3.2 OVERVIEW OF OBJECTS

In this section the method used to define the interactions across the interface is an object model. Syntax mapping for this logical model will be provided in section 4.2, The Transfer Syntax. The objects which have been defined are:

Table 1. Objects

State Name	Object Name	Notes
Service Availability Query	SAQ	Sent from AT&T to ILEC
Service Availability Response	SAR	Sent from ILEC to AT&T
Telephone Number Availability Query	TNAQ	Sent from AT&T to ILEC
Telephone Number Availability Response	TNAR	Sent from ILEC to AT&T
Address Verification Query	AVQ	Sent from AT&T to ILEC
Address Verification Response	AVR	Sent from ILEC to AT&T
Customer Service Record Query	CSRQ	Sent from AT&T to ILEC
Customer Service Record Response	CSRR	Sent from ILEC to AT&T
Appointment Available Query	AAQ	Sent from AT&T to ILEC
Appointment Available Response	AAR	Sent from ILEC to AT&T
Appointment Selection Query	ASQ	Sent from AT&T to ILEC
Appointment Confirmation Response	ACR	Sent from ILEC to AT&T
Delay in Response	DIR	Sent from ILEC to AT&T

3.3 DETAILED OBJECT DEFINITIONS

This section defines the data elements and their logical structure for all messages sent or received by the AT&T pre-ordering interface.

3.3.1 Telephone Number Objects

3.3.1.1 Telephone Number Availability Query

3.3.1.1.1 Telephone Number Availability Query (TNAQ) Object Structure

This section defines the Telephone Number Availability Query (TNAQ) object that is sent from AT&T to ILEC.

The table below outlines the TNAQ object structure.

Table 2. Telephone Number Availability Query (TNAQ) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN TNAQ	T	M	
<NULL | SINGLE Instance of AVAIL_Q Object Structure>		C	(see note 1 below)
<NULL | SINGLE Instance of SELECT Object Structure>		C	(see note 1 below)
END TNAQ	T	M	

1. It is permissible to have only a single instance of any of the object structures in the TNAQ object structure at a given time. In other words, you cannot send both an AVAIL_Q object structure and a SELECT object structure at the same time.

3.3.1.1.2 Telephone Number Availability (AVAIL_Q) Object Structure

This section defines the AVAIL_Q object structure of the TNAQ. The AVAIL_Q object structure is sent to ILEC to inquire about the availability of Telephone Numbers for a specific Telephone Number provider.

Table 3. AVAIL_Q Object Structure for TNAQ

Data Element	Type	M/O/C	Notes
BEGIN AVAIL_Q	T	C	
remarks	X-30	O	Remarks
npa_nxx	N-6	O	npa-nxx of requested number(s)
subscriber_type	X-3	M	"BUS" | "RES"
quantity_req	N-4	M	quantity of Telephone Numbers requested
number_of_lines	N-4	O	number of lines
query_type	A-2	M	"S" | "R" | "RR" - Specific | Random | Random Range (see note 1)
BEGIN Specific_tn	T	C	(for vanity requests
specific_tn	N-4	C	(see note 2 below)
specific_tn_criteria	N-4	C	(see note 3 below)
END Specific_tn		C	
specific_starting_tn	N-4	C	(see note 2 below) 4 digit line # (for vanity requests)
hunt_group	X-1	M	Y or N
hunt_ group_direction	X-1	C	I=inbound O=outbound B=both
hunt_group_lines	N-4	C	Number of lines in hunt group
hunt_sequential	X-1	C	Y or N
hunt_group_multi_line	X-1	C	Y=multi-line N=terminal
END AVAIL_Q	T	C	

1. The "query_type" data element must be populated as follows:

   When a specific Telephone Number is requested ("specific_sn" is populated), "query_type" = "S".
   When a sequential range starting with a specific Telephone Number is requested ("specific_starting_sn" is populated), "query_type" = "S".
   When random sequential Telephone Numbers are requested, "query_type" = "R".
   When a random range of Telephone Numbers are requested, "query_type" = "RR".

2. You may only have the data element for either "specific_sn" or "specific_starting_sn" (used to specify a specific starting Telephone Number in a range) present. You cannot request both a specific Telephone Number and a specific range of Telephone Numbers at the same time. Furthermore, if something specific is ordered, "query_type" must be equal to "S".

