

Site Specific Statement of Work (SS-SOW)

for

Site Name AFB, ST

**** DELETE FROM THIS LINE

ENGINEERING NOTES: ***** DO NOT EDIT THIS DOCUMENT *****

- 1) Text in “**(large print)**”: modify as needed IAW base requirements.
- 2) Text in “*italics*” are survey tips.
- 3) The majority of the following paragraphs are pretty much standard for all sites. However, the Engineer can modify as needed.
- 4) The following can be fixed globally and are set as fields. To change go to the menu FILE, PROPERTIES, CUSTOM. Select the field by its name and enter a new name, org symbol, etc., within the “value” box. To UPDATE the site name, e.g., Tinker AFB OK or 72 CS/CC, at the menu select EDIT, SELECT ALL. Then press the F9 key to update all the fields. Save your document (regularly), and before you have an accident remove the select all by clicking somewhere on the document text. If you made an error in the text of the following, repeat the changes described. This should save you some time hunting all appearance of the site name. If you have multiple sites, then manually place the secondary sites.

Site Name AFB, ST
CSO OFFICE SYMBOL

- 5) Before sending the document out of engineering. Please make sure all paragraphs are properly in order; i.e: remove engineering tips, paragraph, and/or paragraph number should start on new page if paragraph and/or paragraph number is on the last line of the previous page.

1.0 Scope. All terms of the Basic Agreement Statement of Work (BA-SOW) apply. This Site Specific Statement of Work (SS-SOW) defines the specific requirements for SITE NAME AFB, STATE. Paragraph 3, of this SS-SOW, provides applicable service clarification and is supplemented by Appendix 10. All installation and cutover service requirements are identified in Appendix 10.

a. The local exchange access services at **Site Name AFB, ST** is currently being provided by **...LOCAL BELL NAME...**

b. The base telephone switching system is a **...SWITCH MODEL...** with **...SOFTWARE MODEL...** software version. The switching system is located in Building **...NUMBER...**

***Tip:** If the base is going through software change, note the new software version and cutover date.*

c. The primary long distance carrier serving **Site Name AFB, ST** is **AT&T/MCI** under the FTS-2000/2001 contract. **{MODIFY IF OTHER THAN FTS-2000/2001}**

2.0 Documents. All documents in the BA-SOW, Paragraph 2.0, and all supplemental paragraphs apply. The following document also applies:

BASOW-96-38EITS-028, 08 Jan 97
Revision 4.0, 18 Apr 99

BA-SOW for Local Commercial
Communications Services

3.0. Requirements.

a. All terms of the BA-SOW, Paragraph 3.0, and all supplemental paragraphs apply.

b. Organizational office symbol for the Communications-Computer Systems Officer (CSO):
CSO OFFICE SYMBOL

***Tip:** Include only the CSO Office Symbol; **DO NOT** include the complete address. The complete address should be listed in the Notes to the Buyer (NTB) file. The address may change in the future and the contract would need to be modified any time the address changed.*

c. **1 or 2** relay rack(s) space is available for vendor equipment.

***Tip:** Include the space available at the site for vendor use. At site survey, space must be determined and reserved. Determine what the site requires, e.g., Project Support Agreement, to assure that space will be available for a potential new vendor.*

3.1 Local Commercial Communications Services.

3.1.1 Installation and Cutover. All terms of the BA-SOW, Paragraph 3.1.1 apply. Blocks 6 and 14a of CDRL A001 and CDRL A002 are completed as follows: **CSO OFFICE**

SYMBOL. Installation, circuit assignments, all possible/applicable testing, records' management, and Government acceptance shall be completed no later than (NLT) one hundred and fifty (150) days after contract award. Cutover of the system shall be completed NLT one hundred and eighty (180) days after contract award.

***Tips:** The installation, testing, and acceptance phase is to complete 30 days (30 days is minimum) prior to the current CSA expiration date. Cutover date must be determined and can occur anytime within the 30 day period between the installation completion and the expiration of the current CSA. NOTE: THIS INSTALLATION AND CUTOVER TIMING MUST BE COORDINATED WITH THE INCUMBENT AS WELL!! Determine these dates with the IPT. If more than one CSA is bundled into one SOW, then the earliest expiration date applies. Dates per multiple sites may differ as needed.*

3.1.2 Commercial Subscriber Lines & Exchange Access Trunks.

3.1.2.1 Commercial Subscriber Lines. All terms of the BA-SOW, Paragraph 3.1.2.1 apply.

***Tips:** In most cases the cost of the FTS2000/2001 is becoming much cheaper than intra-LATA toll calls. Inform the base that to continue placing intra-LATA toll calls is an unwise use of funding. If they do not agree to block them, do nothing else.*

3.1.2.2 Commercial Subscriber Line Basic Services. All terms of the BA-SOW, Paragraph 3.1.2.2 apply.

OR MODIFY AS NEEDED

Survey Tips:

Our objective is to have standardized requirements for the basic services of commercial subscriber lines as defined in Paragraph 3.1.2.2. However, the base can change their requirements if needed.

