2.2	A FIS Accept APDU contains...											FISAccept ::= SEQUENCE	
M-2.2.01	... a contract number	—					M					ContractNumber	
M-2.2.02	... some additional data	—					M					FISAcceptData	
M-2.3	Data in a FIS Accept PDU contains...											FISAcceptData ::= CHOICE	
M-2.3.01	... a FIS Report	—					M					[0] FISReportData	
M-2.3.02	... a Positive Ack.	—					M					[2] NULL	
M-2.3.03	... other data	—					M					Use of Extensibility	
M-2.4	A Cancel Contracts APDU contains...											FISCancelContracts ::=	
M-2.4.01	... the type of the FIS contracts (e.g. ATIS, METAR...) to be cancelled in one shot	M					—					FISServiceType	
M-2.5	A Cancel Contracts Accept APDU contains...											FISCancelContractsAccept ::=	
M-2.5.01	... the type of the FIS contracts (e.g. ATIS, METAR...) to be cancelled in one shot	—					M					FISServiceType	
M-2.6	A FIS Cancel Update Accept APDU contains...											FISCancelUpdateAccept ::= SEQUENCE	
M-2.6.01	... a contract number	M					M					Contract Number	
M-2.6.02	... some additional data	M					M					FISCancelAcceptData	
M-2.7	Data in a FIS Cancel Contracts Accept APDU contains...											FISCancelAcceptData ::= CHOICE	
M-2.7.01	... for ATIS	M					M					[0] NULL	
M-2.7.02	... for a FIS Service not supported by FIS V1	X					M					Use of Extensibility	
M-2.8	A FIS Cancel Update Contract APDU contains...											FISCancelUpdateContract ::= SEQUENCE	
M-2.8.01	... a contract number	M					M					Contract Number	
M-2.8.02	... some additional data	M					M					FISCancelUpdateData	
M-2.9	Data in a Cancel Update APDU contains...											FISCancelUpdateData ::= CHOICE	
M-2.9.01	... for ATIS	M					M					[0] NULL	
M-2.9.02	... for a FIS Service not supported by FIS V1	X					M					Use of Extensibility	
M-2.10	A FIS Reject APDU contains...											FISReject ::= SEQUENCE	
M-2.10.01	... a contract number	—					M					Contract Number	
M-2.10.02	... some additional data	—					M					FISRejectData	
M-2.11	Data in a FIS Reject Data indicates a reject because...											FISRejectData ::= CHOICE	
M-2.11.01	... the update function is not supported (no report included)	—					M					[0] NULL	
M-2.11.02	... the update function is not supported (report included)	—					M					[1] FISReportData	
M-2.11.03	... an other reason	—					M					[2] FISRejectReason	
M-2.11.04	... of a reason non defined in version 1	—					M					Use of Extensibility	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
M-2.12	The FIS Reject Reason is because...											FISRejectReason ::= ENUMERATED	
M-2.12.01	... the ground cannot comply with the request	—					M					canNotComply (0)	
M-2.12.02	... the FIS Service is not available	—					M					fISServiceUnavailable (1)	
M-2.12.03	... an error is detected in the request	—					M					errorInRequest (2)	
M-2.12.04	... an undefined reason	—					M					undefined (3)	
M-2.12.05	... by a reason not defined in FIS V1	—					M					Use of Extensibility	
M-2.13	A FIS Report APDU contains...											FISReport ::= SEQUENCE	
M-2.13.01	... a contract number	—					M					Contract Number	
M-2.13.02	... some additional data	—					M					FISReportData	
M-2.14	Data in a FIS Report APDU contains...											FISReportData ::= CHOICE	
M-2.14.01	... ATIS Information	—					C.2					[0] ATISReport	
M-2.14.02	... non ATIS information	—					M					Use of Extensibility	
M-2.14.03	... METAR information	—					C.3					[1] METARReport	a
M-2.15	A FIS Request APDU contains...											FISRequest ::= SEQUENCE	
M-2.15.01	... a contract number	M					—					Contract Number	
M-2.15.02	... the contract type	M					—					ContractType DEFAULT	
M-2.15.03	... some additional data	M					—					demandContract	
												FISRequestData	
M-2.16	FIS Contract Type is described as...											ContractType ::= ENUMERATED	
M-2.16.01	... a demand contract	M					—					demandContract (0)	
M-2.16.02	... an update contract	C.1					—					updateContract (1)	
M-2.17	Data in a FIS Request APDU contains...											FISRequestData ::= CHOICE	
M-2.17.01	... handle a FIS request for ATIS Information	C.2					—					[0] ATISRequest	
M-2.17.02	... handle a FIS request for non ATIS information	C.4					—					Use of Extensibility	
M-2.17.03	... handle a FIS request for METAR Information	C.3					—					[1] METARRequest	a
M-2.18	React to a provider abort caused by...											FISProtocolErrorDiag ::= ENUMERATED	
M-2.18.01	... the expiration of a local or remote ASE timer	M					M					timerExpiration (0)	
M-2.18.02	... the detection of a local/remote protocol violation	M					M					protocolError (1)	
M-2.18.03	... an incorrect message sequencing	M					M					sequenceError (2)	
M-2.18.04	... an error when decoding a message	M					M					decodingError (3)	
M-2.18.05	... a local/remote unrecoverable error	M					M					unrecoverableInternalError (4)	
M-2.18.06	... the use of an incorrect contract number	M					M					invalidContractNumber (5)	
M-2.18.07	... the rejection by the ground of the dialogue release	M					M					dialogueEndNotSupported (6)	
M-2.18.08	... an undefined reason	M					M					undefined (7)	
M-2.18.09	... the use of an incorrect QoS parameter	—					M					invalidQoSParameter (8)	
M-2.18.10	... a reason not defined in version 1	X					M					Use of Extensibility	
M-2.19	The FIS service identifies...											FISServiceType ::= BIT STRING (SIZE (1,...))	
M-2.19.07	... the D-ATIS service	C.2					C.2					atis (0)	
M-2.19.08	... other non D-ATIS service	C.4					M					Use of Extensibility	
M-2.19.09	... the D-METAR service	C.3					C.3					metar (1)	a

OPLINKP Profile

- C.1 if (FIS-air-ASE/UC) **M** else -
 C.2 if D-ATIS **M** else **N/A**

Source: Chapter 4 - ASN.1													Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		

Source: Chapter 4 - ASN.1													Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	
		OPLINKP Profile	Profile Status Cons		Implementation Status Cons		OPLINKP Profile	Profile Status Cons		Implementation Status Cons			
C.4	if V1 X else M												
a	in V2 only												

Table M-4: ATIS Messages

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
M-4.1	An ATIS request contains...											ATISRequest ::= SEQUENCE	
M-4.1.01	... the location indicator	M					—					LocationIndicator	
M-4.1.02	... the type of ATIS requested	O					—					ArrivalDepartureIndicator OPTIONAL	
M-4.1.03	... other data	X					—					Use of Extensibility	
M-4.2	The type of the requested ATIS is specified as...											ArrivalDepartureIndicator ::= ENUMERATED	
M-4.2.01	... Arrival	C					—					arrivalARR (0)	
M-4.2.02	... Departure	C					—					departureDEP (1)	
M-4.2.03	... other data	X					—					Use of Extensibility	
M-4.3	An ATIS report contains...											ATISReport ::= SEQUENCE	
M-4.3.01	... the location identification	—					M					[0] LocationIndicator	
M-4.3.02	... the type of ATIS reported	—					M					[1] ArrivalDepartureIndicator OPTIONAL	
M-4.3.03	... the ATIS Designator	—					M					[2] ATISDesignator	
M-4.3.04	... the time of observation	—					M					[3] Time,	
M-4.3.05	... the type of approach	—					M					[4] ApproachType OPTIONAL,	
M-4.3.06	... the runways in use	—					M					[5] ATISRunways OPTIONAL,	
M-4.3.07	... the arresting system	—					M					[6] ATISArrestingSystem OPTIONAL,	
M-4.3.08	... the surface conditions braking actions	—					M					[7] SurfaceConditionsBrakingAction OPTIONAL,	
M-4.3.09	... the holding delay (up to 200 char)	—					M					[8] IA5String (SIZE (1..200)) OPTIONAL,	
M-4.3.10	... the transition level	—					M					[9] TransitionLevel OPTIONAL,	
M-4.3.11	... other operational information (up to 250 char)	—					M					[10] IA5String (SIZE (1..250)) OPTIONAL,	
M-4.3.12	... surface winds	—					M					[11] ATISSurfaceWind,	
M-4.3.13	... ceiling and visibility information	—					M					[12] CHOICE	
M-4.3.131	... CAV not ok	—					M					[0] SEQUENCE	
M-4.3.1311	... visibility information	—					M					[0] ATISVisibility,	
M-4.3.1312	... RVR	—					M					[1] ATISRVR OPTIONAL,	
M-4.3.1313	... the present weather	—					M					[2] ATISPresentWeather OPTIONAL,	
M-4.3.1314	... cloud information	—					M					[3] ATISCloud	
M-4.3.1315	... other	—					M					Use of extensibility	
M-4.3.132	... CAV ok	—					M					[1] NULL	
M-4.3.14	... air temperature	—					M					[13] Temperature,	
M-4.3.15	... dew point temperature	—					M					[14] Temperature,	
M-4.3.16	... altimeter setting	—					M					[15] AltimeterSetting,	
M-4.3.17	... supplementary information	—					M					[16] SupplementaryInformation OPTIONAL,	
M-4.3.18	... trend forecast information	—					M					[17] TrendForecastInformation OPTIONAL,	
M-4.3.19	... specific ATIS information (up to 64 char)	—					M					[18] IA5String (SIZE (1..64)) OPTIONAL	
M-4.3.20	... ATIS data not defined in FIS V2	—					M					Use of Extensibility	

Source: Chapter 4 - ASN.1													Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	
		OPLINKP Profile	Status	Cons	Implementation Status	Cons	OPLINKP Profile	Status	Cons	Implementation Status	Cons		
M-4.4	Location Indicator with a 4 characters string											LocationIndicator ::= IA5String (SIZE(4))	

OPLINKP Profile
C At least one must be supported.

Table M-5: METAR Messages

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send						Receive					
		OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons		OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons	
M-5.1	A METAR request contains...												
M-5.1.01	... the location indicator	M						—					
M-5.1.02	... other data	X						—					
M-5.2	A METAR report contains...												
M-5.2.01	... the type of report	—						M					
M-5.2.02	... the location identification	—						M					
M-5.2.03	... the time of observation	—						M					
M-5.2.04	... level of automation	—						M					
M-5.2.05	... the surface wind	—						M					
M-5.2.06	... ceiling and visibility information as	—						M					
M-4.2.061	... ok	—						M					
M-5.2.0611	... visibility information	—						M					
M-5.2.0612	... RVR information	—						M					
M-5.2.0613	... present weather information and	—						M					
M-5.2.0614	... cloud information	—						M					
M-5.2.0615	... other data	—						M					
M-3.2.062	... or nok	—						M					
M-5.2.07	... air temperature	—						M					
M-5.2.08	... dew point temperature	—						M					
M-5.2.09	... pressure values	—						M					
M-5.2.10	... supplementary information	—						M					
M-5.2.11	... trend forecast information	—						M					
M-5.2.12	... remark	—						M					
M-5.2.13	... METAR data not defined in FIS V2	—						M					
M-5.3	A METAR Report Type is either												
M-5.3.01	... METAR	—						M					
M-5.3.02	... or SPECI	—						M					
M-5.3.03	... other data	—						M					

a if V2 and METAR

Table P-2: Altimeter Setting

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-2.1	Altimeter setting contains...											AltimeterSetting ::= SEQUENCE		
P-2.1.01	... a QNH value	—					M					[0] PressureMeasure		
P-2.1.02	... a QFE value per runway (up to 6)	—					M					[1] SEQUENCE (SIZE(1..6,...)) OF RunwayQFE OPTIONAL		
P-2.1.03	... other data	—					M					Use of extensibility		
P-2.2	Pressure Measure expressed...											PressureMeasure ::= CHOICE		
P-2.2.01	... in hecto-pascal	—					C					[0] PressureHPA,		
P-2.2.02	... in inches of Mercury (from 22.00 to 32.00 with a resolution of 0.01	—					C					[1] INTEGER (2200..3200)		
P-2.2.03	... other data	—					M					Use of extensibility		
P-2.3	Pressure Hecto Pascal expressed...											PressureHPA ::=		
P-2.3.01	... in hecto-pascal (from 500 to 1100 with a resolution of 1)	—					M					[0] INTEGER (500..1100)		
P-2.4	Runway QFE contains...											RunwayQFE ::= SEQUENCE		
P-2.4.01	... a Runway Identifier	—					M					RunwayId OPTIONAL		
P-2.4.02	... a QFE value	—					M					PressureHPA		
P-2.4.03	... other data	—					M					Use of extensibility		

Notes:

C At least one must be supported.

Table P-4: Cloud

Source: Chapter 4 - ASN.1															
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons				
P-4.1	ATIS Cloud contains...											ATISCloud ::= SEQUENCE			
P-4.1.01	... display request of the keyword CLD	—					M					[0] NULL OPTIONAL,			
P-4.1.02	... a ATIS cloud value per runway (up to 6)	—					M					[1] SEQUENCE (SIZE(1..6,...)) OF RunwayATISCloud			
P-4.2	ATIS Cloud contains for each runway...											RunwayATISCloud ::= SEQUENCE			
P-4.2.01	... the runway id	—					M					[0] RunwayId OPTIONAL,			
P-4.2.02	... a ATIS cloud value per runway (up to 6)	—					M					[1] Cloud			
P-4.3	A Cloud Value is expressed as ...											Cloud ::= CHOICE			
P-4.3.01	... cloud layer information (up to 4)	—					M					[0] SEQUENCE (SIZE(1..4,...)) OF CloudLayer,			
P-4.3.02	... a "sky obscured" indication	—					M					[1] SkyObscured,			
P-4.3.03	... a "sky clear" indication	—					M					[2] NULL,			
P-4.3.04	... an "nsc" indication	—					M					[3] NULL			
P-4.3.05	... other data	—					M					Use of Extensibility			
P-4.4	A "Sky Obscured" indication contains...											SkyObscured ::= SEQUENCE			
P-4.4.01	... vertical visibility information	—					M					[0] VerticalVisibility OPTIONAL			
P-4.4.02	... other data	—					M					Use of Extensibility			
P-4.5	Cloud Layer contains description of...											CloudLayer ::= SEQUENCE			
P-4.5.01	... amount	—					M					[0] CloudAmount OPTIONAL			
P-4.5.02	... type	—					M					[1] CloudType OPTIONAL			
P-4.5.03	... height of base	—					M					[2] CloudHeightOfBase OPTIONAL			
P-4.5.04	... other data	—					M					Use of Extensibility			
P-4.6	Cloud Height Of Base contains ...											CloudHeightOfBase ::= SEQUENCE			
P-4.6.01	... cloud height	—					M					[0] CloudHeight,			
P-4.6.02	... cloud qualifier	—					M					[1] CloudQualifier OPTIONAL			
P-4.6.03	... other data	—					M					Use of Extensibility			
P-4.7	Cloud Amount is described as...											CloudAmount ::= ENUMERATED			
P-4.7.01	Few	—					M					fewFEW (0)			
P-4.7.02	Scattered	—					M					scatteredSCT (1)			
P-4.7.03	Broken	—					M					brokenBKN (2)			
P-4.7.04	Overcast	—					M					overcastOVC (3)			
P-4.7.05	... other data	—					M					Use of Extensibility			
P-4.8	Cloud Qualifier is described as...											CloudQualifier ::= ENUMERATED			
P-4.8.01	diffuse	—					M					diffuseDIF (0)			
P-4.8.02	ragged	—					M					raggedRAG (1)			
P-4.8.03	fluctating rapidly	—					M					fluctuatingRapidlyFLUC (2)			
P-4.8.04	... other data	—					M					Use of Extensibility			
P-4.9	Cloud Height is expressed...											CloudHeight ::= CHOICE			
P-4.9.01	... in Meters (from 0 to 3000 with a resolution of 30)	—					C					[0] INTEGER (0..100)			
P-4.9.02	... in Meters (from 3300 to 19800 with a resolution of 300)	—					C					[1] INTEGER (11..66)			
P-4.9.03	... in Feet (from 0 to 10000 with a resolution of 100)	—					C					[2] INTEGER (0..100)			