3. Either "specific_tn" or specific_tn_criteria" will be populated. You cannot request both a specific number and criteria to be satisfied. "specific_tn_criteria" can only be used with a single request not for a range of numbers. "specific_tn_criteria" requests one of the following conditions be satisfied
   - n000 (number being requested is thousands, i.e., 2000)
   - nu00 (number being requested is hundreds, i.e., 4800)
   - nnuu (number being requested is doubles, i.e., 1122)

nuuu (number being requested is triple, i.e., 4111)

3.3.1.1.3 Telephone Number Selection (SELECT) Object Structure

This section defines the Telephone Number Selection (SELECT) object structure of the TNAQ. The SELECT object structure is sent to ILEC and is used to select Telephone Numbers and put them in the "reserved" state after determining their availability with the AVAIL_Q object structure.

Table 4. SELECT Object Structure for TNAQ

Data Element	Type	M/O/C	Notes
BEGIN SELECT	T	C	
res_contact	X-32	O	reservation contact name
res_contact_tn	X-32	O	reservation contact telephone number
quantity_sel	N-4	M	quantity of Telephone Numbers selected
fetch_id	N-10	M	(see note 1 below)
npa_nxx	N-6	M	npa-nxx of selected number(s)
BEGIN Selected_tn	T	C	
selected_tn	N-4	M	used for selecting a Telephone Number, multi-valued
END Selected_tn	T	C	
BEGIN Selected_range	T	C	multi-valued
first_tn_in_range	N-4	M	used for selecting a range of Telephone Numbers
last_tn_in_range	N-4	M	
END Selected_range	T	C	
expiration_date	N-8	M	YYYYMMDD date reservation will expire (see note 2)
END SELECT	T	C	

1. "fetch_id" is the identification number associated with the numbers that will be selected. This id is sent to AT&T on the response (AVAIL_R) to the availability query (AVAIL_Q).

2. Date when ILEC may reassign telephones if they have yet been confirmed. Telephone numbers that are not selected shall not be explicitly returned.

3.3.1.2 Telephone Number Availability Responses

3.3.1.2.1 Telephone Number Availability Response Object Structure

This section defines the Telephone Number Availability Response (TNAR) object that is sent from ILEC to AT&T.

The table below outlines the response object structure.

Table 5. Telephone Number Availability Response (TNAR) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN TNAR	T	M	(see note 1 below)
<NULL | SINGLE Instance of AVAIL_R Object Structure>		C	
<NULL | SINGLE Instance of CONFIRM Object Structure>		C	
END TNAR	T	M	

1. It is permissible to have only a single instance of any of the object structures in the TNAQ object structure at a given time. In other words, you cannot send both an AVAIL_R object structure and a CONFIRM object structure at the same time.

3.3.1.2.2 Telephone Number Availability (AVAIL_R) Object Structure

This section defines the AVAIL_R object structure of the TNAR. The AVAIL_R object structure is sent to AT&T to return available Telephone Numbers in response to a AVAIL_Q object.

Table 6. AVAIL_R Object Structure for TNAR

Data Element	Type	M/O/C	Notes
BEGIN AVAIL_R	T	C	
res_contact	X-32	O	
res_contact_tn	X-32	O	
fetch_id	N-10	M	Identification number associated with Telephone Numberss.
remarks	X-30	C	(see note 1 below)
npa_nxx	N-6	M	npa_nxx of
appointment_required	X-1	M	Y/N (Based on facilities availability)
BEGIN Available_tn	T	C	
available_tn	N-4	M	Used for single Telephone Numbers
END Available_tn	T	C	
BEGIN Available_range	T	C	
first_tn_in_range	N-4	M	Used for ranges of Telephone Numbers.
last_tn_in_range	N-4	M	
END Available_range	T	C	
hunt_group_number	TBD	C	
trunk_group_number	TBD	C	
BEGIN Terminal_ids	T		Returned if terminal hunting
first_term_id_in_range	TBD	C	
last_term_id_in_range	TBD	C	
END Terminal_ids	T		
END AVAIL_R	T	C	

3.3.1.2.3 Confirmation Number (CONFIRM) Object Structure

This section defines the CONFIRM object structure of the TNAR. The CONFIRM object structure is sent to AT&T to deliver the confirmation number associated with Telephone Numbers that have been put in the "reserved" or "advanced reserved" state.