3.1.2.3 Commercial Subscriber Line Optional Features. All terms of the BA-SOW, Paragraph 3.1.2.3 apply. **OR MODIFY AS NEEDED**

3.1.2.4 Subscriber Line Relocation. All terms of the BA-SOW, Paragraph 3.1.2.4 apply.

OR MODIFY AS NEEDED

Survey Tips:

Most of the time, the Government will perform on-base subscriber line relocation by the BLUE SUIT team or by O&M Contractors. Some cases, the Government requires the Contractor to provide subscriber line relocation services. Engineer needs to specify if the Contractor is required to perform the subscriber line relocation, totally or partially. If subscriber line relocation is required at cutover, then you must state it.

3.1.2.5 Exchange Access Trunks. All terms of the BA-SOW, Paragraph 3.1.2.5 apply.

3.1.2.6 Exchange Access Trunks Basic Services. All terms of the BA-SOW, Paragraph 3.1.2.6 apply.

3.1.3 Transport Services. All terms of the BA-SOW, Paragraph 3.1.3 apply.

3.1.4 Circuit Termination. All terms of the BA-SOW, Paragraph 3.1.4, and all supplemental paragraphs apply.

3.1.5 Local Exchange Access and Service Areas. All terms of the BA-SOW, Paragraph 3.1.5 apply. The Contractor shall provide the local/foreign exchange access services for **Site Name AFB, ST**. The local/foreign exchange access service areas shall, as a minimum, include the areas/zones coverage as currently defined by the incumbent local service provider(s) and/or the State Public Utilities Commission (PUC) for **Site Name AFB, ST** and shall be applied under the scope of this contract. The local/foreign exchange access service areas shall be, as a minimum, bounded by geographic city areas/zones and/or surrounding areas. The access areas shall not be limited by prefixes as defined, that may change, be deleted, or added due to the growth of a city or an area. The local service areas/zones/boundaries shall not be reduced regardless of who, when, and how local communications services are provided. If it is determined by the Contractor that the local/foreign exchange access service areas are different than defined, the Contractor shall coordinate with the CSO and the Contracting Officer for approval.

Survey Tips: *This local calling areas issue is very complicated. The template accounts for flat rate services of both local exchange access and foreign exchange access. The following tips provide for your survey:*

*1) **Must** determine if there is foreign exchange services required for the site. If **NO** then delete the foreign exchange access areas from the template.*

2) Our first choice is flat rate local exchange and access services for most of the Air Force Bases and ANGs. Sometimes, there is no flat rate services available at the site due to the lack of competition or state PUC Regulations and Policies by tariff. If this is a case, then the IPT should make a decision whether or not to switch back to measured rate services after this is discovered (recommend you to provide flat rate, also). However, if you know before hand that there will be no flat rate services available for the

site then you can modify as needed. Please notice that flat or measured rate could be applied for any of the following: subscriber lines, foreign exchange lines, city trunks, foreign exchange lines/trunks, or any combination thereof.

*3) The list/map of the cities/areas for local exchange access and/or foreign exchange access are not required to accomplish the SS-SOW. However, note to All Engineers, **the list/map of local calling areas will be required for Technical Evaluation** (Note: usually the calling areas are listed under the existing local phone book or may be found in the tariff); upon the survey, obtain and keep the list/map in the project's folder:*

a. Each service location (note: some AF and ANG sites have more than one location).

b. Each FX service area, if required.

3.1.6 Number Portability. All terms of the BA-SOW, Paragraph 3.1.6 apply as follows: **OR MODIFY AS NEEDED.**

The contractor shall provide number portability:

- Direct-Inward-Dial Directory numbers
- An individual commercial subscriber line
- All Commercial subscriber lines

Survey Tips: *Some sites want to keep the commercial subscriber line(s) only. Some want to keep all the telephone lines and DID numbers. And some just want to keep a particular telephone number and/or or a particular DID block numbers. Choose the appropriate options. These are provided as information to the Contractor. The following tips are provided for your survey:*

1) DID Directory numbers (EX: The Contractor shall provide the number portability for DID Directory numbers. Number portability for commercial subscriber lines are not applicable),

2) An individual commercial subscriber line,

3) All Commercial subscriber lines, OR

4) Any combination thereof.