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-4.9.04	... in Feet (from 11000 to 60000 with a resolution of 1000)	—					C					[3] INTEGER (11..60)		
P-4.9.05	... other data	—					M					Use of Extensibility		
P-4.10	Cloud Type is described as...											CloudType ::= ENUMERATED		
P-4.10.01	Cumulonimbus	—					M					cumulonimbusCB (0)		
P-4.10.02	Towering Cumulus	—					M					toweringcumulusTCU (1)		
P-4.10.03	... other data	—					M					Use of Extensibility		
P-4.11	Vertical Visibility is expressed...											VerticalVisibility ::= CHOICE		
P-4.11.01	... in meters from 0 to 600 with a resolution of 30	—					C					[0] INTEGER (0..20)		
P-4.11.02	... in feet from 0 to 2000 with a resolution of 100	—					C					[1] INTEGER (0..20)		
P-4.11.03	... other data	—					M					Use of Extensibility		

OPLINKP Profile

C Conditional, Feet or Meter or both must be supported

Table P-5: Date & Time

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-5.1	The time stamp appended to any FIS APDU contains...											DateTimeGroup ::= SEQUENCE		
P-5.1.01	... the date	M					M					Date		
P-5.1.02	... the time (hhmmss)	M					M					HHMMSS		
P-5.2	The Date contains...											Date ::= SEQUENCE		
P-5.2.01	... the year	M					M					Year		
P-5.2.02	... the month	M					M					Month		
P-5.2.03	... the day	M					M					Day		
P-5.3	Year											Year ::=		
P-5.3.01	from 1996 to 2095	M					M					INTEGER (1996..2095)		
P-5.4	Month											Month ::=		
P-5.4.01	from January(1) to December (12)	M					M					INTEGER (1..12)		
P-5.5	Day											Day ::=		
P-5.5.01	from 1 to 31	M					M					INTEGER (1..31)		
P-5.6	A Day Time contains...											DayTime ::= SEQUENCE	a	
P-5.6.01	... a day	-					M					Day,		
P-5.6.02	... a time	-					M					Time		
P-5.7	HHMMSS contains...											HHMMSS ::= SEQUENCE		
P-5.7.01	... Hours	M					M					TimeHours		
P-5.7.02	... Minutes	M					M					TimeMinutes		
P-5.7.03	... Seconds	M					M					TimeSeconds		
P-5.8	Hours											TimeHours ::=		
P-5.8.01	from Midnight(0) to 23:00 hrs (11 PM)	M					M					INTEGER (0..23)		
P-5.9	Minutes											TimeMinutes ::=		
P-5.9.01	from 0 to 59	M					M					INTEGER (0..59)		
P-5.10	Seconds											TimeSeconds ::=		
P-5.10.01	from 0 to 59	M					M					INTEGER (0..59)		

a V2 and METAR only

Table P-7: Present Weather

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Status	Cons	Implementation Status	Cons	OPLINKP Profile	Status	Cons	Implementation Status	Cons		
P-7.1	ATIS Present Weather contains up to 3 PresentWeather information	—					M		3			ATISPresentWeather ::= SEQUENCE OF (SIZE(1..3,...)) PresentWeather	
P-7.2	METAR Present Weather contains up to 3 Present Weather information	—					M		3			METARPresentWeather ::= SEQUENCE OF (SIZE(1..3,...)) PresentWeather	a
P-7.3	Present Weather contains...											PresentWeather ::= SEQUENCE	
P-7.3.01	... an intensity or proximity qualifier	—					M					[0] CHOICE OPTIONAL	
P-7.3.011	... intensity or	—					M					[0] IntensityQualifier	
P-4.3.012	... proximity	—					M					[1] NULL	
P-7.3.02	... a weather qualifier	—					M					[1] WeatherQualifier OPTIONAL,	
P-7.3.03	... up to 6 weather type	—					M					[2] SEQUENCE (SIZE(1..6,...)) OF WeatherType OPTIONAL	
P-7.3.04	... other data	—					M					Use of Extensibility	
P-7.4	Recent Weather contains...											RecentWeather ::= SEQUENCE	
P-7.4.01	... a weather qualifier	—					M					[0] WeatherQualifier OPTIONAL,	
P-7.4.02	... up to 6 weather type	—					M					[1] SEQUENCE (SIZE(1..6,...)) OF WeatherType OPTIONAL	
P-7.4.03	... other data	—					M					Use of Extensibility	
P-7.5	Intensity Qualifier is described as...											IntensityQualifier ::= ENUMERATED	
P-7.5.01	light or minus	—					M					lightOrMinus (0)	
P-7.5.02	moderate	—					M					moderate (1)	
P-7.5.03	heavy or plus	—					M					heavyOrPlus (2)	
P-7.5.04	... other data	—					M					N32Use of Extensibility	
P-7.6	WeatherType is described as...											WeatherType ::= ENUMERATED	
P-7.6.01	Drizzle	—					M					drizzle (0)	
P-7.6.02	Rain	—					M					rain (1)	
P-7.6.03	Snow	—					M					snow (2)	
P-7.6.04	Snow Grains	—					M					snowGrains (3)	
P-7.6.05	Ice Pellets	—					M					icePellets (4)	
P-7.6.06	Ice Crystals	—					M					iceCrystal (5)	
P-7.6.07	Hail	—					M					hail (6)	
P-7.6.08	Small Hail	—					M					smallHail (7)	
P-7.6.09	fog	—					M					fogFG (8)	
P-7.6.10	mist	—					M					mistBR (9)	
P-7.6.11	sand	—					M					sandSA (10)	
P-7.6.12	dust	—					M					dustDU (11)	
P-7.6.13	haze	—					M					hazeHZ (12)	
P-7.6.14	smoke	—					M					smokeFU (13)	
P-7.6.15	volcanicAshes	—					M					volcanicAshesVA (14)	
P-7.6.16	dustSand	—					M					dustSandPO (15)	
P-7.6.17	squalls	—					M					squallSQ (16)	
P-7.6.18	funnelCloud	—					M					funnelCloudFC (17)	
P-7.6.19	duststorm	—					M					duststorm (18)	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-7.6.20	sandstorm	—					M					sandstorm (19)	
P-7.6.21	... other data	—					M					Use of Extensibility	
P-7.7	Weather Qualifier is described as...											WeatherQualifier ::= ENUMERATED	
P-7.7.01	Shallow	—					M					thunderstormTS (0)	
P-7.7.02	Partial	—					M					showerSH (1)	
P-7.7.03	Patches	—					M					freezingFZ (2)	
P-7.7.04	Low Drifting	—					M					blowingBL (3)	
P-7.7.05	Blowing	—					M					lowDriftingDR (4)	
P-7.7.06	Shower	—					M					mistMI (5)	
P-7.7.07	Thunderstorm	—					M					patchesBC (6)	
P-7.7.08	Freezing	—					M					partialPR (7)	
P-7.7.09	... other data	—					M					Use of Extensibility	

a if V2 and METAR

Table P-9: Runway

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.1	ATISRunways contains up to 6 RunwayInUse	—					M		6			ATISRunways ::= SEQUENCE (SIZE(1..6,...)) OF RunwayInUse	
P-9.2	RunwayInUse contains...											RunwayInUse ::= SEQUENCE	
P-9.2.01	... a runway qualifier	—					M					[0] TakeOffLandingIndicator OPTIONAL,	
P-9.2.02	... an instrument indicator	—					M					[1] IfrVfrIndicator OPTIONAL	
P-9.2.03	... a runway id	—					M					[2] RunwayId	
P-9.2.04	... other data	—					M					Use of Extensibility	
P-9.3	A Runway Qualifier is expressed as...											TakeoffLandingIndicator ::= ENUMERATED	
P-9.3.01	takeoff	—					M					takeoff (0)	
P-9.3.02	landing	—					M					landing (1)	
P-9.3.03	... other data	—					M					Use of Extensibility	
P-9.4	An Instrument Indicator is expressed as...											IfrVfrIndicator ::= ENUMERATED	
P-9.4.01	ifr	—					M					ifr (0)	
P-9.4.02	vfr	—					M					vfr (1)	
P-9.4.03	... other data	—					M					Use of Extensibility	
P-9.5	A Runway Identifier contains...											RunwayId ::= SEQUENCE	
P-9.5.01	... a Runway Designator (1 to 36)	—					M					[0] RunwayDesignator	
P-9.5.02	... a Runway Letter	—					M					[1] RunwayLetter OPTIONAL	
P-9.5.03	... other data	—					M					Use of Extensibility	
P-9.6	Runway Designator											RunwayDesignator ::=	
P-9.6.01	from 1 to 36	—					M					INTEGER (1..36)	
P-9.7	A Runway Letter is described as...											RunwayLetter ::= ENUMERATED	
P-9.7.01	Left	—					M					left (0)	
P-9.7.02	Center	—					M					center (1)	
P-9.7.03	Right	—					M					right (2)	
P-9.7.04	... other data	—					M					Use of Extensibility	
P-9.8	The Surface Condition Braking Actions contains...											SurfaceConditionsBrakingActions ::= SEQUENCE	
P-9.8.01	... a descriptive information containing ...	—					M					[0] CHOICE	
P-9.8.011	... standardized values for each runway	—					M					[0] SEQUENCE (SIZE (1..6,...)) OF ConditionsAndActions	
P-9.8.012	... a character string in plain language (up to 256 char)	—					M					[1] IA5String (SIZE (1..256))	
P-9.8.013	... other data	—					M					Use of Extensibility	
P-9.8.02	... other information (up to 500 char)	—					M					[1] IA5String (SIZE(1..500)) OPTIONAL	
P-9.8.03	... other data	—					M					Use of Extensibility	
P-9.9	The Surface Condition Braking Actions contains...											ConditionsAndActions ::= SEQUENCE	
P-9.9.01	... time of observation	—					M					[0] Time OPTIONAL,	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.9.02	... the runway id	—					M					[1] RunwayId OPTIONAL,	
P-9.9.03	... the runway length	—					M					[2] RunwayLength OPTIONAL,	
P-9.9.04	... the runway width	—					M					[3] RunwayWidth OPTIONAL,	
P-9.9.05	... the deposits on the runway	—					M					[4] RunwayDeposits OPTIONAL,	
P-9.9.06	... the friction measurements	—					M					[5] FrictionMeasurements OPTIONAL	
P-9.9.07	... other data	—					M					Use of Extensibility	
P-9.10	The RunwayLength is expressed ...											RunwayLength ::= CHOICE	
P-9.10.01	... in meters from 300 to 6500 with a resolution of 10	—					C					[0] INTEGER (30..650),	
P-9.10.02	... in feet from 1000 to 20000 with a resolution of 100	—					C					[1] INTEGER (10..200)	
P-9.10.03	... other data	—					M					Use of Extensibility	
P-9.11	The RunwayWidth is expressed ...											RunwayWidth ::= CHOICE	
P-9.11.01	... in meters from 10 to 130 with a resolution of 1	—					C					[0] INTEGER (10..130),	
P-9.11.02	... in feet from 30 to 400 with a resolution of 10	—					C					[1] INTEGER (2..40)	
P-9.11.03	... other data	—					M					Use of Extensibility	
P-9.12	The Runway Deposits contains...											RunwayDeposits ::= SEQUENCE	
P-9.12.01	... type of deposits	—					M					[0] Deposits,	
P-9.12.02	... attributes	—					M					[1] DepositAttribute OPTIONAL,	
P-9.12.03	... depth	—					M					[2] DepositDepth OPTIONAL	
P-9.12.04	... other data	—					M					Use of Extensibility	
P-9.13	The Deposits are described as...											Deposits ::= ENUMERATED	
P-9.13.01	clear and dry	—					M					clearAndDry (0)	
P-9.13.02	damp	—					M					damp (1)	
P-9.13.03	wet	—					M					wet (2)	
P-9.13.04	rime or frosted	—					M					rimeOrFrosted (3)	
P-9.13.05	ice	—					M					ice (4)	
P-9.13.06	slush	—					M					slush (5)	
P-9.13.07	dry snow	—					M					drySnow (6)	
P-9.13.08	wet snow	—					M					wetSnow (7)	
P-9.13.09	water	—					M					water (8)	
P-9.13.10	flooded	—					M					flooded (9)	
P-9.13.11	frozen ruts or redges	—					M					frozenRutsOrRidges (10)	
P-9.13.12	compacted or rolled snow	—					M					compactedOrRolledSnow (11)	
P-9.13.13	de-iced	—					M					de-iced (12)	
P-9.13.14	sanded	—					M					sanded (13)	
P-9.13.15	drifting sand	—					M					driftingSand (14)	
P-9.13.16	rubber deposits	—					M					rubberDeposits (15)	
P-9.13.17	volcanish ash	—					M					volcanishAsh (16)	
P-9.13.18	not reported	—					M					notReported (17)	
P-9.13.19	... other data	—					M					Use of Extensibility	
P-9.14	The Deposit Attributes are described as...											DepositAttributes ::= ENUMERATED	
P-9.14.01	patches	—					M					patches (0)	
P-9.14.02	covered	—					M					covered (1)	
P-9.14.03	... other data	—					M					Use of Extensibility	
P-9.15	The Deposit Depth is expressed ...											DepositDepth ::= CHOICE	
P-9.15.01	... in millimeters from 1 to 400 with a resolution of 1	—					C					[0] INTEGER (1..400),	
P-9.15.02	... in inches from 0.01 to 0.09 with a resolution of 0.01	—					C					[1] INTEGER (10..90)	
P-9.15.03	... in inches from 1 to 20 with a resolution of 0.5	—					C					[2] INTEGER (2..40)	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.15.04	... other data	—					M					Use of Extensibility	
P-9.16	The Friction Measurements are described as...											FrictionMeasurements ::= CHOICE	
P-9.16.01	... coefficient by third	—					M					[0] SEQUENCE	
P-9.16.011	... the 3 coefficients	—					M					[0] SEQUENCE (SIZE(3)) OF BACoefficient,	
P-9.16.012	... type of equipment used	—					M					[1] BAEquipmentUsed OPTIONAL,	
P-9.16.013	... free text	—					M					[2] IA5String	
P-9.16.014	... other data	—					M					Use of Extensibility	
P-9.16.02	... estimation by third	—					M					[1] SEQUENCE (SIZE(3)) OF BAEstimate,	
P-9.16.03	... estimation for the full runway	—					M					[2] BAEstimate	
P-9.16.04	... other data	—					M					Use of Extensibility	
P-9.17	The Braking Action Description contains...											BAEquipmentUsed ::= SEQUENCE	
P-9.17.01	... an equipment id	—					M					[0] ENUMERATED OPTIONAL,	
P-9.17.011	brd	—					M					brd (0)	
P-9.17.012	grt	—					M					grt (1)	
P-9.17.013	mum	—					M					mum (2)	
P-9.17.014	rft	—					M					rft (3)	
P-9.17.015	sfh	—					M					sfh (4)	
P-9.17.016	sfl	—					M					sfl (5)	
P-9.17.017	skh	—					M					skh (6)	
P-9.17.018	skl	—					M					skl (7)	
P-9.17.019	tap	—					M					tap (8)	
P-9.17.020	... other data	—					M					Use of Extensibility	
P-9.17.02	... a free text message (up to 50 char)	—					M					[1] IA5String (SIZE(1..50)) OPTIONAL	
P-9.17.03	... other data	—										Use of Extensibility	
P-9.18	The BACoefficient is expressed as an integer from 0 to 99 with a resolution of 1	—					M					BACoefficient ::= INTEGER (0..99)	
P-9.19	The BAEstimate is described as...											BAEstimate ::= ENUMERATED	
P-9.19.01	Not Report	—					M					brakingConditionsNotReported (0)	
P-9.19.02	poor	—					M					poor (1)	
P-9.19.03	medium to poor	—					M					mediumToPoor (2)	
P-9.19.04	medium	—					M					medium (3)	
P-9.19.05	medium to good	—					M					mediumToGood (4)	
P-9.19.06	good	—					M					good (5)	
P-9.19.07	unreliable	—					M					unreliable (9)	
P-9.19.08	... other data	—					M					Use of Extensibility	
P-9.20	ATISArrestingSystem contains up to 6 ArrestingSystem	—					M					ATISArrestingSystem ::= SEQUENCE (SIZE(1..6,...)) OF ArrestingSystem	
P-9.21	An ArrestingSystem contains an indication about...											ArrestingSystem ::= SEQUENCE	
P-9.21.01	... the runway id	—					M					[0] RunwayId OPTIONAL,	
P-9.21.02	... the runway section	—					M					[1] RunwaySectionId,	
P-9.21.03	... the condition	—					M					[2] RASCondition	
P-9.21.04	... other data	—					M					Use of Extensibility	
P-9.22	The Runway Section Id is described as...											RunwaySectionId ::= ENUMERATED	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.22.01	touchdown	—					M					touchdown (0)	
P-9.22.02	mid point	—					M					midPoint (1)	
P-9.22.03	stop end	—					M					stopEnd (2)	
P-9.22.04	... other data	—					M					Use of Extensibility	
P-9.23	The Arresting System Condition is described as...											RASCondition ::= ENUMERATED	
P-9.23.01	Up	—					M					up (0)	
P-9.23.02	Down	—					M					down (1)	
P-9.23.03	... other data	—					M					Use of Extensibility	