Table 7. CONFIRM Object Structure for TNAR

Data Element	Type	M/O/C	Notes
BEGIN Confirm	T	C	
fetch_id	N-10	M	fetch id associated with all original Telephone Numbers
confirmation_num	X-15	M	id associated with only the reserved Telephone Numbers
END Confirm	T	C	

1. By sending back the old fetch id along with the new confirmation number, an association can be made to what Telephone Numbers are being moved into the "reserved" or "advanced reserved" state and what the Telephone Number(s) corresponding confirmation number is. This is an

3.3.2 Appointment Objects

3.3.2.1 Appointment Availability Query

This section defines the Appointment Availability Query (AAQ) object that is sent from AT&T to the ILEC.

3.3.2.1.1 Appointment Availability Query Object Structure

The table below outlines the AAQ object structure:

Table 8. Appointment Availability Query (AAQ) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN AAQ	T	M	
subscriber_type	X-3	M	"BUS"|"RES" indicator
initiator_of_request	X-1	M	C=Customer I=ILEC B=both
initial_install	X-1	M	Y or N
inside_wire	X-1	M	Y or N
CPE_administration	X-1	M	Y or N
type_of_request	X-1	M	D=specific date R=range of dates E=earliest available appt Default is E
specific_date_request	N-8	C	type_of_request=D
specific_date_start_range	N-8	C	type_of_request=R
specific_date_end_range	N-8	C	type_of_request=R
specific_time_request	X-2	C	am or pm
non-standard_work_hours	X-1	O	Y=yes N=no (Sat/evenings)
contact_address	X-30	M	Customer contact information.
contact_city	X-30	M	
contact_state	X-2	M	
contact-zip	N-9	M	
contact-reference-no	N-9	M	
number_of_lines	N-4	O	
END AAQ	T	M	

1. The query can specify data and time preferences.

3.3.2.2 Appointment Availability Response

This section defines the Appointment Availability Response (AAR) object that is sent from the ILEC to AT&T.

3.3.2.2.1 Appointment Availability Response Object Structure

The table below outlines the AAR object structure:

Table 9. Appointment Availability Response (AAR) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN AAR	T	M	
<NULL | MULTIPLE Instances of APTDATE Object Structure>			
END AAR	T	M	

3.3.2.2.2 Appointment Availability Date Object Structure

The table below outlines the APTDATE object structure:

Table 10. Appointment Availability Date (APTDATE) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN APTDATE	T	M	
available_date	N-8	M	MMDDYYYY
available_time	X-2	M	AM or PM
END APTDATE	T	M	

3.3.2.3 Appointment Selection Query (ASQ)

This section defines the Appointment Selection (APTSEL) object that is sent from AT&T to the ILEC.

3.3.2.3.1 Appointment Selection Query Object Structure

The table below outlines the APTSEL object structure:

Table 11. Appointment Selection (APTSEL) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN APTSEL	T	M	
available_date	X-2	M	AM or PM
available_time	N-4	M	24 Hour clock
contact-reference-no	N-9	M	
contact_name	X-30	M	Customer contact
END APTSEL	T	M	

3.3.2.4 Appointment Confirmation Response (ACR)

This section defines the Appointment Confirmation (APTCONF) object that is sent from the ILEC to AT&T.

3.3.2.4.1 Appointment Confirmation Object Structure

The table below outlines the APTCONF object structure:

Table 12. Appointment Confirmation (APTCONF) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN APTCONF	T	M	
ILEC_confirm_no	N-5	M	
END APTCONF	T	M	

3.3.3 Service Availability Objects

This section defines the data elements and their structure for all online messages sent to ILECs or received by AT&T as part of the Service Availability function.

3.3.3.1 Service Availability Query (SAQ) Object Structure

This section defines the Service Availability Query (SAQ) object that is sent from AT&T to ILEC.

Table 13. Service Availability Query (SAQ) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN QUERY	T	M	
<NULL | SINGLE Instance of CLLI Object Structure>		C	(see note 1 below)
<NULL | SINGLE Instance of ADDRESS Object Structure>		C	(see note 1 below)
END QUERY	T	M	

1. You may have only one instance of the CLLI Object Structure or the ADDRESS Object Structure. The two objects are mutually exclusive.