3.1.7 Demarcation. All terms of the BA-SOW, Paragraph 3.1.7, and all supplemental paragraphs apply. The primary demarcation point shall be at the Dial Central Office (DCO), Building **...NUMBER...** **OR MODIFY AS NEEDED.**

Survey Tips:

- 1) *One demarcation only, OR*
- 2) *Multiple demarcations (If multiple, then you need to specify which one is primary and which one(s) is/are secondary)*

3.1.7.1 Secondary Demarcation. All terms of the BA-SOW, Paragraph 3.1.7.1 apply. **OR MODIFY AS NEEDED.**

3.1.7.2 Circuit Extension. All terms of the BA-SOW, Paragraph 3.1.7.2 and all supplemental paragraphs apply. **OR MODIFY AS NEEDED.**

Survey Tips: IMPORTANT!!

1) Determine who is responsible to perform circuit extension (the Government or the Contractor)? REMEMBER THAT THE DATA CIRCUITS ARE THE MOST SENSITIVE AND THAT TO DETERMINE ITS FINAL LOCATION IS CRITICAL. FOR EXAMPLE:

- *Simple voice grade lines used to support analog data lines where the end user **owns** the data communications equipment do not need circuit extension. Wire pair cross connections will connect to the end user.*
 - *Simple voice grade lines used to support analog data lines where the end user **does not own** the data communications equipment may need to consider circuit extension. **IF** the vendor is to provide the data communications equipment, then the requirement is to have the vendor install the equipment at the user location and not at the demarcation point. The government could provide the wire pair cross connections to the end user.*
 - ***Data communications requiring digital data transport will probably require line conditioning to the user end location.** Simple voice grade lines used to support digital data lines may not adequately support the user's data requirement. When the user equipment is not at the demarcation point, DETERMINE whether the Government already has equipment to satisfy the data transport to the user location. DO NOT place the Government in a position to extend digital data circuits to the user location if the Government transport is not already in place. The Government MAY NOT BE ABLE TO EXTEND THE CIRCUIT!! Require the vendor to extend the data circuit to the user's location and install the data communications equipment at that location.*
- 2) If the Government is responsible, then Para 3.1.7.1 and all supplemental paragraphs are not applicable. Otherwise it is applied.*

3.1.8 Contractor Equipment and Cable Installation. All terms of the BA-SOW, Paragraph 3.1.8 apply.

3.1.9 Restoration of Service and Maintenance. All terms of the BA-SOW, Paragraph 3.1.9 apply. The Contractor shall respond to the Government within one (1) hour of notification.

***Survey Tips:** Confirm that the Restore Service times are reviewed with the site. Do not suggest change. We need to determine times agreeable with the industry. To do this we must have consistent times in the proposals.*

3.1.9.1 Emergency Outage. All terms of BA-SOW, Paragraph 3.1.9.1 apply. Restore service within four (4) hours from the time the Contractor responds to the Government's notification.

3.1.9.2 Catastrophic Outage. All terms of the BA-SOW, Paragraph 3.1.9.2 apply. Restore service within eight (8) hours from the time the Contractor responds to the Government's notification.

3.1.9.3 Serious Outage. All terms of the BA-SOW, Paragraph 3.1.9.3 apply. Restore service within twenty-four (24) hours from the time the Contractor responds to the Government's notification.

3.1.9.4 Routine Outage. All terms of the BA-SOW, Paragraph 3.1.9.4 paragraphs apply. Restore service within two (2) calendar day from the time the Contractor responds to the Government's notification.

3.1.10 Diversity/Diverse Routing. All terms of the BA-SOW, Paragraph 3.1.10 apply. See Appendix 10 for Diversity application.

***Survey Tips:** The diversity requirement might be very expensive. Recommend this requirement apply only if it exists, unless the base has good justification due to mission. Do not include diversity, ATM, OC-1, or any other complex items in this SS-SOW unless the base has such item(s) presently. If there is a future needs for any complex item(s), then it can handle with a separate proposal.*

Provide diversity for:

- *For all circuits,*
- *City trunk only,*
- *City trunks, DS-1, and higher bandwidth transport circuits only,*
- *All DS-1 and higher B/W circuits.*

If diversity is required, put in a sentence to tell the vendor where both demarcation points are located and what services are required. This option should be discussed thoroughly with the CSO on how they want diversity routing. Make sure to specify how

diversity is provided, i.e: two separate transmission paths through two difference Central Offices (CO) or just transmission path redundancy with one CO.