OPLINKP Profile

C Conditional, Feet or Meter or both must be supported

Table P-11: Surface Wind

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-11.1	Surface Wind for ATIS contains...											ATISSurfaceWind ::= SEQUENCE	
P-11.1.01	... a display indicator of the keyword WIND	—					M					[0] NULL OPTIONAL,	
P-11.1.02	... a surface wind indication per runway (up to 6)	—					M					[1] SEQUENCE (SIZE(1..6,...)) OF SurfaceWind	
P-11.2	Surface Wind for METAR contains...											METARSurfaceWind ::= SEQUENCE	
P-11.2.01	... direction information as	—					M					[0] CHOICE	
P-11.2.011	... a direction and	—					M					[0] WindDirection	
P-11.2.012	... a VARIABLE indicator	—					M					[1] NULL	
P-11.2.013	... other data	—					M					Use of Extensibility	
P-11.2.02	... speed information	—					M					[1] WindSpeed,	
P-11.2.03	... Gust speed information	—					M					[2] WindSpeed OPTIONAL,	
P-11.2.04	... direction variations...	—					M					[3] SEQUENCE OPTIONAL	
P-11.2.043	... between direction 1 ...	—					M					[0] WindDirection	
P-11.2.044	... And direction 2	—					M					[1] WindDirection	
P-11.2.05	... other data	—					M					Use of Extensibility	
P-11.3	Surface Wind contains...											SurfaceWind ::= SEQUENCE	
P-11.3.01	... the runway id	—					M					[0] RunwayId OPTIONAL,	
P-11.3.02	... information on winds...	—					M					[1] CHOICE	
P-11.3.021	... for the whole runway or	—					M					[0] SurfaceWD	
P-11.3.022	... per section	—					M					[1] SEQUENCE	
P-11.3.0221	... touchdown	—					M					[0] SurfaceWD OPTIONAL	
P-11.3.0222	... middle	—					M					[1] SurfaceWD OPTIONAL	
P-11.3.0223	... end	—					M					[2] SurfaceWD OPTIONAL	
P-11.4	Surface Wind Information is expressed...											SurfaceWD ::= CHOICE	
P-11.4.01	... a "calm" indicator or	—					M					[0] NULL,	
P-11.4.02	... speed and direction information	—					M					[1] WindSpeedDirection	
P-11.4.03	... other data	—					M					Use of Extensibility	
P-11.5	Wind Speed and Direction contains...											WindSpeedDirection ::= SEQUENCE	
P-11.5.01	... direction information expressed as	—					M					[0] CHOICE	
P-11.5.011	... a direction or	—					M					[0] WindDirection,	
P-11.5.012	... a direction variation or	—					M					[1] DirectionVariations,	
P-11.5.013	... a "variable" indication	—					M					[2] NULL	
P-11.5.014	... other data	—					M					Use of Extensibility	
P-11.5.02	... speed direction	—					M					[1] WindSpeed,	
P-11.5.03	... speed variations	—					M					[2] SpeedVariations OPTIONAL,	
P-11.5.04	... and direction variations	—					M					[3] DirectionVariations OPTIONAL	
P-11.5.05	... other data	—					M					Use of Extensibility	
P-11.6	Wind Speed contains...											SurfaceWindSpeed ::= SEQUENCE	
P-11.6.01	... a display indication of the keyword ABV	—					M					[0] NULL OPTIONAL,	
P-11.6.02	... a speed value expressed ...	—					M					[1] CHOICE	
P-11.6.021	... in KMH (from 0 to 399 with a resolution of 1)	—					C					[0] INTEGER (0..399)	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-11.6.022	... in Knots (from 0 to 199 with a resolution of 1)	—					C					[1] INTEGER (0..199)	
P-11.6.023	... other data	—					M					Use of Extensibility	
P-11.6.024	... in mps (from 0 to 99 with a resolution of 1)	—					C					[2] INTEGER (0..99)	a
P-11.7	Direction Variations contains...											DirectionVariations ::= SEQUENCE	
P-11.7.01	... a direction 1	—					M					[0] WindDirection	
P-11.7.02	... a direction 2	—					M					[1] WindDirection	
P-11.8	Speed Variations contains...											SpeedVariations ::= SEQUENCE	
P-11.8.01	... a max speed	—					M					[0] WindSpeed	
P-11.8.02	... a min speed	—					M					[1] WindSpeed	
P-11.9	Wind Direction											WindDirection ::=	
P-11.9.01	from 0 to 360 with a resolution of 10	—					M					INTEGER (0..36)	

OPLINKP Profile:

C Conditional, at least one must be supported

Table P-13: Visibility

Source: Chapter 4 - ASN.1															
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons				
P-13.1	ATISVisibility contains a visibility value for each runway (up to 6)	—					M		6			ATISVisibility ::= SEQUENCE (SIZE (1..6,...)) OF Visibility			
P-13.2	METARVisibility contains...											METARVisibility ::= SEQUENCE	a		
P-13.2.01	... a min visibility	—					M					[0] METARVisibilityMeasure,			
P-13.2.02	... a max visibility	—					M					[1] METARVisibilityMeasure OPTIONAL			
P-13.2.03	... other data											Use of Extensibility			
P-13.3	Visibility contains...											Visibility ::= SEQUENCE			
P-13.3.01	... a runway id	—					M					[0] RunwayId OPTIONAL,			
P-13.3.02	... a visibility value	—					M					[1] CHOICE			
P-13.3.021	... for the whole runway or	—					M					[0] VIS			
P-13.3.022	... for each section	—					M					[1] SEQUENCE			
P-13.3.0221	... touchdown	—					M					[0] VIS OPTIONAL			
P-13.3.0222	... end	—					M					[1] VIS OPTIONAL			
P-13.4	METARVisibilityMeasure contains...											METARVisibilityMeasure ::= SEQUENCE			
P-13.4.01	... a visibility value	—					M					[0] VIS,			
P-13.4.02	... and a direction	—					M					[1] Direction			
P-13.4.03	... other data	—					M					Use of Extensibility			
P-13.5	VIS expressed...											VIS ::= CHOICE			
P-13.5.01	... in meters (from 0 to 800 with a resolution of 50)	—					M					[0] INTEGER (0..16)			
P-13.5.02	... in meters (from 900 to 4900 with a resolution of 100)	—					M					[1] INTEGER (9..49)			
P-13.5.03	... in Kms (from 5 to 10)	—					M					[2] INTEGER (5..10)			
P-13.5.04	... in statutes miles	—					O					[3] VisibilityStatuteMiles			
P-13.5.05	... other data	—					M					Use of Extensibility			
P-13.6	Direction is expressed as...											Direction ::= ENUMERATED	a		
P-13.6.01	... north	—					M					northN (0),			
P-13.6.02	... south	—					M					southS (1),			
P-13.6.03	... east	—					M					eastE (2),			
P-13.6.04	... west	—					M					westW (3),			
P-13.6.05	... north east	—					M					northEastNE (4),			
P-13.6.06	... north west	—					M					northWestNW (5),			
P-13.6.07	... south east	—					M					southEastSE (6),			
P-13.6.08	... south west	—					M					southWestSW (7)			
P-13.7	VisibilityStatuteMiles expressed...											VisibilityStatuteMiles ::= CHOICE			
P-13.7.01	... in 1/16th (from 0 to 3/8)	—					M					[0] INTEGER (0..6)			
P-13.7.02	... in 1/8th (from 3/8 to 2)	—					M					[1] INTEGER (3..16)			
P-13.7.03	... in 1/4th (from 2 to 3)	—					M					[2] INTEGER (8..12)			
P-13.7.04	... in units (from 3 to 15)	—					M					[3] INTEGER (3..15)			
P-13.7.05	... in five to five (from 15 to 50)	—					M					[4] INTEGER (3..10)			
P-13.7.06	... as the indication "More Than Fifty"	—					M					[5] NULL			
P-13.7.07	... other data	—					M					Use of Extensibility			

Source: Chapter 4 - ASN.1													Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	
		OPLINKP	Profile		Implementation		OPLINKP	Profile		Implementation			
		Profile	Status	Cons	Status	Cons	Profile	Status	Cons	Status	Cons		

a if V2 and METAR

Table P-15: Miscellaneous

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-15.1	Ability of the aircraft to manage several FIS contracts simultaneously with the same ground system											ContractNumber ::=		
P-15.1.01	up to 256	M					M					INTEGER (1..256)		
P-15.2	Temperature expressed in degrees Celcius (from -80 to 60 with a resolution of 1)	—					M					Temperature ::= INTEGER (-80..60)		
P-15.3	Transition Level expressed...											TransitionLevel ::= CHOICE		
P-15.3.01	... in meters from 300 to 6000 with a resolution of 10	—					C					[0] INTEGER (30..610)		
P-15.3.02	... in feet from 1000 to 20000 with a resolution of 100	—					C					[1] INTEGER (2..40)		
P-15.3.03	... other data	—					M					Use of Extensibility		

OPLINKP Profile:

C Conditional, Meters or Feet or both must be supported

Table P-16: Supplementary Information

Source: Chapter 4 - ASN.1															
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons				
P-16.1	ATIS Supplementary Information contains...	—					M		3			SupplementaryInformation ::= SEQUENCE (SIZE (1..3,...)) OF CHOICE			
P-16.1.01	... a free text message or	—					M					[0] IA5String SIZE (1..256),			
P-16.1.02	... information with	—					M					[1] SEQUENCE			
P-16.1.021	... MET phenomena	—					M					[0] SEQUENCE OPTIONAL			
P-16.1.021	... as a type and	—					M					[0] SignificantMetPhenomena,			
P-16.1.0212	... a location	—					M					[1] PhenomenonLocation			
P-16.1.0213	... other data	—					M					OPTIONAL			
P-16.1.022	... recent Weather	—					M					Use of Extensibility			
P-16.1.03	... other data	—					M					[1] RecentWeather OPTIONAL			
												Use of Extensibility			
P-16.2	METAR Supplementary Information contains...											METARSuppInfo ::= SEQUENCE	a		
P-16.2.01	... information on recent weather	—					M		3			[0] SEQUENCE (SIZE(1..3,...)) OF RecentWeather OPTIONAL,			
P-16.2.02	... wind shear information ...	—					M					[1] CHOICE OPTIONAL			
P-16.2.021	... for up to 6 runways or	—					M		6			[0] SEQUENCE (SIZE(1..6,...)) OF Runway			
P-16.2.022	... for all runways	—					M					[1] NULL			
P-16.2.023	... other data	—					M					Use of Extensibility			
P-16.2.03	... sea information	—					M					[2] SeaInfo OPTIONAL,			
P-16.2.04	... runway state	—					M					[3] RunwayState OPTIONAL			
P-16.2.05	... other data	—					M					Use of Extensibility			
P-16.3	Significant MET Phenomena is described as...											SignificantMetPhenomena ::= ENUMERATED			
P-16.3.01	cumulonimbus	—					M					cumulonimbusCB (0)			
P-16.3.02	thunderstorm	—					M					thunderstormTS (1)			
P-16.3.03	moderate turbulence	—					M					moderate turbulence (2)			
P-16.3.04	severe turbulence	—					M					severe turbulence (3)			
P-16.3.05	wind shear	—					M					wind shear (4)			
P-16.3.06	hail	—					M					hail (5)			
P-16.3.07	severe squall	—					M					severe squall (6)			
P-16.3.08	moderate ice	—					M					moderate ice (7)			
P-16.3.09	severe ice	—					M					severe ice (8)			
P-16.3.10	freezing drizzle	—					M					freezing drizzle (9)			
P-16.3.11	freezing rain	—					M					freezing rain (10)			
P-16.3.12	severe mountain waves	—					M					severeSEVMTW (11)			
P-16.3.13	sandstorm	—					M					sandstormSS (12)			
P-16.3.14	duststorm	—					M					duststormDS (13)			
P-16.3.15	blowing snow	—					M					blowingSnowBLSN (14)			
P-16.3.16	funnel cloud	—					M					funnelCloudFC (15)			
P-16.3.17	other data	—					M					Use of Extensibility			
P-16.4	PhenomenonLocation is described as...											PhenomenonLocation ::= CHOICE			
P-16.4.01	... in approach	—					M					[0] NULL,			
P-16.4.02	... in climb out	—					M					[1] NULL,			