Table 14. CLLI Object Structure

Data Element	Type	M/O/C	Notes
BEGIN CLLI	T	C	
clli		M	switch id
END CLLI	T	C	

Table 15. ADDRESS Object Structure

Data Element	Type	M/O/C	Notes
BEGIN ADDRESS	T	C	
street_number	X-10	M	(see note 1 below)
street_directional	X-2	O	
street_name	X-35	M	
street_designator	X-4	M	
BEGIN secondary_address		T	floor, building, room, etc
secondary_addr_number	X-10	O	
secondary_addr_ind	X-4	O	
END secondary_address		T	
community	X-30	M	town, township, or city
state	X-2	M	Use two character state abbreviation
zip_code	N-9	M	US Post Office Zip Code
address_type	X-1	M	O=orderable, D=directory listing E=E911
END ADDRESS	T	C	

3.3.3.2 Service Availability Response

This section defines the Service Availability Response objects.

3.3.3.2.1 Service Availability Response Object Structure

This section defines the Service Availability response Object Structure of the SAR.

Table 16. Switch Availability Response Object Structure

Data Element	Type	M/O/C	Notes
BEGIN SWITCH	T	M	
BEGIN npanxx	T		multi-valued
npa	N-3	M	combined with nxx to form npa-nxx
nxx	N-3	M	combined with npa to form npa-nxx
END npanxx	T		
switch_id	X-11	C	CLLI
BEGIN interLATA			
interlata_pic	N-4	M	
END interLATA			
BEGIN intraLATA			
intralata_pic	N-4	M	
END intraLATA			
<SINGLE | MULTIPLE Instances of SERVICE Object>		C	
END SWITCH	T	M	

3.3.3.2.2 SERVICE Object Structure

This section defines the SERVICE Object Structure of the SAR.

Table 17. SERVICE Object Structure

Data Element	Type	M/O/C	Notes
BEGIN SERVICE	T	C	
service_id	X-10	M	Service ID
service_name	X-40	M	Service Name
<SINGLE | MULTIPLE Instances of FEATURE Object>		M	
END SERVICE	T	C	

3.3.3.2.3 FEATURE Object Structure

This section defines the FEATURE Object Structure of the SAR.

Table 18. FEATURE Object Structure

Data Element	Type	M/O/C	Notes
BEGIN FEATURE	T	M	
feature_id	X-10	M	Identification of the feature option
feature_title	X-50	M	Name of the feature, i.e. Call Waiting
END FEATURE	T	M	

1. feature_id values will be standard set values based on TCIF codes from OBF.

3.3.4 Address Verification Objects

3.3.4.1 Address Verification Query (AVQ) Object Structure

This section defines the Address Verification Query object that is from AT&T to ILEC.

Table 19. Address Verification Query (AVQ) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN QUERY	T	M	
Query Type Object Structure>	X-1	M	A=Address, W=WTN
<NULL | SINGLE Instance of ADDRESS Object Structure>		C	(see note 1 below)
<NULL | SINGLE Instance of WTN Object Structure>		C	(see note 1 below)
END QUERY	T	M	

1. You may only have one instance of the ADDRESS Object Structure or the WTN Object Structure. The two objects are mutually exclusive. The ADDRESS Object Structure and/or the WTN object is used for an initial query sent to ILEC.

3.3.4.1.1 ADDRESS Object Structure

This section defines the ADDRESS Object structure of the Address Verification Query.

Table 20. ADDRESS Object Structure

Data Element	Type	M/O/C	Notes
BEGIN ADDRESS	T	C	
street_number	X-10	M	(see note 1 below)
street_directional	X-2	O	
street_name	X-35	M	
street_designator	X-4	M	
BEGIN secondary_address		T	floor, building, room, etc
secondary_addr_number	X-10	O	
secondary_addr_ind	X-4	O	
END secondary_address		T	
community	X-30	M	town, township, or city
state	X-2	M	Use two character state abbreviation
zip_code	N-9	M	US Post Office Zip Code
address_type	X-1	M	O=orderable, D=directory listing E=E911
END ADDRESS	T	C	

1. Street addresses will be provided in the USPS standard format.

2. The data elements "community" and "state" are mandatory and are used to validate the zip code.

3.3.4.2 Address Verification Response (AVR)

3.3.4.2.1 Address Verification Response (AVR) Object Structure

This section defines the Address Verification Response object that is from ILEC to AT&T.