3.1.11 Operator Assistance. All terms of the BA-SOW, Paragraph 3.1.11 apply.

3.1.12 Directory Assistance. All terms of the BA-SOW, Paragraph 3.1.12 apply.

3.1.13 911/311 Services. All terms of the BA-SOW, Paragraph 3.1.13 apply. **OR SPECIFY AS NEEDED**

Survey Tips:

1) 911 access for a whole AFB (lines and trunks),

2) 911 access for Contractor provided commercial subscriber lines only (Business lines listed in App-10),

3) Any combination thereof.

3.1.14 Public Listings. All terms of the BA-SOW, Paragraph 3.1.14 apply.

Survey Tips: *Be sure to include the quantity for each listing type in the Appendix 10 as required.*

3.1.15 Telephone Directories. Presently, **Site Name AFB, ST** is being provided (*place the amount of directories they are currently receiving*) local telephone directories.

3.2 Future Services. All terms of the BA-SOW, Paragraph 3.2 apply.

3.2.1 Service Orders. All terms of the BA-SOW, Paragraph 3.2.1 apply.

3.2.1.1 Emergency Services. All terms of the BA-SOW, Paragraph 3.2.1.1 apply. The time frame is one (1) calendar day.

3.2.1.2 Priority Services. All terms of the BA-SOW, Paragraph 3.2.1.2 apply. The time frame is five (5) calendar days.

3.2.1.3 Routine Services. All terms of the BA-SOW, Paragraph 3.2.1.3 apply. The time frame is ten (10) calendar days.

3.2.2 Traffic Analysis. All terms of the BA-SOW, Paragraph 3.2.2 apply.

Tips: *Please explain to the site that this traffic analysis is a traffic study for the telco side of the circuits.*

3.2.2.1 Traffic Analysis for City Trunks. All terms of the BA-SOW, Paragraph 3.2.2.1 apply. Blocks 6 and 14a of CDRL A005 are completed as follows: **CSO OFFICE SYMBOL.**

3.2.2.2 Traffic Analysis for Higher Bandwidth Transport Circuits. All terms of the BA-SOW, Paragraph 3.2.2.2 apply. Blocks 6 and 14a of CDRL A006 are completed as follows: **CSO OFFICE SYMBOL. (DS1/T-1 or higher)**

3.3 Customer and Communications Service Records. All terms of the BA-SOW, Paragraph 3.3 apply.

3.3.1 Customer Service Records. All terms of the BA-SOW, Paragraph 3.3.1 apply. Blocks 6 and 14a of CDRL A003 are completed as follows: **CSO OFFICE SYMBOL**

3.3.2 Communications Service Records. All terms of the BA-SOW, Paragraph 3.3.2 apply. Blocks 6 and 14a of CDRL A004 are completed as follows: **Site** and Major Command offices are **CSO OFFICE SYMBOL** and **...HQ ORGANIZATIONAL OFFICE SYMBOL....**, respectively.

***Tips:** Please do not include the complete address with the organizational Office Symbol. The reason being the address may be changed in the future and the Contracting Administrator must modify the contract any time the address change. The complete address of the CSO and HQ should be listed in the Note to the Buyer (NTB) document.*

3.4 Contract Management.

3.4.1 Meetings. All terms of the BA-SOW, Paragraph 3.4.1 apply.

3.4.2 Support. All terms of the BA-SOW, Paragraph 3.4.2 apply.

3.4.3 Point-of-Contact (POC). All terms of the BA-SOW, Paragraph 3.4.3 apply.

3.5 Year 2000 (Y2K). All terms of the BA-SOW, Paragraph 3.5 apply.

3.6 Regulations and Policies. All terms of the BA-SOW, Paragraph 3.6, and all supplemental paragraphs apply.

3.7 Special Service. All terms of the BA-SOW, Paragraph 3.7 apply.

4.0 Site Specific Special Requirement. All terms of BA-SOW, Paragraph 4.0, are not applicable. **OR MODIFY AS NEEDED**

Tips: *List all the site specific special requirements which have not been specified or mentioned in the BA-SOW.*

APPENDIX 10

REQUIRED LOCAL COMMERCIAL COMMUNICATIONS SERVICES AT CUTOVER

10.0 Local services, required from the Contractor, are initial installation and cutover service requirements for the Government under the scope of this contract. The Contractor shall provide the following baseline of local commercial communications services for **Site Name AFB, ST** at cutover. The quantity of these initial service requirements will be incorporated into the Schedule B. The installation service requirement must be identified here and the Schedule B.

Tips:

1) Within this Appendix 10, enter the site requirements or services issues, circuit characteristics, routing or destination clarifications, circuit extensions that require additional engineering or considerations, site to telco central office diversity issues, etc. Discuss all of the concerns and conflicts you have been requested to clarify.