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-16.4.03	... on a runway	—					M					[2] RunwayId		
P-16.4.04	... other data	—					M					Use of Extensibility		
P-16.5	Sea Info contains...											SeaInfo ::= SEQUENCE	a	
P-16.5.01	... sea temperature	—					M					[0] SeaTemperature,		
P-16.5.02	... sea state	—					M					[1] INTEGER (0..9)		
P-16.6	See Temperature expressed in degree Celcius (from -10 to 40 with a resolution of 1)											SeaTemperature ::= INTEGER (-10..40)	a	
P-16.7	Runway State is described as...											RunwayState ::= CHOICE	a	
P-16.7.01	... a runway state group	—					M					[0] RunwayStateGroup,		
P-16.7.02	... indication "aerodrome is closed"	—					M					[1] NULL,		
P-16.7.03	... other data	—					M					Use of Extensibility		
P-16.8	Runway State Group contains...											RunwayStateGroup ::= SEQUENCE	a	
P-16.8.01	...runway designator	—					M					[0] ExtendedRunwayDesignator		
P-16.8.02	... deposit indicator	—					M					[1] INTEGER (0..9) OPTIONAL,		
P-16.8.03	... contamination extent	—					M					[2] ContaminationExtent OPTIONAL,		
P-16.8.04	... deposit depth	—					M					[3] RunwayDepositDepth OPTIONAL,		
P-16.8.05	... friction coefficient	—					M					[4] FrictionCoefficient OPTIONAL		
P-16.8.06	... other data	—					M					Use of Extensibility		
P-16.9	Extended Runway Designator is expressed as...											ExtendedRunwayDesignator ::= CHOICE	a	
P-16.9.01	... a runway designator or	—					M					[0] RunwayDesignator,		
P-16.9.02	... an integer between 51 and 86 or	—					M					[1] INTEGER (51..86)		
P-16.9.03	... all runways	—					M					[2] INTEGER (88),		
P-16.9.04	... not available	—					M					[3] INTEGER (99)		
P-16.9.05	... other data	—					M					Use of Extensibility		
P-16.10	Contamination Extent is...											ContaminationExtent ::= ENUMERATED	a	
P-16.10.01	... less than 10	—					M					lessThan10percent (1)		
P-16.10.02	... between 11 to 25 percent	—					M					between11and25percent (2)		
P-16.10.03	... between 26 to 50 percent	—					M					between26to50percent (5)		
P-16.10.04	... between 51 to 100 percent	—					M					between51to100percent (9)		
P-16.10.05	... other data	—					M					Use of Extensibility		
P-16.11	Runway Deposit Depth is expressed as...											RunwayDepositDepth ::= CHOICE	a	
P-16.11.01	up to 90 mm	—					M					[0] INTEGER (0..90),		
P-16.11.02	more than 10 cm	—					M					[1] INTEGER (92..98)		
P-16.11.03	non operational runway	—					M					[INTEGER (99)		
P-16.11.04	other data	—					M					Use of Extensibility		
P-16.12	Friction Coefficient is expressed as ...											FrictionCoefficient ::= CHOICE	a	
P-16.12.01	... a coefficient	—					M					[0] INTEGER (0..95),		
P-16.12.02	... the indication "unreliable"	—					M					[1] INTEGER (99)		
P-16.12.03	other data	—					M					Use of Extensibility		

a if V2 and METAR

Table P-17: Approach Type

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-17.1	The Approach type contains...											ApproachType ::= SEQUENCE	
P-17.1.01	... a display indication of the keyword EXPECT	—					M					[0] NULL OPTIONAL,	
P-17.1.02	... and an approach type as	—					M					[1] CHOICE	
												[0] SEQUENCE (SIZE (1..6,...)) OF InstrumentApproachProcedure OPTIONAL	
P-17.1.011	... an instrument approach procedure per runway (up to 6)	—					M					[1] IA5String (SIZE(1..64))	
P-17.1.021	... or a non standard approach	—					M					Use of Extensibility	
P-17.1.012	... other data	—					M						
P-17.2	The Instrument Approach Procedure contains...											InstrumentApproachProcedure ::= SEQUENCE	
P-17.2.01	... one or two approach procedure	—					M					[0] SEQUENCE (SIZE(1..2)) OF SEQUENCE	
P-17.2.011	... an approach procedure value	—					M					[0] ApproachProcedure	
												[1] IA5String (SIZE(1..50)) OPTIONAL	
P-17.2.012	... a free text message (up to 50 char)	—					M					Use of Extensibility	
P-17.2.013	... other data	—					M						
P-17.2.02	... a circling indicator	—					M					[1] NULL OPTIONAL,	
P-17.2.03	... a runway id	—					M					[2] RunwayId OPTIONAL	
P-17.2.04	... other data	—					M					Use of Extensibility	
P-17.3	The Approach procedure value is described as...											ApproachProcedure ::= ENUMERATED	
P-17.3.01	ils	—					M					ils (0)	
P-17.3.02	ilsdme	—					M					iiddem (1)	
P-17.3.03	localizer	—					M					localizer (2)	
P-17.3.04	vor	—					M					vor (3)	
P-17.3.05	vordme	—					M					vordme (4)	
P-17.3.06	ndb	—					M					ndb (5)	
P-17.3.07	dmearc	—					M					dmearc (6)	
P-17.3.08	rnav	—					M					rnav (7)	
P-17.3.09	mls	—					M					mls (8)	
P-17.3.10	vsa	—					M					vsa (9)	
P-17.3.11	other data	—					M					Use of Extensibility	

Table P-18: RVR

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-18.1	ATISRVR contains up to 6 RVR	—					M		6			ATISRVR ::= SEQUENCE (SIZE(1..6,...)) OF RVR		
P-18.2	METARRVR contains up to 4 METARRunwayVR	—					M		4			METARRVR ::= SEQUENCE (SIZE(1..4,...)) OF METARRunwayVR	a	
P-18.3	The RVR contains...											RVR ::= SEQUENCE		
P-18.3.01	... the runway id	—					M					[0] RunwayId OPTIONAL,		
P-18.3.02	... the RVR value	—					M					[1] CHOICE		
P-18.3.021	... for the whole runway	—					M					[0] RunwayVR		
P-18.3.022	... for each runway section	—					M					[1] SEQUENCE		
P-18.3.0221	... at the touchdown point	—					M					[0] RunwayVR OPTIONAL		
P-18.3.0222	... at the mid-point	—					M					[1] RunwayVR OPTIONAL		
P-18.3.0223	... at the stop end point	—					M					[2] RunwayVR OPTIONAL		
P-18.4	The Runway RVR contains...											RunwayVR ::= CHOICE		
P-18.4.01	... a RVR value or	—					M					[0] RVRValue		
P-18.4.02	... a "not reported" indication or	—					M					[1] NULL		
P-18.4.03	... a "not available" indication	—					M					[2] NULL		
P-18.4.04	... other data	—					M					Use of Extensibility		
P-18.5	The METARRunwayVR contains....											METARRunwayVR ::= SEQUENCE	a	
P-18.5.01	... a runway id	—					M					[0] RunwayId,		
P-18.5.02	... a value	—					M					[1] RVRValue,		
P-18.5.03	... a RVR variation	—					M					[2] RVRValue OPTIONAL,		
P-18.5.04	... a tendency	—					M					[3] METARRVRPastTendency		
P-18.5.05	... other data	—					M					Use of Extensibility		
P-18.6	The METARRVRPastTendency is expressed as...											METARRVRPastTendency ::= ENUMERATED	a	
P-18.6.01	... up	—					M					up (0),		
P-18.6.02	... down	—					M					down (1),		
P-18.6.03	... no distinct tendency	—					M					noDistinctTendency (2)		
P-18.6.04	... other data	—					M					Use of Extensibility		
P-18.7	The RVR Value contains...											RVRValue ::= CHOICE		
P-18.7.01	... a qualifier	—					M					[0] RVRQualifier OPTIONAL,		
P-18.7.02	...a value	—					M					[1] RunwayVisualRange		
P-18.7.03	... other data	—					M					Use of Extensibility		
P-18.8	The RVRQualifier is described as...											RVRQualifier ::= ENUMERATED		
P-18.8.01	below or minus	—					M					belowOrM (0)		
P-18.8.02	above or plus	—					M					aboveOrP (1)		
P-18.8.03	... other data	—					M					Use of Extensibility		
P-18.9	The Runway Visual Range is expressed...											RunwayVisualRange ::= CHOICE		
P-18.9.01	... in meters from 0 to 400 with a resolution of 25	—					C					[0] INTEGER (0..16)		
P-18.9.02	... in meters from 450 to 800 with a resolution of 50	—					C					[0] INTEGER (9..16)		

Source: Chapter 4 - ASN.1													Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-18.9.03	... in meters from 900 to 1500 with a resolution of 100	—					C					[0] INTEGER (9..15)	
P-18.9.04	... in feet from 0 to 1000 with a resolution of 100	—					C					[0] INTEGER (0..10)	
P-18.9.05	... in feet from 1200 to 3000 with a resolution of 200	—					C					[0] INTEGER (6..15)	
P-18.9.06	... in feet from 3500 to 6000 with a resolution of 500	—					C					[0] INTEGER (7..12)	
P-18.9.07	... other data	—					M					Use of Extensibility	

OPLINKP Profile

C Conditional, Feet or Meter or both must be supported

November 2001

ATNP WGA-SGA2/03 WP xx

AERONAUTICAL TELECOMMUNICATION NETWORK PANEL

WGA - Application and Implementation

SGA2 - Air/Ground Applications

Ground Flight Information Services PICS/OICS Proforma

File Ref.	FISPOG_21_Ed2Ed3.XLS
Author	Frédéric Picard
Version No.	2.1
Date of Issue	7th November 2001

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DOCUMENT CONTROL LOG

Sections	Date	Amendment Number	Reason for change and/or Change Note Number	
All		0.A	New document	Edition 2 compliant P/OICS
All	5th March 1999	0.B	Input Brussels SG2 Meeting (20th meeting)	
All	18 May 1999	0.C	Input Naples WG3 Meeting	
All	24th August 1999	0.D	Input Gran Canary WG3 Meeting	
All	10th November 1999	0.E	Input Tokyo WG3 Meeting	
All	21st August 2000	0.F	Input Berlin WG3 Meeting (Editorial changes + PDR 99040001)	
V2 sections	27th February 2001	1.A	Output Laurel SGA2 Meeting / Input WGA Honolulu Meeting	Edition 3 compliant P/OICS
All V1 sections	11th June 2001	2.0	PDR M1030001 - ATIS V1 ASN.1 replaced by ATIS V2 ASN.1	Edition 3 compliant P/OICS
All sections	7th November 2001	2.1	PDR M1110002 - OKI comments	

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Table I-1: PICS/OICS Identification

Ref No	PICS/OICS Identification	Implementation PICS/OICS
I-1.1	Date of Statement (DD/MM/YY)	
I-1.2	PICS/OICS Serial Number	
	Profile Identification	Profile Details
I-1.3	Profile Name	
I-1.4	Version	
I-1.5	Profile Authority Name	
I-1.6	Profile Applicability (Areas, Countries, Organisations etc where the profile can be applied)	
I-1.7	Date of effect	
I-1.8	Other Information	

Table I-2: Supplier and Implementation Identification

Ref No	Supplier Information	Supplier Details
I-2.1	Organization Name	
I-2.2	Contact Name(s)	
I-2.3	Address	
I-2.4	Telephone Number	
I-2.5	Telex Number	
I-2.6	Fax Number	
I-2.7	E-mail Address	
I-2.8	Other Information	
	Implementation Information	Implementation Details
I-2.9	Implementation Name	
I-2.10	Implementation Version	
I-2.11	Hardware Name	
I-2.12	Hardware Version	
I-2.13	Operating System Name	
I-2.14	Operating System Version	
I-2.15	Special Configuration	
I-2.16	Other Information	

Table I-3: FIS Protocol Identification

Ref No		OPLINKP	Profile	Implementation
I-3.1	Protocol Standard (Title, reference, date)	ICAO Doc 9705 Edition Three - November 2000		
I-3.2	FIS Protocol Version	Version 1 Version 2		
I-3.3	Addenda, amendments and corrigenda implemented			
I-3.4	Defect Reports implemented	M0060002 M0110002 M0110003 M1030001 M1030002 M1110002		

Table S-1: FIS Protocol Options

Source: Chapter 8 - Subsetting Rules		DPLINKP Profil	Profile	IMP	Associated	Notes
Ref No	Protocol Option	Status	Status	Support	Predicate	
S-1.1	DFIS Protocol Version 1	C.1			V1	
S-1.2	DFIS Protocol Version 2	C.1			V2	
S-1.3	FIS-air-ASE	—			FIS/Air	
S-1.4	FIS-ground-ASE	M			FIS/Ground	
S-1.5	FIS Update Contract Function supported by the FIS-ground-user	O			FIS-ground-user/UC	
S-1.6	FIS Update Contract supported by the FIS-air-ASE				FIS-air-ASE/UC	
S-1.7	FIS Cancel Contracts supported by the FIS-air-ASE				FIS-air-ASE/CC	
S-1.7	D-ATIS service operated by the FIS-user	C.2			D-ATIS	
S-1.8	D-METAR service operated by the FIS-use	C.2			D-METAR	

OPLINKP Profile:

- C.1 An implementation shall support one and only one of these two options.
- C.2 if V1 (D-ATIS M, D-METAR N/A) else if V2 (at least one must be supported)

Table S-2: FIS-ASE Conformant Configurations

Source: Chapter 8: Subsetting Rules		OPLINKP Profile Config	Profile Status	IMP Support	Notes
Ref No	List of Predicates: Ground ASE				
S-2.1	I. FIS/ground	C.1			
S-2.2	II. FIS/ground + FIS-ground-user/UC	C.1			
	List of Predicates: Air ASE				
S-2.3	I. FIS/air	—			
S-2.4	II. FIS/air + FIS-air-ASE/UC				
S-2.5	II. FIS/air + FIS-air-ASE/UC + FIS-air-ASE/CC				

OPLINKP Profile:
C.1 At least one configuration must be supported.

Table S-3: Supported FIS Service Primitives

Source: Chapter 3 - Abstract Service		Sender (req, [cnf])			Receiver (ind, [rsp])			Notes
Ref No	Service Primitives	OPLINKP Status	Profile Status	IMP Support	OPLINKP Status	Profile Status	IMP Support	
S-3.1	Ability of the ground system to operate the FIS-demand-contract service	—			M			See Table S-4
S-3.2	Ability of the ground system to operate the FIS-update-contract service	—			M			See Table S-5
S-3.3	Ability of the ground system to operate the FIS-report service	M			—			See Table S-6
S-3.4	Ability of the ground system to operate the FIS-cancel-contracts service	—			M			See Table S-7
S-3.5	Ability of the ground system to operate the FIS-cancel-update-contract service	C.1			C.2			See Table S-8
S-3.6	Ability of the ground system to operate the FIS-user-abort service	M			M			—
S-3.7	Ability of the ground system to operate the FIS-provider-abort service	—			M			See Table S-9

OPLINKP Profile:

C.1 if (FIS-ground-user/UC and (V1 or (V2 and D-ATIS))) then C else —

C.2 if (FIS-ground-user/UC and (V1 or (V2 and D-ATIS))) **M** else —

Table S-4: FIS-demand-contract Service Parameters

Source: Chapter 3 - Abstract Service		OICS					
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	ASN.1 Description
S-4.1	Ability of the ground system to identify demand contracts with contract numbers						
S-4.1.01	FIS Contract Number = INTEGER (1..256)	M					See ContractNumber
S-4.2	Ability of the ground system to interpret the terms of the demand contract						
S-4.2.01	FIS Contract Details	M		—		—	See FISRequestData
S-4.3	Ability of the ground system to specify the result of the demand contract establishment						
S-4.3.01	accepted	M		—		—	
S-4.3.02	positive acknowledgement	O		—		—	
S-4.3.03	rejected	M		—		—	
S-4.4	Ability of the ground system to specify the reason of the demand contract rejection						
S-4.4.01	Reject Reason	M		—		—	See FISRejectReason
S-4.5	Ability of the ground system to specify the contents of an FIS report						
S-4.5.01	FIS Information	M		—		—	See FISReportData