Table 21. Address Verification Response (AVR) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN RESPONSE	T	M	
Address Match Ind	X-1	M	E=exact, N=near match, X=no match
<NULL | Multi Instances of ADDRESS Verification Object Structure>		C	(see note 1 below)
END RESPONSE	T	M	

1. If the address match indicator = no match then the no objects will be address objects will be returned.
2. If address match indicator = near match, then multiple address object will be returned.

3.3.4.2.2 Returned Address Verification (RAV) Object

This section defines the Returned AddressVerification Object structure of the Address Verification Response.

Table 22. Returned Address Verification Object Structure

Data Element	Type	M/O/C	Notes
BEGIN Returned Address Verification	T	C	
CLLI Code	X-	M	clli code for address
<NULL | Single Instance of Address Object			(see note 1)
Address_type	X-1	M	O=orderable, D=directory listing E=E911
facilities_available_ind	X-1	O	
END Returned Address Verification	T	C	

1. Street address will be returned in USPS format.

3.3.5 Customer Service Record Objects

3.3.5.1 Customer Service Record Query

3.3.5.1.1 Customer Service Record Query (CSRQ) Object Structure

This section defines the Customer Service Record Query (CSRQ) object that is sent from AT&T.

Table 23. Customer Service Record Query (CSRQ) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN QUERY	T	M	
query_type	X-1	M	(see note 1 below)
subscriber_type	X-3	M	"BUS"|"RES" indicator
csr_authorization_status	X-1		Y/N
csr_authorization_name	X-15		end user name authorizing csr inquiry
csr_authorization_date	N-8		
<NULL | SINGLE Instance of WTN Object Structure>		C	
<NULL | SINGLE Instance of CKT Object Structure>		C	
END QUERY	T	M	

1. The "query_type" data element is used indicate the type of query requested, either a Working Telephone Number or a Circuit ID. The default is "T" for a WTN Object query A value of "C" indicates a Circuit ID query.

3.3.5.1.2 WTN Object Structure

This section defines the WTN Object structure of the Customer Service Record Query

Table 24. WTN Object Structure

Data Element	Type	M/O/C	Notes
BEGIN WTN	T	C	
wtn_id	N-10	M	
END WTN	T	C	

3.3.5.1.3 CKT Object Structure

This section defines the CKT Object structure of the Customer Verification Query.

Table 25. CKT Object Structure

Data Element	Type	M/O/C	Notes
BEGIN CKT	T	C	
circuit_id	X-30	M	Circuit ID
END CKT	T	C	

3.3.5.2 Customer Service Record Response

3.3.5.2.1 Customer Service Record Response (CSRR) Object Structure

This section defines the Customer Service Response (CSRR) object that is sent from the ILEC to AT&T.

The table below outlines the CSRR object structure:

Table 26. Customer Service Request Response (CSRR) Object Structure

Data Element	Type	M/O/C	Notes
BEGIN RESPONSE	T	M	
customer_first_name	X-30	M	
customer_last_name	X-30	M	
<Single|Multiple Instances of Address Object>		M	for billing and service addresses
btn	N-10	M	billing telephone number
inside_wire_jack_code	X-5	O	standard jack code
inside_wire_jack quantity	N-4	O	
inside_wiring_options	X-1	O	R=referral for inside wiring S=repair plan/bill AT&T T=repair plan/bill end user U=wiring and repair plan/bill AT&T V=wiring and repair plan/bill end user W=provide inside wiring and bill AT&T Y=provide inside wiring/bill end user
telecom_service_priority	X-12	O	Indicates the provisioning and restoration priority
number_of_wires	N-4	O	
CPE Vendor	X-20	O	
hunt_group_number	TBD	C	
hunt_group_type	X-1	O	M=multi-line T=terminal
BEGIN hunt_group_seq	T		multi-value
wtn	N-10	C	
next_wtn_in_sequence	N-10	C	
END hunt_group_seq	T		
<NULL | MULTIPLE Instances of WTN CSR Object Structure>			
<NULL | SINGLE Instance of CKT CSR Object Structure>			
END RESPONSE	T	M	

1. You can only one or more instances of the WTN CSR Object Structure or the CKT CSR Object Structure.

3.3.5.2.2 WTN CSR Object Structure

This section defines the WTN CSR Object structure of the CSRR.