*2) Do not delete any paragraphs in this appendix. If a paragraph is not used, KEEP the TITLE and mark it as **Not Applicable**.*

3) If your site as multiple "remotes" (sites not counted as being served as a part of the primary demarcation point), then try to segregate (if needed for billing, site distinction, etc.) by using sub-paragraphs .1, .2, .3, ... etc., within the appropriate paragraph areas to provide the distinction. If one of the areas does not apply to a (remote) site, then tag as not applicable to that site.

EXAMPLE:

10.20 Provide widgets:

10.20.1 host site: 15 each

10.20.2 remote site 1: Not Applicable

10.20.3 Lodging: 2 each

10.1 Direct-In-Dial Directory Numbers.

Example:

NPA- NXX-XXXX	DID Directory Numbers
(405) 734-0000 to 9999	10000
(405) 736-3000 to 4999	2000
(405) 736-6000 to 9999	4000

Tips:

1) *NPA NXX-XXXX: NPA is an area code, NXX is an office code, and XXXX is a station code. N = 2 to 9 while X = 0 to 9.*

2) *DID Directory Numbers: The quantity of direct-in-dial directory numbers for the official commercial subscriber lines on base which has been reserved from the incumbent local service provider.*

10.2 Exchange and Access Lines.

10.2.1 Commercial Subscriber Lines.

The number of commercial lines is: _____.

Tips: *Enter the number of the commercial subscriber lines entered if 20 or more entries. This provides a cross check. If less than 20, then delete the line.*

Example:

(NPA)-NXX-XXX	Type	Services and Optional Features	Demarcation	Organization & Location
(405) 999-6508	Analog	BS,	Weather Site (NEXRAD) off base, MDF	412 OSS/OSW at 123 NE 2nd ST, Boron City
(405) 999-6525	Analog	BS, , Call Forward, 3-Way Calling, Rotary Hunt	Weather Site (NEXRAD) on base, MDF	412 OSS/OSW, Bldg 201
(405) 999-0151	Analog	BS,	Base Central Office, B 2600, MDF	411 FLTS/CCD, Bldg 4556
(405) 111-0152	ISDN BRI, 2nd B Channel	BS,	Base Central Office, B 2600, MDF	411 FLTS/CCD, Bldg 4556

Notes:

1) *NPA-XXX-XXXX: A particular commercial subscriber line which is serving directly from the Local Service Provider's CO.*

Input: (NPA) NXX-XXXX

2) *Type: Either an analog or ISDN BRI.*

Input: Analog or ISDN BRI

3) *Services and Optional Features: List all the non-standard services (different from the Basic Agreement Statement of Work and optional features associated with that particular commercial subscriber line.*

BS = Basic Services (always listed).

FR = Flat Rate (need to specify).

MR = Measured Rate (need to specify).

Input: “list the services and optional feature name separate with a comma”

4) *Demarcation. The demarcation where the Contractor terminates a circuit. Use the street address only the location is off-site.*

Input: Building #, and how circuit terminate: RJ21X, MDF, 66 block etc.

5) *Organization & Location: List the organization office symbol with Building Number. Provide the address for only the off-site location.*

6) *Engineer must determine if commercial subscriber line terminates on a key system/PABX. If it does then in most cases the start signaling is Ground Start and must be specified under services and optional features.*

10.2.2 Hot Lines.

Example:

Circuit ID (Name)	Serving Demarcation	Destination Demarcation	Estimated Mileage	Organization & Location
315R40-0932-599-253 Manual, automatic or code-select ringdown	Tinker AFB, B 3001	OKC IAP, FAA Tower	15	555 Wing, Control Tower

Notes:

1) *Circuit ID/Name: Name or ID of a particular H.L circuit.*

Input: “Circuit Name”, also say what type of ringdown is it: manual, automatic or code-select ringdown.

2) *Serving Demarcation: The demarcation at the base location to be terminated. Use the street address only the location is off-site.*

Input: “Building Number”

3) *Destination Demarcation: The demarcation at the other end to be terminated. Use the street address only the location is off-site.*

Input: “Address”

4) *Estimated Mileage: Airline mileage between two locations.
Input: "Number of Miles"*

5) *Organization & Location: An office symbol and building number of whom a circuit belonged to.*

10.3 Local Exchange and Access Trunks.

*Note: for trunk members as applicable: **Coordination will be required with a new vendor. The base switching systems already has the digital trunks assigned and if these are reaccomplished, coordinate with all to assure minimum disruption to the trunk assignments already made in the base switch!***

10.3.1 Local Exchange Access Analog Trunks.

Example:

Circuit ID	Qty & Type	IC Channel Signaling: Supervision, Addressing, Start	OG Channel Signaling: Supervision, Addressing, Start	Demarcation
CITY DID	15, 4-wire (IC)	E&M Type 1, DTMF, GS	N/A	B 3001
City DOD	7, 2 Wire (OG)	N/A	Loop, DTMF, WS	B 3001
City Two-Way	40, 2 Wire (2-Way)	E&M Type 1, DTMF, WS	E&M Type 1, DTMF, WS	B 3001

Notes:

1) *Circuit Description: Name of a particular trunk or trunk group.
Input: "Circuit Name or ID Number"*

2) *Type: As either 2 wire or 4 wire*

3) *Directionalization: As either Incoming (IC), Outgoing (OG), or Two Way (2-Way)(IC and OG parts).
Input: "IC, OG, or 2-Way"*

4) *Number of Channels:
Input: "Total number of channels for each type"*

5) *Signaling: List one each the following:
* **Supervision Signaling: E&M Type 1, 2, ... , Reverse Battery, or "not specified"***

* **Addressing Signaling:** *DP (Dial Pulse), DTMF (Dual Tone Multi-Frequency), or MF (Multi-Frequency).*

* **Start Signaling:** *GS (Ground start), LS (Loop start), or WS (Wink start)*

** **NOTE:** *Place the Signaling in the specified order in the tables above and below. Example: Supervision (first), Addressing (Second), and Start (third).*

6) **Demarcation:** *Where the trunks will be terminated. Use the street address only the location is off-site.*

10.3.2 Local Exchange Access Digital Trunks.

Tips:

1) You can “double-up” on entries on one line if the digital trunk characteristic is the same for each DS1 on that line. EX: DTI 1 - 4 with a 2-way setup.

2) Separate each DTI with distinct trunk characteristics. EX: DTI 5 - 7 with incoming setup. DTI 8 - 9 with outgoing setup. EX: DTI 10 - 11 with a mix of incoming and outgoing setup. When you place more than one DS1 on the same line, make sure that these will be configured the same regarding the members within the DS1.

Example:

Digital Circuit ID	IC Channel Quantity & Signaling: Supervision, Addressing, Start	OG Channel Quantity & Signaling: Supervision, Addressing, Start	2 Way Channel Quantity & Signaling:		Demarcation
			QTY	IC Channel Signaling: Supervision, Addressing, Start	
DTI #1 - 4			96	E&M, DTMF, WS	E&M, DTMF, WS B 3001
DTI #5 - 7	12, Loop, DTMF, WS				B 3001
DTI #8 - 9		24, Loop, DTMF, LS			B 3001

Digital Circuit ID	IC Channel Quantity & Signaling: Supervision, Addressing, Start	OG Channel Quantity & Signaling: Supervision, Addressing, Start	2 Way Channel Quantity & Signaling:		Demarcation
			QTY	IC Channel Signaling: Supervision, Addressing, Start	

			QTY	Addressing, Start	Addressing, Start	

Note:

1. See Paragraph 10.3.1 for signaling types.
2. Replace the designation DTI #X with a sensible name of the trunk group. Let the telco determine the extent of the DSI 's required for the trunk group. EX:

Digital Circuit ID	IC Channel Quantity & Signaling: Supervision, Addressing, Start	OG Channel Quantity & Signaling: Supervision, Addressing, Start	2 Way Channel Quantity & Signaling:			Demarcation
			Qty	IC Channel Signaling: Supervision, Addressing, Start	OG Channel Signaling: Supervision, Addressing, Start	
City	36, DTMF, WS	60, DTMF, LS	222	E&M, DTMF, WS	E&M, DTMF, WS	B 3001

3. Digital trunk may have the DID trunk queuing feature (DID trunk queuing is when trunk between customer and the serving central office is busy, this feature can hold calls in a queue. However, the cost per DID # equipped with this feature can cost up to \$0.25 per DID #.)

10.3.3 Local Exchange Digital (ISDN PRI) Trunks.

Example:

ISDN PRI Circuit ID	D-Channel	IC B-Channel Quantity & Signaling: (PRI Q.931)	OG B-Channel Quantity & Signaling: (PRI Q.931)	2 Way Channel Quantity & Signaling (PRI Q.931): Qty	Demarcation
PRI #1	1	23			B 3001
PRI #2		12	12		B 3001
PRI #3			24		B 3001
PRI #4			12	12	B 3001
PRI #5	1	23			B 3001
PRI #6		6	6	12	B 3001
PRI #7		8	8	8	B 3001

Assignments Note(s):

- PRI 1 through 4 have the same D-channel messaging. One of the others of 2 - 4 will be used to provide the secondary (backup) D-channel.*
- PRI 5 through 7 have the same D-channel messaging. One of the others of 6 - 7 will be used to provide the secondary (backup) D-channel.*

Note:

- See Paragraph 10.3.1 for signaling types.*
- Replace the designation PRI #X with a sensible name of the trunk group. Let the telco determine the extent of the DSI's required for the trunk group.*

Example:

ISDN PRI Circuit ID	D-Channel	IC B-Channel Quantity & Signaling: (PRI Q.931)	OG B-Channel Quantity & Signaling: (PRI Q.931)	2 Way Channel Quantity & Signaling (PRI Q.931): Qty	Demarcation
CITY	1	23	46	46	B 3001

3. COORDINATION WILL BE REQUIRED IF A NEW VENDOR IS SELECTED.
The base switching systems already has the digital trunks assigned and if these are reaccomplished, coordinate with all to assure minimum disruption to the trunk assignments already made in the base switch!

10.4 Foreign Exchange (FX) Lines/Trunks.

10.4.1 Analog FX Line/Trunks.

Example:

Circuit Description	Type	Direction-alization	Number of Channels	Signaling	Demarcation	Destination	Estimated Mileage
Tulsa-FX	2 Wire	2 Way	20	IC: GS, DTMF, GS OG: Loop, DTMF. GS	B 3001	Tulsa	100

Notes:

- 1) *Circuit Description: Name of a particular trunk or trunk group.
Input: "Circuit Name or ID Number"*
- 2) *Type: 2 wire or 4 wire.*
- 3) *Directionalization: Incoming (IC), Outgoing (OG), or Two Way (2-Way).
Input: "IC, OG, or 2-Way"*
- 4) *Number of Channels:
Input: "Total number of channels for each type"*
- 5) *Signaling: List one each the following:
* **Supervision Signaling:** E&M, Reverse Battery, or "not specify"
* **Addressing Signaling:** DP (Dial Pulse), DTMF (Dual Tone Multi-Frequency),
or MF (Multi-Frequency).
* **Start Signaling:** GS (Ground start), LS (Loop start), or WS (Wink start)*
- 6) *Serving Point: The Government demarcation location. Use the street address only the location is off-site.
Input: "Demarcation Building Number"*
- 7) *Destination: The Designated FX city area*

Input: "City area name"

8) *Estimated Mileage: The airline mileage between the Government Central Office and the Contractor Central Office designated FX city area.*

Input: "Air line mileage quantity"

10.4.2 Foreign Exchange Digital Trunks.

Example:

Digital Circuit ID	IC Channel Quantity & Signaling: Supervision, Addressing, Start	OG Channel Quantity & Signaling: Supervision, Addressing, Start	2 Way Channel Quantity & Signaling:			Demarcation & Destination & Mileage
			Qty	IC Channel Signaling: Supervision, Addressing, Start	OG Channel Signaling: Supervision, Addressing, Start	
Norman-FX	12, Loop, DTMF, GS	2, Loop, DTMF, GS				B 3001; Norman; 20
Norman-FX			20	Loop, DTMF, WS	Loop, DTMF, WS	B 3001; Norman; 20
Tulsa-FX	12, Loop, DTMF, GS	2, Loop, DTMF, GS				B 3001; Tulsa; 100

Note: See Paragraph 10.4.1 for signaling types and see para 10.3.1 for DS1 groupings.

10.5 Transport Channels.

Circuit ID/Name	Type	Demarcation	Destination	Estimated Mileage	Circuit Description
315R40-0575-582-251	Data Circuit, 2 Wire, Bit rate	B 3001	OKC IAP, FAA Tower	15	Weather Printer Ckt
G2345	Data, 4 wire, Full Duplex, Bit rate	B 3001	OKC IAP, FAA Tower	15	LAN Connectivity
(405) 734-1111	Voice, 2-Wire	B 1	1234 SW 2nd St., Yukon City	35	OPX Voice Line

Notes: Transport channels get a path from the TELCO Central Office to the site or a remote site.

- 1) *Circuit ID: Name of a particular transport circuit.*
Input: "Circuit Name"

- 2) *Type: Consists one each of the following elements:*
 - * *Voice or data*
 - * *2-wire or 4-wire*
 - * *Mode of operations: FD (Full Duplex) or HD (Half Duplex), if available*
 - * *Transmission rate (bit rate) in Kbps for data circuit only. Do not specify for voice circuits.*
 - * *T-1 circuit can be unchannelized or channelized (Unchannelized high bandwidth. Whereas channelized is 24 DSO*
 - * *Circuit can be multi-station arrangement (service to 3 or more locations) Need to state all termination point.*

- 3) *Demarcation: The Government demarcation location. Use the street address only the location is off-site.*
Input: "Building Number"

- 4) *Destination: The termination location of the other end away from the site/base.*
Input: "Destination Address"