Table S-5: FIS-update-contract Service Parameters

Source: Chapter 3 - Abstract Service		OICS					ASN.1 Description
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	
S-5.1	Ability of the ground system to interpret update contracts with contract numbers						
S-5.1.01	FIS Contract Number = INTEGER (1..256)	M					See ContractNumber
S-5.2	Ability of the ground system to specify the terms of the update contract						
S-5.2.01	FIS Contract Details	M		—		—	See FISRequestData
S-5.3	Ability of the ground system to specify the result of the update contract establishment						—
S-5.3.01	accepted	M		—		—	—
S-5.3.02	positive acknowledgement	O		—		—	—
S-5.3.03	rejected	M		—		—	—
S-5.4	Ability of the ground system to specify the reason of the demand contract rejection						—
S-5.4.01	can not comply	M		—		—	—
S-5.4.02	FIS service unavailable	M		—		—	—
S-5.4.03	error detected in the FIS request	M		—		—	—
S-5.4.04	undefined	M		—		—	—
S-5.5	Ability of the ground system to specify the contents of an FIS report						
S-5.5.01	FIS Information	M		—		—	See FISReportData

Table S-6: FIS-report Service Parameters

Source: Chapter 3 - Abstract Service		OICS					
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Status	Cons	Implementation Status	Cons	ASN.1 Description
S-6.1	Ability of the ground system to identify update contracts with contract numbers						
S-6.1.01	FIS Contract Number = INTEGER (1..256)	M					See ContractNumber
S-6.2	Ability of the ground system to specify the contents of a FIS report						
S-6.2.01	FIS Information	M		—		—	See FISReportData

Table S-7: FIS-cancel-contracts Service Parameters

Source: Chapter 3 - Abstract Service		OICS					
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status Cons		Implementation Status Cons		ASN.1 Description
S-7.1	Ability of the ground system to interpret the type of FIS service (e.g. ATIS, METAR) for which the cancellation of contracts is requested						
S-7.1.01	FIS Service Type	M		—		—	See FISCancelContracts

Table S-8: FIS-cancel-update-contract Service Parameters

Source: Chapter 3 - Abstract Service		OICS					ASN.1 Description
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status Cons		Implementation Status Cons		
S-8.1	Ability of the ground system to specify/interpret the update contract to be cancelled						
S-8.1.01	FIS Contract Number = INTEGER (1..256)	M		—		—	See ContractNumber

Table S-9: FIS-provider-abort Service Parameters

Source: Chapter 3 - Abstract Service		OICS					Description of the fallback function
		Operational Use					
Ref No	Operational Elements	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	
S-9.1	Activation of a fallback function by the ground system upon detection of a FIS provider abort						
S-9.1.01	timer expiration	M		—		—	
S-9.1.02	protocol error	M		—		—	
S-9.1.03	sequence error	M		—		—	
S-9.1.04	decoding error	M		—		—	
S-9.1.05	unrecoverable internal error	M		—		—	
S-9.1.06	invalid contract number	M		—		—	
S-9.1.07	dialogue end not supported	M		—		—	
S-9.1.08	undefined	M		—		—	
S-9.1.09	invalid QOS parameter	—					
S-9.1.10	cannot establish contact with the peer	—					
S-9.1.11	contact refused by the peer	—					
S-9.1.12	communication system failure	M		—		—	

Table S-10: Technical Timers

Source: Chapter 5 - Protocol Definition			OICS						Notes
			Operational Use						
Ref No	FIS Service	Timer	OPLINKP		Profile		Implementation		
			Status	Value	Status	Value	Status	Value	
S-10.1	FIS-demand-contact								
S10.1.01		t-DC-1	—						
S-10.2	FIS-demand-contact								
S10.2.01		t-DC-2	—						
S-10.3	FIS-update-contact								
S10.3.01		t-UC-1	—						
S-10.4	FIS-update-contact								
S10.4.01		t-UC-2	—						
S-10.5	FIS-cancel-update-contract								
S10.5.01		t-UC-3		9 minutes					
S-10.6	FIS-cancel-contracts								
S10.6.01		t-CL-1	—						
S-10.7	general								
S10.7.01		t-LI-1	—						
S-10.8	general								
S10.8.01		t-inactivity	—						

Table S-11: Dialogue Parameters

Source: Chapter 6 - Communication Requirements												Notes
Ref No	Dialogue Parameter	Send					Receive					
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	
S-11.1	The D-ATIS application service priority QOS parameter in the D-START ind is checked against the value...											
S11.1.01	... "Normal-priority flight safety messages" (value 10)	M					M					
S-11.2	The D-METAR application service priority QOS parameter in the D-START ind is checked against to the value...											
S11.2.01	... "Meteorological communications" (value 9)	M					M					a
S-11.3	The Residual Error Rate in the D-START ind is checked against to the value...											
S11.3.01	... "low" (Transport CRC requested)	M					M					a

a if V2 and METAR

Table M-1: FIS Messages (Top Level)

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
M-1.1	Any FIS downlink message contains...											FISDownlinkAPDU ::= SEQUENCE	
M-1.1.01	... a timestamp	—					M					DateTimeGroup	
M-1.1.02	... a downlink FIS APDU	—					M					DownlinkAPDU	
M-1.2	A downlink FIS APDU contains...											DownlinkAPDU := CHOICE	
M-1.2.01	... a FIS contract establishment request	—					M					[0] FISRequest	
M-1.2.02	...an FIS update contract cancellation request	—					C.1					[1] FISCancelUpdateContract	
M-1.2.03	... a FIS Cancel Update Accept	—					C.1					[2] FISCancelUpdateAccept	
M-1.2.04	... a all contracts cancellation request	—					M					[3] FISCancelContracts	
M-1.2.05	... an air-initiated abort a FIS dialogue	—					M					[4] FISAbort	
M-1.2.06	... other data	—					X					Use of Extensibility	
M-1.3	Any FIS uplink message contains...											FISUplinkAPDU ::= SEQUENCE	
M-1.3.01	... a timestamp	M					—					DateTimeGroup	
M-1.3.02	... an uplink FIS APDU	M					—					UplinkAPDU	
M-1.4	A downlink FIS APDU contains...											UplinkAPDU ::= CHOICE	
M-1.4.01	... a FIS contract accept	M					—					[0] FISAccept	
M-1.4.02	... a FIS contract reject	M					—					[1] FISReject	
M-1.4.03	... a FIS report	M					—					[2] FISReport	
M-1.4.04	... a FIS update contract cancel	C.2					—					[3] FISCancelUpdateContract	
M-1.4.05	... a FIS update contract cancel accept	C.1					—					[4] FISCancelUpdateAccept	
M-1.4.06	... a all contracts cancellation request	M					—					[5] FISCancelContractsAccept	
M-1.4.07	... a ground-initiated abort of a FIS dialogue	M					—					[6] FISAbort	
M-1.4.08	... other data	X					—					Use of Extensibility	

OPLINKP Profile

- C.1 if (FIS-ground-user/UC) **M** else -
 C.2 if (FIS-ground-user/UC) **O** else -

Table M-2: FIS Messages (Second Level)

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send						Receive					
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	ASN.1 Protocol Elements
M-2.1	A FIS Provider Abort contains a reason...												FISAbort ::= CHOICE
M-2.1.01	... defined for ATIS in V1, for ATIS/METAR in V2	M						M					[0] FISProtocolErrorDiag
M-2.1.02	... other data	X						M					Use of Extensibility
M-2.2	A FIS Accept APDU contains...												FISAccept ::= SEQUENCE
M-2.2.01	... a contract number	M						—					ContractNumber
M-2.2.02	... other data	M						—					FISAcceptData
M-2.3	Data in a FIS Accept PDU contains...												FISAcceptData ::= CHOICE
M-2.3.01	... a FIS Report	M						M					[0] FISReportData
M-2.3.02	... a Positive Ack.	O						—					[2] NULL
M-2.3.03	... other data	X						M					Use of Extensibility
M-2.4	A Cancel Contracts APDU contains...												FISCancelContracts ::=
M-2.4.01	... the type of the FIS contracts (e.g. ATIS, METAR...) to be cancelled in one shot	—						M					FISServiceType
M-2.5	A Cancel Contracts Accept APDU contains...												FISCancelContractsAccept ::=
M-2.5.01	... the type of the FIS contracts (e.g. ATIS, METAR...) to be cancelled in one shot	M						—					FISServiceType
M-2.6	A FIS Cancel Update Accept APDU contains...												FISCancelUpdateAccept ::= SEQUENCE
M-2.6.01	... a contract number	M						M					Contract Number
M-2.6.02	... some additional data	M						M					FISCancelAcceptData
M-2.7	Data in a FIS Cancel Contracts Accept APDU contains...												FISCancelAcceptData ::= CHOICE
M-2.7.01	... for ATIS	M						M					[0] NULL
M-2.7.02	... for a FIS Service not supported by FIS V1	X						M					Use of Extensibility
M-2.8	A FIS Cancel Update Contract APDU contains...												FISCancelUpdateContract ::= SEQUENCE
M-2.8.01	... a contract number	M						M					Contract Number
M-2.8.02	... some additional data	M						M					FISCancelUpdateData
M-2.9	Data in a Cancel Update APDU contains...												FISCancelUpdateData ::= CHOICE
M-2.9.01	... for ATIS	M						M					[0] NULL
M-2.9.02	... for a FIS Service not supported by FIS V1	X						M					Use of Extensibility
M-2.10	A FIS Reject APDU contains...												FISReject ::= SEQUENCE
M-2.10.01	... a contract number	M						M					Contract Number
M-2.10.02	... some additional data	M						M					FISRejectData
M-2.11	Data in a FIS Reject Data indicates a reject because...												FISRejectData ::= CHOICE
M-2.11.01	... the update function is not supported (no report included)	C.1						—					[0] NULL
M-2.11.02	... the update function is not supported (report included)	C.1						—					[1] FISReportData
M-2.11.03	... an other reason	M						—					[2] FISRejectReason

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Status	Cons	Implementation Status	Cons	OPLINKP Profile	Status	Cons	Implementation Status	Cons		
M-2.11.04	... of a reason non defined in version 1	X					—					Use of Extensibility	
M-2.12	The FIS Reject Reason is because...											FISRejectReason ::= ENUMERATED	
M-2.12.01	... the ground cannot comply with the request	M					—					canNotComply (0)	
M-2.12.02	... the FIS Service is not available	M					—					fISServiceUnavailable (1)	
M-2.12.03	... an error is detected is the request	M					—					errorInRequest (2)	
M-2.12.04	... an undefined reason	M					—					undefined (3)	
M-2.12.05	... by a reason not defined in FIS V1	X					—					Use of Extensibility	
M-2.13	A FIS Report APDU contains...											FISReport ::= SEQUENCE	
M-2.13.01	... a contract number	M					—					Contract Number	
M-2.13.02	... some additional data	M					—					FISReportData	
M-2.14	Data in a FIS Report APDU contains...											FISReportData ::= CHOICE	
M-2.14.01	... ATIS Information	C.2					—					[0] ATISReport	
M-2.14.02	... non ATIS information	C.4					—					Use of Extensibility	
M-2.14.03	... METAR information	C.3					—					[1] METARReport	a
M-2.15	A FIS Request APDU contains...											FISRequest ::= SEQUENCE	
M-2.15.01	... a contract number	—					M					Contract Number	
M-2.15.02	... the contract type	—					M					ContractType DEFAULT demandContract	
M-2.15.03	... some additional data	—					M					FISRequestData	
M-2.16	FIS Contract Type is described as...											ContractType ::= ENUMERATED	
M-2.16.01	... a demand contract	M					—					demandcontract (0)	
M-2.16.02	... an update contract	C.1					—					updateContract (1)	
M-2.17	Data in a FIS Request APDU contains...											FISRequestData ::= CHOICE	
M-2.17.01	... handle a FIS request for ATIS Information	—					M					[0] ATISRequest	
M-2.17.02	... handle a FIS request for non ATIS information	—					M					Use of Extensibility	
M-2.17.03	... handle a FIS request for METAR Information	—					C.3					[1] METARRequest	a
M-2.18	React to a provider abort caused by...											FISProtocolErrorDiag ::= ENUMERATED	
M-2.18.01	... the expiration of a local or remote ASE timer	M					M					timerExpiration (0)	
M-2.18.02	... the detection of a local/remote protocol violation	M					M					protocolError (1)	
M-2.18.03	... an incorrect message sequencing	M					M					sequenceError (2)	
M-2.18.04	... an error when decoding a message	M					M					decodingError (3)	
M-2.18.05	... a local/remote unrecoverable error	M					M					unrecoverableInternalError (4)	
M-2.18.06	... the use of an incorrect contract number	M					M					invalidContractNumber (5)	
M-2.18.07	... the rejection by the ground of the dialogue release	M					M					dialogueEndNotSupported (6)	
M-2.18.08	... an undefined reason	M					M					undefined (7)	
M-2.18.09	... the use of an incorrect QoS parameter	—					M					invalidQoSParameter (8)	
M-2.18.10	... a reason not defined in version 1	X					M					Use of Extensibility	
M-2.19	The FIS service identifies...											FISServiceType ::= BIT STRING (SIZE (1,...))	
M-2.19.07	... the D-ATIS service	C.2					C.2					atis (0)	
M-2.19.08	... other non D-ATIS service	C.4					M					Use of Extensibility	
M-2.19.09	... the D-METAR service	C.3					C.3					metar (1)	a

Source: Chapter 4 - ASN.1														Notes	
Ref No	Operational Elements	Send						Receive							ASN.1 Protocol Elements
		OPLINKP Profile	Profile		Implementation		OPLINKP Profile	Profile		Implementation					
			Status	Cons	Status	Cons		Status	Cons	Status	Cons				

OPLINKP Profile

C.1 if (FIS-ground-user/UC) **M** else -

C.2 if D-ATIS **M** else **N/A**

C.3 if D-METAR **M** else **N/A**

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
C.4	if V1 X else M													
a	in V2 only													

Table M-4: ATIS Messages

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
M-4.1	An ATIS request contains...											ATISRequest ::= SEQUENCE	
M-4.1.01	... the location indicator	—					M					LocationIndicator	
M-4.1.02	... the type of ATIS requested	—					M					ArrivalDepartureIndicator OPTIONAL	
M-4.1.03	... other data	—					M					Use of Extensibility	
M-4.2	The type of the requested ATIS is specified as...											ArrivalDepartureIndicator ::= ENUMERATED	
M-4.2.01	... Arrival	—					M					arrivalARR (0)	
M-4.2.02	... Departure	—					M					departureDEP (1)	
M-4.2.03	... other data	—					M					Use of Extensibility	
M-4.3	An ATIS report contains...											ATISReport ::= SEQUENCE	
M-4.3.01	... the location identification	M					—					[0] LocationIndicator	
M-4.3.02	... the type of ATIS reported	M					—					[1] ArrivalDepartureIndicator OPTIONAL	
M-4.3.03	... the ATIS Designator	M					—					[2] ATISDesignator	
M-4.3.04	... the time of observation	M					—					[3] Time,	
M-4.3.05	... the type of approach	M					—					[4] ApproachType OPTIONAL,	
M-4.3.06	... the runways in use	M					—					[5] ATISRunways OPTIONAL,	
M-4.3.07	... the arresting system	M					—					[6] ATISArrestingSystem OPTIONAL,	
M-4.3.08	... the surface conditions braking actions	M					—					[7] SurfaceConditionsBrakingAction OPTIONAL,	
M-4.3.09	... the holding delay (up to 200 char)	M					—					[8] IA5String (SIZE (1..200)) OPTIONAL,	
M-4.3.10	... the transition level	M					—					[9] TransitionLevel OPTIONAL,	
M-4.3.11	... other operational information (up to 250 char)	M					—					[10] IA5String (SIZE (1..250)) OPTIONAL,	
M-4.3.12	... surface winds	M					—					[11] ATISSurfaceWind,	
M-4.3.13	... ceiling and visibility information	M					—					[12] CHOICE	
M-4.3.131	... CAV not ok	M					—					[0] SEQUENCE	
M-4.3.1311	... visibility information	M					—					[0] ATISVisibility,	
M-4.3.1312	... RVR	M					—					[1] ATISRVR OPTIONAL,	
M-4.3.1313	... the present weather	M					—					[2] ATISPresentWeather OPTIONAL,	
M-4.3.1314	... cloud information	M					—					[3] ATISCloud	
M-4.3.1315	... other	X					—					Use of extensibility	
M-4.3.132	... CAV ok	M					—					[1] NULL	
M-4.3.14	... air temperature	M					—					[13] Temperature,	
M-4.3.15	... dew point temperature	M					—					[14] Temperature,	
M-4.3.16	... altimeter setting	M					—					[15] AltimeterSetting,	
M-4.3.17	... supplementary information	M					—					[16] SupplementaryInformation OPTIONAL,	
M-4.3.18	... trend forecast information	M					—					[17] TrendForecastInformation OPTIONAL,	
M-4.3.19	... specific ATIS information (up to 64 char)	M					—					[18] IA5String (SIZE (1..64)) OPTIONAL	
M-4.3.20	... ATIS data not defined in FIS V2	X					—					Use of Extensibility	