Table 27. WTN CSR Object Structure

Data Element	Type	M/O/C	Notes
BEGIN WTNVER	T	C	
wtn	N-10	M	
intraLATA_pic	N-4	M	
inter_LATA_pic	N-4	M	
service_type	X-30	M	
lifeline_eligible	X-1	M	Y or N
special_exemption	X-1	M	Y or N
pulse	X-4	O	DP=dial pulse MF=Multi-frequency DTMF=Dual tone multi-frequency
signaling	X-2		type of signaling
<NULL | MULTIPLE Instances of WTNDL Object Structure>			
<NULL | MULTIPLE Instances of WTNFEAT Object Structure>			
END WTNVER	T	C	

3.3.5.2.3 WTNFEAT Object Structure

This section defines the WTNFEAT Object Structure of the CSRR.

Table 28. WTNFEAT Object Structure

Data Element	Type	M/O/C	Notes
BEGIN WTNFEAT	T	M	
feature_id	X-10	M	Identification of the feature option
feature_title	X-50	M	Name of the feature, i.e. Call Waiting
BEGIN	T	C	multi-value
feat_specific_info			
feature_specific	X-30	M	
END	T	C	
feat_specific_info			
BEGIN feat_blocking	T	C	multi-value
feature_blocking	X-30	M	
END feat_blocking	T	C	
END WTNFEAT	T	M	

3.3.5.2.4 WTNDL Object Structure

This section defines the WTNDL Object Structure of the CSRR, which contains directory listing information

Table 29. WTNDL Object Structure

Data Element	Type	M/O/C	Notes
BEGIN WTNDL	T	M	
dl_type	X-2	M	L=listed NL=non-listed NP=non-published A=additional F=foreign
dl_name	X-30	M	
dl_name_cont	X-30	O	
dl_address_line_1	X-30	M	
dl-address_line_2	X-30	O	
dl_city	X-30	M	
dl_state	X-2	M	
dl_zip	N-9	M	
dl-directory_code	TBD	M	
dl_omit_addr	X-1	O	Y or N Default is N
END WTNDL	T		

3.3.5.2.5 CKT CSR Object

Table 30. CKT CSR Object Structure

Data Element	Type	M/O/C	Notes
BEGIN CKTVER	T	C	
wtn	N-10	M	
customer_first_name	X-30	M	
Customer_last_name	X-30	M	
street	X-87	M	
community	X-30	M	town, township, or city
state	X-2	M	Use two character state abbreviation
zip_code	N-9	M	US Post Office Zip Code
<NULL | SINGLE Instances of CKTFEAT Object Structure>			
zip_code	N-9	M	US Post Office Zip Code
END CKTVER	T	C	

3.3.5.2.6 CKTFEAT Object Structure

This section defines the CKTFEAT Object Structure of the CSRR.

Table 31. CKTFEAT Object Structure

Data Element	Type	M/O/C	Notes
BEGIN CKTFEAT	T	C	
speed	N-10	M	
carrier_test	X-3	M	
channels	N-10	M	
card_slot	X-15	M	
END CKTFEAT	T	C	

3.3.6 Delay In Response Objects

3.3.6.1 Delay In Response

3.3.6.1.1 Delay In Response Object Structure

This section defines the Delay In Response (DIR) object that is sent from the ILEC to AT&T when the ILEC cannot respond to an AT&T transaction within 7 seconds..

The table below outlines the DIR object structure:

Delay in Response Object Structure

Data Element	Type	M/O/C	Notes
BEGIN DIR	T	M	
date_time	N-14X-1	M	(see note 1)
original_transaction	X-4	M	
process_message	X-15	M	(see note 2)
END DIR	T	M	

1. The date time attribute will be populated as follows: YYYYMMDDHHMMSS. All times will be Central Standard Time.
2. Original_transaction will contain the object name of the transaction.

4. Connectivity, Transport and Syntax Requirements

4.1 NETWORK OVERVIEW

Two different types of information exchange must be accommodated, each with it's own associated network connectivity, transport and syntax requirements.