- 5) *Estimated Mileage: Airline mileage between two termination locations, ex: site to other location.*
Input: "Number of Miles"

- 6) *Circuit Descriptions: If any*

10.6 Data Point-to-Point Circuits.

Circuit ID/Name	Type	Demarcation	Destination	Estimated Mileage	Mode of Operation
315R40-0575-582-898	Data Circuit, 2 Wire, Bit rate	B2600	OKC IAP, FAA Tower	15	Sequential Arrangement or Addressable

***Note:** As same as Paragraph 10.5 notes, with the exception of circuit description. Mode of operation is an off-hook connection arrangement (sequential arrangement or addressable) of the common equipment for data point-to-point circuit.*

10.7 Circuit Extension.

***Tips:** Circuit extension gets needed engineering, materials, and labor to terminate at a demarcation within the site (continuing beyond the site primary demarcation).*

Circuit ID/Name	Type	Demarcation	User's Location	Estimated Mileage	Circuit Description
(405) 734-6508	2 Wire, Voice, Bit rate	B 3001	B 1	3	Voice Line
(405) 734-6525	2 Wire, Voice, Bit rate	B 3001	B 17	3	Voice Line
G2345	Data, 4 wire, Full Duplex, Bit rate	B 3001	Command Post	1	LAN Connectivity

Notes:

1) *Circuit ID: Name of a particular circuit to be extended.
Input: "Circuit Name"*

2) *Type: Consists one each of the following elements:*

- * *Voice or data*
- * *2-wire or 4-wire*
- * *Mode of operations: FD (Full Duplex) or HD (Half Duplex), if available*
- * *Transmission rate (bit rate) in Kbps for data circuit only. Voice circuit does not need to specify.*

3) *Demarcation: The Government primary demarcation location. Use the street address only the location is off-site.
Input: "Building Number"*

4) *User's Location: The designated user location of a circuit to be extended.
Input: "User's building number"*

5) *Estimated Mileage: Mileage between two termination locations, example: demarcation to the user location.
Input: "Number of Miles"*

6) *Circuit Descriptions: If any*

10.8 Public Listings.

Description	Qty
Public Listing, Government Section	
Cross Reference Listing, Alphabetical Section	
<i>Additional Listings</i>	

Foreign Listing, Government Section	
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Note: Specify the quantity for each type.

10.9 Diversity/Diverse Routing.

Note: If none, then state "No diverse routing requirements for this site". Otherwise, the below specification may be helpful. This is a generic specification, check carefully with your site and provide additional information for the diverse routing requirement if needed.

Example: Sonet Ring Diversity:

Ring Type	Customer Node 1	Customer Port 1	Customer Node 2	Customer Port 2	Central Office Node	Central Office Ports	Alternate Central Office Node	Alternate Central Office Port

Note to engineer.

Ring type: Consists one each of the following elements:

** Either unidirectional path-switched ring or two fiber bidirectional line-switched ring or four fiber bidirectional line-switched ring*

** Dedicated ring or shared ring*

(Engineer Information: unidirectional path protection-switched ring is a clockwise counter clockwise rotating fiber ring (ring in ring architecture that are physically separated path). Traffic flow in one direction unless there is a failure then switch over to the protected path (self healing). Two fiber bidirectional line-switched ring or four fiber bidirectional line-switched ring automatically switch to protected path).

**Customer and Central Office Node: OC 1, OC-12, OC-48 etc.*

**Customer and central office ports: Interface to DS-1, DS-3 etc*

Example: Simple diversity:

Type of Diversity	Bit rate	Demarcation	Line code	Signaling Format

Survey Tips:

*Type of Diversity: Loop diversity or end-to-end diversity
(Engineer information - Loop diversity: physical route redundancy from government site to contractor site. Sometime refer to as loop transfer diversity i.e. services are transfer to a spare channel when the channel that was providing the service is down. End-to-end diversity - no common route involve two central office)*

Bit rate: DS-1, DS- 3 etc.

Line code: AMI or B8ZS

Signaling Format: Superframe or extended superframe

APPENDIX 20

DEFINITIONS & SERVICE FUNCTIONS

All terms of the BA-SOW, Appendix 20, and all supplemental paragraphs apply.

Tips:

List all additional definitions which have not been defined in the BA-SOW.

APPENDIX 30

INSTALLATION & SERVICE

All terms of the BA-SOW, Appendix 30, and all supplemental paragraphs apply.

Tips:

List all additional installations and services which have not been defined in the BA-SOW.

APPENDIX 40

ACRONYMS

All terms of the BA-SOW, Appendix 40, and all supplemental paragraphs apply.

Tips:

List all additional acronyms which have not been defined in the BA-SOW