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Status	Cons	Implementation Status	Cons	OPLINKP Profile	Status	Cons	Implementation Status	Cons			
M-4.4	Location Indicator with a 4 characters string											LocationIndicator ::= IA5String (SIZE(4))		

Table M-5: METAR Messages

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send						Receive					
		OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons		OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons	ASN.1 Protocol Elements
M-5.1	A METAR request contains...												METARRequest ::= SEQUENCE
M-5.1.01	... the location indicator	—						M					LocationIndicator
M-5.1.02	... other data	—						M					Use of Extensibility
M-5.2	A METAR report contains...												METARReport ::= SEQUENCE
M-5.2.01	... the type of report	M						—					[0] METARReportType
M-5.2.02	... the location identification	M						—					[1] LocationIndicator
M-5.2.03	... the time of observation	M						—					[2] DayTime
M-5.2.04	... level of automation	M						—					[3] NULL OPTIONAL,
M-5.2.05	... the surface wind	M						—					[4] METARSurfaceWind,
M-5.2.06	... ceiling and visibility information as	M						—					[5] CHOICE
M-4.2.061	... ok	M						—					[0] SEQUENCE
M-5.2.0611	... visibility information	M						—					[0] METARVisibility
M-5.2.0612	... RVR information	M						—					[1] METARRVR OPTIONAL,
M-5.2.0613	... present weather information and	M						—					[2] METARPresentWeather
M-5.2.0614	... cloud information	M						—					OPTIONAL,
M-5.2.0615	... other data	X						—					[3] Cloud
M-3.2.062	... or nok	M						—					Use of Extensibility
M-5.2.07	... air temperature	M						—					[1] NULL
M-5.2.08	... dew point temperature	M						—					[6] Temperature,
M-5.2.09	... pressure values	M						—					[7] Temperature,
M-5.2.10	... supplementary information	M						—					[8] PressureMeasure,
M-5.2.11	... trend forecast information	M						—					[9] METARSuppInfo OPTIONAL,
M-5.2.12	... remark	M						—					[10] TrendForecastInformation
M-5.2.13	... METAR data not defined in FIS V2	X						—					OPTIONAL,
M-5.3	A METAR Report Type is either												[11] IA5String OPTIONAL
M-5.3.01	... METAR	M						—					Use of Extensibility
M-5.3.02	... or SPECI	M						—					
M-5.3.03	... other data	X						—					

a if V2 and METAR

Table P-2: Altimeter Setting

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-2.1	Altimeter setting contains...											AltimeterSetting ::= SEQUENCE		
P-2.1.01	... a QNH value	M					—					[0] PressureMeasure		
P-2.1.02	... a QFE value per runway (up to 6)	M					—					[1] SEQUENCE (SIZE(1..6,...)) OF RunwayQFE OPTIONAL		
P-2.1.03	... other data	X					—					Use of extensibility		
P-2.2	Pressure Measure expressed...											PressureMeasure ::= CHOICE		
P-2.2.01	... in hecto-pascal	C.1					—					[0] PressureHPA,		
P-2.2.02	... in inches of Mercury (from 22.00 to 32.00 with a resolution of 0.01	C.1					—					[1] INTEGER (2200..3200)		
P-2.2.03	... other data	X					—					Use of extensibility		
P-2.3	Pressure Hecto Pascal expressed...											PressureHPA ::=		
P-2.3.01	... in hecto-pascal (from 500 to 1100 with a resolution of 1)	M					—					[0] INTEGER (500..1100)		
P-2.4	Runway QFE contains...											RunwayQFE ::= SEQUENCE		
P-2.4.01	... a Runway Identifier	M					—					RunwayId OPTIONAL		
P-2.4.02	... a QFE value	M					—					PressureHPA		
P-2.4.03	... other data	X					—					Use of extensibility		

Notes:

C.1 At least one must be supported.

Table P-4: Cloud

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons	OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons			
P-4.1	ATIS Cloud contains...											ATISCloud ::= SEQUENCE		
P-4.1.01	... display request of the keyword CLD	O					—					[0] NULL OPTIONAL,		
P-4.1.02	... a ATIS cloud value per runway (up to 6)	M					—					[1] SEQUENCE (SIZE(1..6,...)) OF RunwayATISCloud		
P-4.2	ATIS Cloud contains for each runway...											RunwayATISCloud ::= SEQUENCE		
P-4.2.01	... the runway id	M					—					[0] RunwayId OPTIONAL,		
P-4.2.02	... a ATIS cloud value per runway (up to 6)	M					—					[1] Cloud		
P-4.3	A Cloud Value is expressed as ...											Cloud ::= CHOICE		
P-4.3.01	... cloud layer information (up to 4)	M					—					[0] SEQUENCE (SIZE(1..4,...)) OF CloudLayer,		
P-4.3.02	... a "sky obscured" indication	M					—					[1] SkyObscured,		
P-4.3.03	... a "sky clear" indication	M					—					[2] NULL,		
P-4.3.04	... an "nsc" indication	M					—					[3] NULL		
P-4.3.05	... other data	X					—					Use of Extensibility		
P-4.4	A "Sky Obscured" indication contains...											SkyObscured ::= SEQUENCE		
P-4.4.01	... vertical visibility information	M					—					[0] VerticalVisibility OPTIONAL		
P-4.4.02	... other data	X					—					Use of Extensibility		
P-4.5	Cloud Layer contains description of...											CloudLayer ::= SEQUENCE		
P-4.5.01	... amount	M					—					[0] CloudAmount OPTIONAL		
P-4.5.02	... type	M					—					[1] CloudType OPTIONAL		
P-4.5.03	... height of base	M					—					[2] CloudHeightOfBase OPTIONAL		
P-4.5.04	... other data	X					—					Use of Extensibility		
P-4.6	Cloud Height Of Base contains ...											CloudHeightOfBase ::= SEQUENCE		
P-4.6.01	... cloud height	M					—					[0] CloudHeight,		
P-4.6.02	... cloud qualifier	M					—					[1] CloudQualifier OPTIONAL		
P-4.6.03	... other data	X					—					Use of Extensibility		
P-4.7	Cloud Amount is described as...											CloudAmount ::= ENUMERATED		
P-4.7.01	Few	M					—					fewFEW (0)		
P-4.7.02	Scattered	M					—					scatteredSCT (1)		
P-4.7.03	Broken	M					—					brokenBKN (2)		
P-4.7.04	Overcast	M					—					overcastOVC (3)		
P-4.7.05	... other data	X					—					Use of Extensibility		
P-4.8	Cloud Qualifier is described as...											CloudQualifier ::= ENUMERATED		
P-4.8.01	diffuse	M					—					diffuseDIF (0)		
P-4.8.02	ragged	M					—					raggedRAG (1)		
P-4.8.03	fluctuating rapidly	M					—					fluctuatingRapidlyFLUC (2)		
P-4.8.04	... other data	X					—					Use of Extensibility		
P-4.9	Cloud Height is expressed...											CloudHeight ::= CHOICE		
P-4.9.01	... in Meters (from 0 to 3000 with a resolution of 30)	C.1					—					[0] INTEGER (0..100)		
P-4.9.02	... in Meters (from 3300 to 19800 with a resolution of 300)	C.1					—					[1] INTEGER (11..66)		
P-4.9.03	... in Feet (from 0 to 10000 with a resolution of 100)	C.1					—					[1] INTEGER (0..100)		

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-4.9.04	... in Feet (from 11000 to 60000 with a resolution of 1000)	C.1					—					[3] INTEGER (11..60)	
P-4.9.05	... other data	X					—					Use of Extensibility	
P-4.10	Cloud Type is described as...											CloudType ::= ENUMERATED	
P-4.10.01	Cumulonimbus	M					—					cumulonimbusCB (0)	
P-4.10.02	Towering Cumulus	M					—					toweringcumulusTCU (1)	
P-4.10.03	... other data	X					—					Use of Extensibility	
P-4.11	Vertical Visibility is expressed...											VerticalVisibility ::= CHOICE	
P-4.11.01	... in meters from 0 to 600 with a resolution of 30	C.1					—					[0] INTEGER (0..20)	
P-4.11.02	... in feet from 0 to 2000 with a resolution of 100	C.1					—					[1] INTEGER (0..20)	
P-4.11.03	... other data	X					—					Use of Extensibility	

OPLINKP Profile

C.1 Conditional, Feet or Meter or both must be supported

Table P-5: Date & Time

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-5.1	The time stamp appended to any FIS APDU contains...											DateTimeGroup ::= SEQUENCE		
P-5.1.01	... the date	M					M					Date		
P-5.1.02	... the time (hhmmss)	M					M					HHMMSS		
P-5.2	The Date contains...											Date ::= SEQUENCE		
P-5.2.01	... the year	M					M					Year		
P-5.2.02	... the month	M					M					Month		
P-5.2.03	... the day	M					M					Day		
P-5.3	Year											Year ::=		
P-5.3.01	from 1996 to 2095	M					M					INTEGER (1996..2095)		
P-5.4	Month											Month ::=		
P-5.4.01	from January(1) to December (12)	M					M					INTEGER (1..12)		
P-5.5	Day											Day ::=		
P-5.5.01	from 1 to 31	M					M					INTEGER (1..31)		
P-5.6	A Day Time contains...											DayTime ::= SEQUENCE	a	
P-5.6.01	... a day	M					M					Day,		
P-5.6.02	... a time	M					M					Time		
P-5.7	HHMMSS contains...											HHMMSS ::= SEQUENCE		
P-5.7.01	... Hours	M					M					TimeHours		
P-5.7.02	... Minutes	M					M					TimeMinutes		
P-5.7.03	... Seconds	M					M					TimeSeconds		
P-5.8	Hours											TimeHours ::=		
P-5.8.01	from Midnight(0) to 23:00 hrs (11 PM)	M					M					INTEGER (0..23)		
P-5.9	Minutes											TimeMinutes ::=		
P-5.9.01	from 0 to 59	M					M					INTEGER (0..59)		
P-5.10	Seconds											TimeSeconds ::=		
P-5.10.01	from 0 to 59	M					M					INTEGER (0..59)		

a V2 and METAR only

Table P-7: ATIS Present Weather

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-7.1	ATIS Present Weather contains up to 3 PresentWeather information	M					—					ATISPresentWeather ::= SEQUENCE OF (SIZE(1..3,...)) PresentWeather		
P-7.2	METAR Present Weather contains up to 3 Present Weather information	M					—					METARPresentWeather ::= SEQUENCE OF (SIZE(1..3)) PresentWeather	a	
P-7.3	Present Weather contains...											PresentWeather ::= SEQUENCE		
P-7.3.01	... an intensity or proximity qualifier	M					—					[0] CHOICE OPTIONAL		
P-7.3.011	... intensity or	M					—					[0] IntensityQualifier		
P-4.3.012	... proximity	M					—					[1] NULL		
P-7.3.02	... a weather qualifier	M					—					[1] WeatherQualifier OPTIONAL,		
P-7.3.03	... up to 6 weather type	M					—					[2] SEQUENCE (SIZE(1..6,...)) OF WeatherType OPTIONAL		
P-7.3.04	... other data	X					—					Use of extensibility		
P-7.4	Recent Weather contains...											RecentWeather ::= SEQUENCE		
P-7.4.01	... a weather qualifier	M					—					[0] WeatherQualifier OPTIONAL,		
P-7.4.02	... up to 6 weather type	M					—					[1] SEQUENCE (SIZE(1..6,...)) OF WeatherType OPTIONAL		
P-7.4.03	... other data	X					—					Use of extensibility		
P-7.5	Intensity Qualifier is described as...											IntensityQualifier ::= ENUMERATED		
P-7.5.01	light or minus	M					—					lightOrMinus (0)		
P-7.5.02	moderate	M					—					moderate (1)		
P-7.5.03	heavy or plus	M					—					heavyOrPlus (2)		
P-7.5.04	... other data	X					—					Use of extensibility		
P-7.6	WeatherType is described as...											WeatherType ::= ENUMERATED		
P-7.6.01	Drizzle	M					—					drizzle (0)		
P-7.6.02	Rain	M					—					rain (1)		
P-7.6.03	Snow	M					—					snow (2)		
P-7.6.04	Snow Grains	M					—					snowGrains (3)		
P-7.6.05	Ice Pellets	M					—					icePellets (4)		
P-7.6.06	Ice Crystals	M					—					iceCrystal (5)		
P-7.6.07	Hail	M					—					hail (6)		
P-7.6.08	Small Hail	M					—					smallHail (7)		
P-7.6.09	fog	M					—					fogFG (8)		
P-7.6.10	mist	M					—					mistBR (9)		
P-7.6.11	sand	M					—					sandSA (10)		
P-7.6.12	dust	M					—					dustDU (11)		
P-7.6.13	haze	M					—					hazeHZ (12)		
P-7.6.14	smoke	M					—					smokeFU (13)		
P-7.6.15	volcanicAshes	M					—					volcanicAshesVA (14)		
P-7.6.16	dustSand	M					—					dustSandPO (15)		
P-7.6.17	squalls	M					—					squallSQ (16)		
P-7.6.18	funnelCloud	M					—					funnelCloudFC (17)		
P-7.6.19	duststorm	M					—					duststorm (18)		