4.1.1 Transaction-Based Information Exchange

Transaction-Based Information Exchange will be utilized for TN Assignment Transactions, Appointment Scheduling Transactions, and Customer Service Record Transactions. On an exception basis, transactions may also be sent for Service Availability and Address Verification. These functions will only utilize transactions when the data housed in internal AT&T systems cannot successfully produce the required response information for these functions.

EC-Lite will be used to provide the generic transactions, process model and underlying transport mechanism to transport pre-order transactions between the AT&T and ILEC gateways. EC-Lite uses a Common Management Information Protocol (CMIP X.700) to provide a "tunneling" capability for moving requests and results between communicating entities. EC-Lite can be utilized for any application and corresponding data model/syntax. The data model content embedded within EC-Lite messages for the transaction-based electronic communications interface will be as specified in Section 3.3 *Detailed Object Definitions.* Syntax for these data objects will utilize TCIF EDI, Version 6 (see Section 4.2 *Transfer Syntax).* Network connectivity will utilize X.25 protocol over a mutually agreeable Frame Relay Network.

4.1.2 Batch Data Information Exchange

Batch Data Information Exchange will be utilized for Service Availability and Address Verification functions. The initial feed will be requested via the Footprint Form. Updates will be provided to AT&T by the ILEC during the first week of the month for both feature availability and orderable address data. All updates will be a total refresh of the current ILEC database.

The data model content for the batch data electronic communications interface will be as specified in Section 3.3 *Detailed Object Definitions.* Content syntax for this data will utilize the file format and record layout specified in Section *4.2 Transfer Syntax.* Initial Batch Feed and Monthly Updates will be transmitted electronically via the Network Data Mover Network using the CONNECT: direct protocol.

4.2 TRANSFER SYNTAX

4.2.1 Transaction-Based Information Exchange

4.2.1.1 Data Model

Syntax mapping of data objects to TCIF EDI, Version 6 standard data model - To Be Provided in Version 2.0.

4.2.1.2 Transactions and Process Model

Syntax mapping of Pre-order Application transactions to EC-Lite model - To Be Provided in Version 2.0.

4.2.2 Batch Data Information Exchange

Syntax mapping of data objects to file format, record layout and data transfer requirements - To Be Provided in Version 2.0.

4.3 DATA TRANSPORT

1. AT&T will be the Manager, and ILEC will be the Agent.
2. The Manager (AT&T) always has the responsibility to initiate a connection to the Agent (ILEC).
3. A single two-way full duplex, connection-oriented X.25 connection will be up all the time between AT&T and ILEC unless there is a link or connection failure.
4. All the transaction messages between AT&T and ILEC will be multiplexed on one single X.25 connection.
5. If a sender of a message does not receive an acknowledgment message after a specific time interval, the sender should resend the message. The time interval should be negotiated between the AT&T and ILEC gateway system developers and should be configurable. The goal for response times between systems is four seconds 95% of the time.
6. Each system should devise its own error recovery strategy.

The data transport rules for the transactions among AT&T and ILEC are outlined below.

5. Definition of Key Terms

Specific TN Request	Request for TN Assignment with specified characteristics (e.g. line number = 1234)
Random TN Request	Request for TN Assignment from any available number(s)
Individual Telephone Numbers	Distinct, individual TNs; multiple Individual TNs may be referenced in a single transaction
Range of Telephone Numbers	Sequential list of TNs; maximum range size is 9999
Multi-line Hunt Group	Multiple TNs used to dial in to location; TNs are arranged in a customer-specified hunt group (e.g. serial, circular)
Terminal Hunt Group	Single TNs used to dial in to multiple stations at a location; terminals are arranged in a customer-specified hunt group (e.g. serial, circular)
USPS Format	United States Postal Service Standard Address Format
On-Line Process	Transaction-based, real-time query and response mechanism for exchange of information between CLEC and ILEC
Gateway Interface	An electronic, machine-to-machine interface that does not rely on human intervention to exchange information between ILEC and CLEC
EC-Lite	Uses a Common Management Information Protocol (CMIP X.700) to provide a "tunneling" capability for moving requests and results between communicating entities
Batch Process	Consists of Initial File Transfer and Monthly Updates; used for Service Availability and Address Verification data
Footprint Order	Infrastructure provisioning form which designates geographic area of coverage and common elements required; utilized to request Initial File Transfers used in Batch Process
Exception Condition	Application level errors or abnormal situations that cause unexpected results to be received in a transaction response