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-7.6.20	sandstorm	M					—					sandstorm (19)	
P-7.6.21	... other data	X					—					Use of extensibility	
P-7.7	Weather Qualifier is described as...											WeatherQualifier ::= ENUMERATED	
P-7.7.01	Shallow	M					—					thunderstormTS (0)	
P-7.7.02	Partial	M					—					showerSH (1)	
P-7.7.03	Patches	M					—					freezingFZ (2)	
P-7.7.04	Low Drifting	M					—					blowingBL (3)	
P-7.7.05	Blowing	M					—					lowDriftingDR (4)	
P-7.7.06	Shower	M					—					mistMI (5)	
P-7.7.07	Thunderstorm	M					—					patchesBC (6)	
P-7.7.08	Freezing	M					—					partialPR (7)	
P-7.7.09	... other data	X					—					Use of extensibility	

a if V2 and METAR

Table P-9: Runway

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.1	ATISRunways contains up to 6 RunwayInUse	M					—					ATISRunways ::= SEQUENCE (SIZE(1..6,...)) OF RunwayInUse	
P-9.2	RunwayInUse contains...											RunwayInUse ::= SEQUENCE	
P-9.2.01	... a runway qualifier	M					—					[0] TakeOffLandingIndicator OPTIONAL,	
P-9.2.02	... an instrument indicator	M					—					[1] IfrVfrIndicator OPTIONAL	
P-9.2.03	... a runway id	M					—					[2] RunwayId	
P-9.2.04	... other data	X					—					Use of Extensibility	
P-9.3	A Runway Qualifier is expressed as...											TakeoffLandingIndicator ::= ENUMERATED	
P-9.3.01	takeoff	M					—					takeoff (0)	
P-9.3.02	landing	M					—					landing (1)	
P-9.3.03	... other data	X					—					Use of Extensibility	
P-9.4	An Instrument Indicator is expressed as...											IfrVfrIndicator ::= ENUMERATED	
P-9.4.01	ifr	M					—					ifr (0)	
P-9.4.02	vfr	M					—					vfr (1)	
P-9.4.03	... other data	X					—					Use of Extensibility	
P-9.5	A Runway Identifier contains...											RunwayId ::= SEQUENCE	
P-9.5.01	... a Runway Designator (1 to 36)	M					—					[0] RunwayDesignator	
P-9.5.02	... a Runway Letter	M					—					[1] RunwayLetter OPTIONAL	
P-9.5.03	... other data	X					—					Use of Extensibility	
P-9.6	Runway Designator											RunwayDesignator ::=	
P-9.6.01	from 1 to 36	M					—					INTEGER (1..36)	
P-9.7	A Runway Letter is described as...											RunwayLetter ::= ENUMERATED	
P-9.7.01	Left	M					—					left (0)	
P-9.7.02	Center	M					—					center (1)	
P-9.7.03	Right	M					—					right (2)	
P-9.7.04	... other data	X					—					Use of Extensibility	
P-9.8	The Surface Condition Braking Actions contains...											SurfaceConditionsBrakingActions ::= SEQUENCE	
P-9.8.01	... a descriptive information containing ...	M					—					[0] CHOICE	
P-9.8.011	... standardized values for each runway	M					—					[0] SEQUENCE (SIZE (1..6)) OF ConditionsAndActions	
P-9.8.012	... a character string in plain language (up to 256 char)	M					—					[1] IA5String (SIZE (1..256))	
P-9.8.013	... other data											Use of Extensibility	
P-9.8.02	... other information (up to 500 char)	M					—					[1] IA5String (SIZE(1..500) OPTIONAL	
P-9.8.03	... other data	X					—					Use of Extensibility	
P-9.9	The Surface Condition Braking Actions contains...											ConditionsAndActions ::= SEQUENCE	
P-9.9.01	... time of observation	M					—					[0] Time OPTIONAL,	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.9.02	... the runway id	M					—					[1] RunwayId OPTIONAL,	
P-9.9.03	... the runway length	M					—					[2] RunwayLength OPTIONAL,	
P-9.9.04	... the runway width	M					—					[3] RunwayWidth OPTIONAL,	
P-9.9.05	... the deposits on the runway	M					—					[4] RunwayDeposits OPTIONAL,	
P-9.9.06	... the friction measurements	M					—					[5] FrictionMeasurements OPTIONAL	
P-9.9.07	... other data	X					—					Use of Extensibility	
P-9.10	The RunwayLength is expressed ...											RunwayLength ::= CHOICE	
P-9.10.01	... in meters from 300 to 6500 with a resolution of 10	C.1					—					[0] INTEGER (30..650),	
P-9.10.02	... in feet from 1000 to 20000 with a resolution of 100	C.1					—					[1] INTEGER (10..200)	
P-9.10.03	... other data	X					—					Use of Extensibility	
P-9.11	The RunwayWidth is expressed ...											RunwayWidth ::= CHOICE	
P-9.11.01	... in meters from 10 to 130 with a resolution of 1	C.1					—					[0] INTEGER (10..130),	
P-9.11.02	... in feet from 30 to 400 with a resolution of 10	C.1					—					[1] INTEGER (2..40)	
P-9.11.03	... other data	X					—					Use of Extensibility	
P-9.12	The Runway Deposits contains...											RunwayDeposits ::= SEQUENCE	
P-9.12.01	... type of deposits	M					—					[0] Deposits,	
P-9.12.02	... attributes	M					—					[1] DepositAttribute OPTIONAL,	
P-9.12.03	... depth	M					—					[2] DepositDepth OPTIONAL	
P-9.12.04	... other data	X					—					Use of Extensibility	
P-9.13	The Deposits are described as...											Deposits ::= ENUMERATED	
P-9.13.01	clear and dry	M					—					clearAndDry (0)	
P-9.13.02	damp	M					—					damp (1)	
P-9.13.03	wet	M					—					wet (2)	
P-9.13.04	rime or frosted	M					—					rimeOrFrosted (3)	
P-9.13.05	ice	M					—					ice (4)	
P-9.13.06	slush	M					—					slush (5)	
P-9.13.07	dry snow	M					—					drySnow (6)	
P-9.13.08	wet snow	M					—					wetSnow (7)	
P-9.13.09	water	M					—					water (8)	
P-9.13.10	flooded	M					—					flooded (9)	
P-9.13.11	frozen ruts or redges	M					—					frozenRutsOrRidges (10)	
P-9.13.12	compacted or rolled snow	M					—					compactedOrRolledSnow (11)	
P-9.13.13	de-iced	M					—					de-iced (12)	
P-9.13.14	sanded	M					—					sanded (13)	
P-9.13.15	drifting sand	M					—					driftingSand (14)	
P-9.13.16	rubber deposits	M					—					rubberDeposits (15)	
P-9.13.17	volcanish ash	M					—					volcanishAsh (16)	
P-9.13.18	not reported	M					—					notReported (17)	
P-9.13.19	... other data	X					—					Use of Extensibility	
P-9.14	The Deposit Attributes are described as...											DepositAttributes ::= ENUMERATED	
P-9.14.01	patches	M					—					patches (0)	
P-9.14.02	covered	M					—					covered (1)	
P-9.14.03	... other data	X					—					Use of Extensibility	
P-9.15	The Deposit Depth is expressed ...											DepositDepth ::= CHOICE	
P-9.15.01	... in millimeters from 1 to 400 with a resolution of 1	C.2					—					[0] INTEGER (1..400),	
P-9.15.02	... in inches from 0.01 to 0.09 with a resolution of 0.01	C.2					—					[1] INTEGER (10..90)	
P-9.15.03	... in inches from 1 to 20 with a resolution of 0.5	C.2					—					[1] INTEGER (2..40)	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-9.15.04	... other data	X					—					Use of Extensibility	
P-9.16	The Friction Measurements are described as...											FrictionMeasurements ::= CHOICE	
P-9.16.01	... coefficient by third	M					—					[0] SEQUENCE	
P-9.16.011	... the 3 coefficients	M					—					[0] SEQUENCE (SIZE(3)) OF BACoefficient,	
P-9.16.012	... type of equipment used	M					—					[1] BAEquipmentUsed OPTIONAL,	
P-9.16.013	... free text	M					—					[2] IA5String	
P-9.16.014	... other data	X					—					Use of Extensibility	
P-9.16.02	... estimation by third	M					—					[1] SEQUENCE (SIZE(3)) OF BAEstimate,	
P-9.16.03	... estimation for the full runway	M					—					[2] BAEstimate	
P-9.16.04	... other data	X					—					Use of Extensibility	
P-9.17	The Braking Action Description contains...											BAEquipmentUsed ::= SEQUENCE	
P-9.17.01	... an equipment id	M					—					[0] ENUMERATED OPTIONAL,	
P-9.17.011	brd	M					—					brd (0)	
P-9.17.012	grt	M					—					grt (1)	
P-9.17.013	mum	M					—					mum (2)	
P-9.17.014	rft	M					—					rft (3)	
P-9.17.015	sfh	M					—					sfh (4)	
P-9.17.016	sfl	M					—					sfl (5)	
P-9.17.017	skh	M					—					skh (6)	
P-9.17.018	skl	M					—					skl (7)	
P-9.17.019	tap	M					—					tap (8)	
P-9.17.020	... other data	X					—					Use of Extensibility	
P-9.17.02	... a free text message (up to 50 char)	M					—					[1] IA5String (SIZE(1..50)) OPTIONAL	
P-9.17.03	... other data	X					—					Use of Extensibility	
P-9.18	The BACoefficient is expressed as an integer from 0 to 99 with a resolution of 1	M					—					BACoefficient ::= INTEGER (0..99)	
P-9.19	The BAEstimate is described as...											BAEstimate ::= ENUMERATED	
P-9.19.01	Not Report	M					—					brakingConditionsNotReported (0)	
P-9.19.02	poor	M					—					poor (1)	
P-9.19.03	medium to poor	M					—					mediumToPoor (2)	
P-9.19.04	medium	M					—					medium (3)	
P-9.19.05	medium to good	M					—					mediumToGood (4)	
P-9.19.06	good	M					—					good (5)	
P-9.19.07	unreliable	M					—					unreliable (9)	
P-9.19.08	... other data	X					—					Use of Extensibility	
P-9.20	ATISArrestingSystem contains up to 6 ArrestingSystem	M					—					ATISArrestingSystem ::= SEQUENCE (SIZE(1..6,...)) OF ArrestingSystem	
P-9.21	An ArrestingSystem contains an indication about...											ArrestingSystem ::= SEQUENCE	
P-9.21.01	... the runway id	M					—					[0] RunwayId OPTIONAL,	
P-9.21.02	... the runway section	M					—					[1] RunwaySectionId,	
P-9.21.03	... the condition	M					—					[2] RASCondition	
P-9.21.04	... other data	X					—					Use of Extensibility	
P-9.22	The Runway Section Id is described as...											RunwaySectionId ::= ENUMERATED	

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-9.22.01	touchdown	M					—					touchdown (0)		
P-9.22.02	mid point	M					—					midPoint (1)		
P-9.22.03	stop end	M					—					stopEnd (2)		
P-9.22.04	... other data	X					—					Use of Extensibility		
P-9.23	The Arresting System Condition is described as...											RASCondition ::= ENUMERATED		
P-9.23.01	Up	M					—					up (0)		
P-9.23.02	Down	M					—					down (1)		
P-9.23.03	... other data	X					—					Use of Extensibility		

OPLINKP Profile

- C.1 Conditional, Feet or Meter or both must be supported
- C.2 Conditional, Millimeter, Inches or both must be supported

Table P-11: Surface Wind

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-11.1	Surface Wind for ATIS contains...											ATISSurfaceWind ::= SEQUENCE		
P-11.1.01	... a display indicator of the keyword WIND	O					—					[0] NULL OPTIONAL,		
P-11.1.02	... a surface wind indication per runway (up to 6)	M					—					[1] SEQUENCE (SIZE(1..6,...)) OF SurfaceWind		
P-11.2	Surface Wind for METAR contains...	M					—					METARSurfaceWind ::= SEQUENCE	a	
P-11.2.01	... direction information as	M					—					[0] CHOICE		
P-11.2.011	... a direction and	M					—					[0] WindDirection		
P-11.2.012	... a VARIABLE indicator	M					—					[1] NULL		
P-11.2.013	... other data	X					—					Use of Extensibility		
P-11.2.02	... speed information	M					—					[1] WindSpeed,		
P-11.2.03	... Gust speed information	M					—					[2] WindSpeed OPTIONAL,		
P-11.2.04	... direction variations...	M					—					[3] SEQUENCE OPTIONAL		
P-11.2.043	... between direction 1 ...	M					—					[0] WindDirection		
P-11.2.044	... And direction 2	M					—					[1] WindDirection		
P-11.2.05	... other data	X					—					Use of Extensibility		
P-11.3	Surface Wind contains...											SurfaceWind ::= SEQUENCE		
P-11.3.01	... the runway id	M					—					[0] RunwayId OPTIONAL,		
P-11.3.02	... information on winds...	M					—					[1] CHOICE		
P-11.3.021	... for the whole runway or	M					—					[0] SurfaceWD		
P-11.3.022	... per section	M					—					[1] SEQUENCE		
P-11.3.0221	... touchdown	M					—					[0] SurfaceWD OPTIONAL		
P-11.3.0222	... middle	M					—					[1] SurfaceWD OPTIONAL		
P-11.3.0223	... end	M					—					[2] SurfaceWD OPTIONAL		
P-11.4	Surface Wind Information is expressed...											SurfaceWD ::= CHOICE		
P-11.4.01	... a "calm" indicator or	M					—					[0] NULL,		
P-11.4.02	... speed and direction information	M					—					[1] WindSpeedDirection		
P-11.4.03	... other data	X					—					Use of Extensibility		
P-11.5	Wind Speed and Direction contains...											WindSpeedDirection ::= SEQUENCE		
P-11.5.01	... direction information expressed as	M					—					[0] CHOICE		
P-11.5.011	... a direction or	M					—					[0] WindDirection,		
P-11.5.012	... a direction variation or	M					—					[1] DirectionVariations,		
P-11.5.013	... a "variable" indication	M					—					[2] NULL		
P-11.5.014	... other data	X					—					Use of Extensibility		
P-11.5.02	... speed direction	M					—					[1] WindSpeed,		
P-11.5.03	... speed variations	M					—					[2] SpeedVariations OPTIONAL,		
P-11.5.04	... and direction variations	M					—					[3] DirectionVariations OPTIONAL		
P-11.5.05	... other data	X					—					Use of Extensibility		
P-11.6	Wind Speed contains...											SurfaceWindSpeed ::= SEQUENCE		
P-11.6.01	... a display indication of the keyword ABV	M					—					[0] NULL OPTIONAL,		
P-11.6.02	... a speed value expressed ...	M					—					[1] CHOICE		
P-11.6.021	... in KMH (from 0 to 399 with a resolution of 1)	C.1					—					[0] INTEGER (0..399)		
P-11.6.022	... in Knots (from 0 to 199 with a resolution of 1)	C.1					—					[1] INTEGER (0..199)		
P-11.6.023	... other data	X					—					Use of Extensibility		
P-11.6.024	... in mps (from 0 to 99 with a resolution of 1)	C.1					—					[2] INTEGER (0..99)	a	

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-11.7	Direction Variations contains...											DirectionVariations ::= SEQUENCE	
P-11.7.01	... a direction 1	M					—					[0] WindDirection	
P-11.7.02	... a direction 2	M					—					[1] WindDirection	
P-11.8	Speed Variations contains...											SpeedVariations ::= SEQUENCE	
P-11.8.01	... a max speed	M					—					[0] WindSpeed	
P-11.8.02	... a min speed	M					—					[1] WindSpeed	
P-11.9	Wind Direction											WindDirection ::=	
P-11.9.01	from 0 to 360 with a resolution of 10	M					—					INTEGER (0..36)	

OPLINKP Profile:

C.1 Conditional, at least one must be supported

a if V2 and METAR

Table P-13: Visibility

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons	OPLINKP Profile	Status	Profile Cons	Implementation Status	Cons			
P-13.1	ATISVisibility contains a visibility value for each runway (up to 6)	M					—					ATISVisibility ::= SEQUENCE (SIZE (1..6,...)) OF Visibility		
P-13.2	METARVisibility contains...											METARVisibility ::= SEQUENCE	a	
P-13.2.01	... a min visibility	M					—					[0] METARVisibilityMeasure,		
P-13.2.02	... a max visibility	M					—					[1] METARVisibilityMeasure OPTIONAL		
P-13.2.03	... other data	X					—					Use of Extensibility		
P-13.3	Visibility contains...											Visibility ::= SEQUENCE		
P-13.3.01	... a runway id	M					—					[0] RunwayId OPTIONAL,		
P-13.3.02	... a visibility value	M					—					[1] CHOICE		
P-13.3.021	... for the whole runway or	M					—					[0] VIS		
P-13.3.022	... for each section	M					—					[1] SEQUENCE		
P-13.3.0221	... touchdown	M					—					[0] VIS OPTIONAL		
P-13.3.0222	... end	M					—					[1] VIS OPTIONAL		
P-13.4	METARVisibilityMeasure contains...											METARVisibilityMeasure ::= SEQUENCE	a	
P-13.4.01	... a visibility value	M					—					[0] VIS,		
P-13.4.02	... and a direction	M					—					[1] Direction		
P-13.4.03	... other data	X					—					Use of Extensibility		
P-13.5	VIS expressed...											VIS ::= CHOICE		
P-13.5.01	... in meters (from 0 to 800 with a resolution of 50)	C.1					—					[0] INTEGER (0..16)		
P-13.5.02	... in meters (from 900 to 4900 with a resolution of 100)	C.1					—					[1] INTEGER (9..49)		
P-13.5.03	... in Kms (from 5 to 10)	C.1					—					[2] INTEGER (5..10)		
P-13.5.04	... in statutes miles	C.1					—					[3] VisibilityStatuteMiles		
P-13.5.05	... other data	X					—					Use of Extensibility		
P-13.6	Direction is expressed as...											Direction ::= ENUMERATED	a	
P-13.6.01	... north	M					—					northN (0),		
P-13.6.02	... south	M					—					southS (1),		
P-13.6.03	... east	M					—					eastE (2),		
P-13.6.04	... west	M					—					westW (3),		
P-13.6.05	... north east	M					—					northEastNE (4),		
P-13.6.06	... north west	M					—					northWestNW (5),		
P-13.6.07	... south east	M					—					southEastSE (6),		
P-13.6.08	... south west	M					—					southWestSW (7)		
P-13.7	VisibilityStatuteMiles expressed...											VisibilityStatuteMiles ::= CHOICE		
P-13.7.01	... in 1/16th (from 0 to 3/8)	M					—					[0] INTEGER (0..6)		
P-13.7.02	... in 1/8th (from 3/8 to 2)	M					—					[1] INTEGER (3..16)		
P-13.7.03	... in 1/4th (from 2 to 3)	M					—					[2] INTEGER (8..12)		
P-13.7.04	... in units (from 3 to 15)	M					—					[3] INTEGER (3..15)		
P-13.7.05	... in five to five (from 15 to 50)	M					—					[4] INTEGER (3..10)		
P-13.7.06	... as the indication "More Than Fifty"	M					—					[5] NULL		
P-13.7.07	... other data	X					—					Use of Extensibility		

Source: Chapter 4 - ASN.1														Notes	
Ref No	Operational Elements	Send						Receive							ASN.1 Protocol Elements
		OPLINKP Profile	Profile		Implementation		OPLINKP Profile	Profile		Implementation					
			Status	Cons	Status	Cons		Status	Cons	Status	Cons				

a if V2 and METAR

Table P-15: Miscellaneous

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-15.1	Ability of the aircraft to manage several FIS contracts simultaneously with the same ground system											ContractNumber ::=		
P-15.1.01	up to 256	M					—					INTEGER (1..256)		
P-15.2	Temperature expressed in degrees Celcius (from -80 to 60 with a resolution of 1)	M					—					Temperature ::= INTEGER (-80..60)		
P-15.3	Transition Level expressed...											TransitionLevel ::= CHOICE		
P-15.3.01	... in meters from 300 to 6000 with a resolution of 10	C.1					—					[0] INTEGER (30..610)		
P-15.3.02	... in feet from 1000 to 20000 with a resolution of 100	C.1					—					[1] INTEGER (2..40)		
P-15.3.03	... other data	X					—					Use of Extensibility		

OPLINKP Profile:

C.1 Conditional, Meters or Feet or both must be supported

Table P-16: Supplementary Information

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-16.1	ATIS Supplementary Information contains...	M					—					SupplementaryInformation ::= SEQUENCE (SIZE (1..3,...)) OF CHOICE		
P-16.1.01	... a free text message or	M					—					[0] IA5String SIZE (1..256),		
P-16.1.02	... information with	M					—					[1] SEQUENCE		
P-16.1.021	... MET phenomena	M					—					[0] SEQUENCE OPTIONAL		
P-16.1.021	... as a type and	M					—					[0] SignificantMetPhenomena,		
P-16.1.0212	... a location	M					—					[1] PhenomenonLocation		
P-16.1.0213	... other data											OPTIONAL		
P-16.1.022	... recent Weather	M					—					Use of Extensibility		
P-16.1.03	... other data	X					—					[1] RecentWeather OPTIONAL		
												Use of Extensibility		
P-16.2	METAR Supplementary Information contains...											METARSuppInfo ::= SEQUENCE	a	
P-16.2.01	... information on recent weather	M					—					[0] SEQUENCE (SIZE(1..3,...)) OF RecentWeather OPTIONAL,		
P-16.2.02	... wind shear information ...	M					—					[1] CHOICE OPTIONAL		
P-16.2.021	... for up to 6 runways or	M					—					[0] SEQUENCE (SIZE(1..6,...)) OF Runway		
P-16.2.022	... for all runways	M					—					[1] NULL		
P-16.2.023	... other data											Use of Extensibility		
P-16.2.03	... sea information	M					—					[2] SeaInfo OPTIONAL,		
P-16.2.04	... runway state	M					—					[3] RunwayState OPTIONAL		
P-16.2.05	... other data	X					—					Use of Extensibility		
P-16.3	Significant MET Phenomena is described as...											SignificantMetPhenomena ::= ENUMERATED		
P-16.3.01	cumulonimbus	M					—					cumulonimbusCB (0)		
P-16.3.02	thunderstorm	M					—					thunderstormTS (1)		
P-16.3.03	moderate turbulence	M					—					moderate turbulence (2)		
P-16.3.04	severe turbulence	M					—					severe turbulence (3)		
P-16.3.05	wind shear	M					—					wind shear (4)		
P-16.3.06	hail	M					—					hail (5)		
P-16.3.07	severe squall	M					—					severe squall (6)		
P-16.3.08	moderate ice	M					—					moderate ice (7)		
P-16.3.09	severe ice	M					—					severe ice (8)		
P-16.3.10	freezing drizzle	M					—					freezing drizzle (9)		
P-16.3.11	freezing rain	M					—					freezing rain (10)		
P-16.3.12	severe mountain waves	M					—					severeSEVMTW (11)		
P-16.3.13	sandstorm	M					—					sandstormSS (12)		
P-16.3.14	duststorm	M					—					duststormDS (13)		
P-16.3.15	blowing snow	M					—					blowingSnowBLSN (14)		
P-16.3.16	funnel cloud	M					—					funnelCloudFC (15)		
P-16.3.17	other data	X					—					Use of Extensibility		
P-16.4	PhenomenonLocation is described as...											PhenomenonLocation ::= CHOICE		
P-16.4.01	... in approach	M					—					[0] NULL,		
P-16.4.02	... in climb out	M					—					[1] NULL,		

Source: Chapter 4 - ASN.1													
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons		
P-16.4.03	... on a runway	M					—					[2] RunwayId	
P-16.4.04	... other data	X					—					Use of Extensibility	
P-16.5	Sea Info contains...											SeaInfo ::= SEQUENCE	a
P-16.5.01	... sea temperature	M					—					[0] SeaTemperature,	
P-16.5.02	... sea state	M					—					[1] INTEGER (0..9)	
P-16.6	See Temperature expressed in degree Celcius (from -10 to 40 with a resolution of 1)											SeaTemperature ::= INTEGER (-10..40)	a
P-16.7	Runway State is described as...											RunwayState ::= CHOICE	a
P-16.7.01	... a runway state group	—					M					[0] RunwayStateGroup,	
P-16.7.02	... indication "aerodrome is closed"	—					M					[1] NULL,	
P-16.7.03	... other data	—					M					Use of Extensibility	
P-16.8	Runway State Group contains...											RunwayStateGroup ::= SEQUENCE	a
P-16.8.01	... runway designator	M					—					[0] ExtendedRunwayDesignator	
P-16.8.02	... deposit indicator	M					—					[1] INTEGER (0..9) OPTIONAL,	
P-16.8.03	... contamination extent	M					—					[2] ContaminationExtent OPTIONAL,	
P-16.8.04	... deposit depth	M					—					[3] RunwayDepositDepth OPTIONAL,	
P-16.8.05	... friction coefficient	M					—					[4] FrictionCoefficient OPTIONAL	
P-16.8.06	... other data	X					—					Use of Extensibility	
P-16.9	Extended Runway Designator is expressed as...											ExtendedRunwayDesignator ::= CHOICE	a
P-16.9.01	... a runway designator or	M					—					[0] RunwayDesignator,	
P-16.9.02	... an integer between 51 and 86 or	M					—					[1] INTEGER (51..86)	
P-16.9.03	... all runways	M					—					[2] INTEGER (88)	
P-16.9.04	... not available	M					—					[3] INTEGER (99)	
P-16.9.05	... other data	X					—					Use of Extensibility	
P-16.10	Contamination Extent is...											ContaminationExtent ::= ENUMERATED	a
P-16.10.01	... less than 10	M					—					lessThan10percent (1)	
P-16.10.02	... between 11 to 25 percent	M					—					between11and25percent (2)	
P-16.10.03	... between 26 to 50 percent	M					—					between26to50percent (5)	
P-16.10.04	... between 51 to 100 percent	M					—					between51to100percent (9)	
P-16.10.05	... other data	X					—					Use of Extensibility	
P-16.11	Runway Deposit Depth is expressed as...											RunwayDepositDepth ::= CHOICE	a
P-16.11.01	up to 90 mm	M					—					[0] INTEGER (0..90),	
P-16.11.02	more than 10 cm	M					—					[1] INTEGER (92..98)	
P-16.11.03	non operational runway	M					—					[INTEGER (99)	
P-16.11.04	other data	X					—					Use of Extensibility	
P-16.12	Friction Coefficient is expressed as ...											FrictionCoefficient ::= CHOICE	a
P-16.12.01	... a coefficient	M					—					[0] INTEGER (0..95),	
P-16.12.02	... the indication "unreliable"	M					—					[1] INTEGER (99)	
P-16.12.03	other data	X					—					Use of Extensibility	

a if V2 and METAR

Table P-17: Approach Type

Source: Chapter 4 - ASN.1											
Ref No	Operational Elements	Send					Receive				
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons
P-17.1	The Approach type contains...										
P-17.1.01	... a display indication of the keyword EXPECT	O					—				
P-17.1.02	... and an approach type as	M					—				
P-17.1.011	... an instrument approach procedure per runway (up to 6)	M					—				
P-17.1.021	... or a non standard approach	M					—				
P-17.1.012	... other data	X					—				
P-17.2	The Instrument Approach Procedure contains...										
P-17.2.01	... one or two approach procedure	M					—				
P-17.2.011	... an approach procedure value	M					—				
P-17.2.012	... a free text message (up to 50 char)	M					—				
P-17.2.013	... other data	X					—				
P-17.2.02	... a circling indicator	M					—				
P-17.2.03	... a runway id	M					—				
P-17.2.04	... other data	X					—				
P-17.3	The Approach procedure value is described as...										
P-17.3.01	ils	M					—				
P-17.3.02	ilsdme	M					—				
P-17.3.03	localizer	M					—				
P-17.3.04	vor	M					—				
P-17.3.05	vordme	M					—				
P-17.3.06	ndb	M					—				
P-17.3.07	dmearc	M					—				
P-17.3.08	rnav	M					—				
P-17.3.09	mls	M					—				
P-17.3.10	vsa	M					—				
P-17.3.11	other data	X					—				

Table P-18: RVR

Source: Chapter 4 - ASN.1														
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements	Notes	
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-18.1	ATISRVR contains up to 6 RVR	M					—					ATISRVR ::= SEQUENCE (SIZE(1..6,...)) OF RVR		
P-18.2	METARRVR contains up to 4 METARRunwayVR	M					—					METARRVR ::= SEQUENCE (SIZE(1..4,...)) OF METARRunwayVR	a	
P-18.3	The RVR contains...											RVR ::= SEQUENCE		
P-18.3.01	... the runway id	M					—					[0] RunwayId OPTIONAL,		
P-18.3.02	... the RVR value	M					—					[1] CHOICE		
P-18.3.021	... for the whole runway	M					—					[0] RunwayVR		
P-18.3.022	... for each runway section	M					—					[1] SEQUENCE		
P-18.3.0221	... at the touchdown point	M					—					[0] RunwayVR OPTIONAL		
P-18.3.0222	... at the mid-point	M					—					[1] RunwayVR OPTIONAL		
P-18.3.0223	... at the stop end point	M					—					[2] RunwayVR OPTIONAL		
P-18.4	The Runway RVR contains...											RunwayVR ::= CHOICE		
P-18.4.01	... a RVR value or	M					—					[0] RVRValue		
P-18.4.02	... a "not reported" indication or	M					—					[1] NULL		
P-18.4.03	... a "not available" indication	M					—					[2] NULL		
P-18.4.04	... other data	X					—					Use of Extensibility		
P-18.5	The METARRunwayVR contains....											METARRunwayVR ::= SEQUENCE	a	
P-18.5.01	... a runway id	M					—					[0] RunwayId,		
P-18.5.02	... a value	M					—					[1] RVRValue,		
P-18.5.03	... a RVR variation	M					—					[2] RVRValue OPTIONAL,		
P-18.5.04	... a tendency	M					—					[3] METARRVRPastTendency		
P-18.5.05	... other data	X					—					Use of Extensibility		
P-18.6	The METARRVRPastTendency is expressed as...											METARRVRPastTendency ::= ENUMERATED	a	
P-18.6.01	... up	M					—					up (0),		
P-18.6.02	... down	M					—					down (1),		
P-18.6.03	... no distinct tendency	M					—					noDistinctTendency (2)		
P-18.6.04	... other data	X					—					Use of Extensibility		
P-18.7	The RVR Value contains...											RVRValue ::= CHOICE		
P-18.7.01	... a qualifier	M					—					[0] RVRQualifier OPTIONAL,		
P-18.7.02	...a value	M					—					[1] RunwayVisualRange		
P-18.7.03	... other data	X					—					Use of Extensibility		
P-18.8	The RVRQualifier is described as...											RVRQualifier ::= ENUMERATED		
P-18.8.01	below or minus	M					—					belowOrM (0)		
P-18.8.02	above or plus	M					—					aboveOrP (1)		
P-18.8.03	... other data	X					—					Use of Extensibility		
P-18.9	The Runway Visual Range is expressed...											RunwayVisualRange ::= CHOICE		
P-18.9.01	... in meters from 0 to 400 with a resolution of 25	C.1					—					[0] INTEGER (0..16)		
P-18.9.02	... in meters from 450 to 800 with a resolution of 50	C.1					—					[0] INTEGER (9..16)		

Source: Chapter 4 - ASN.1														Notes
Ref No	Operational Elements	Send					Receive					ASN.1 Protocol Elements		
		OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons	OPLINKP Profile	Profile Status	Cons	Implementation Status	Cons			
P-18.9.03	... in meters from 900 to 1500 with a resolution of 100	C.1					—					[0] INTEGER (9..15)		
P-18.9.04	... in feet from 0 to 1000 with a resolution of 100	C.1					—					[0] INTEGER (0..10)		
P-18.9.05	... in feet from 1200 to 3000 with a resolution of 200	C.1					—					[0] INTEGER (6..15)		
P-18.9.06	... in feet from 3500 to 6000 with a resolution of 500	C.1					—					[0] INTEGER (7..12)		
P-18.9.07	... other data	X					—					Use of Extensibility		

OPLINKP Profile

- C.1Conditional, Feet or Meter or both must be supported
- aif V2 and METAR