DAS MASTER AGREEMENT NUMBER:	B-03-006	DAS APPROVAL DATE:	2/5/2016

VENDOR NAME: FRONTIER (SBC SNET)

SERVICE/PRODUCT NAME: Private Line Service: Digital Private Line Services

SERVICE/PRODUCT DESCRIPTION:

Digital Data Private Line Service

Digital Data Service (DDS) is a high quality dedicated private line service connecting two or more locations for the transmission of voice or data in a digital format using 100% end to end digital transmission facilities. With digital transmission, data is sent by an electrical impulse that is regenerated, eliminating the need for amplification. Static, distortion and atmospheric interference are eliminated. This translates into fewer repeat transmissions.

Digital Data Service is available at transmission speeds of 2.4, 4.8, 9.6, 56 or 64 Kilobits. The DDS circuit can be served from the same wire center (intraexchange) or it can be served from different wire centers (interexchange).

FRONTIER (SBC SNET) DS1 Service

FRONTIER (SBC SNET) DS1 service is a digital point-to-point, private line service providing a bulk transport at DS1 speed (1.544 Mbps) for any combination of voice, data, or video channels. This service provides full duplex (simultaneous two-way) transmission of serial, asynchronous digital signals.

FRONTIER (SBC SNET) DS1 service also provides serial, bipolar, return-to-zero asynchronous signals. This means the timing is derived from the signal carrying the data. No timing leads are provided at the customer interface.

DS1 can be used for:

- LAN interconnection
- Linking PBXs
- Providing access to an interexchange carrier (IXC)
- Alternate routing of redundant circuits
- Videoconferencing, including distance learning
- Support of a transaction-based system such as for billing, reservations, customer service, or database access
- Support of batch data file transfer for payroll, inventory, accounting information, and records transfer.

FRONTIER (SBC SNET) DS3 Service

FRONTIER (SBC SNET) DS3 is a point to point connection designed to carry high-volume voice data and video communications. DS3 operates at 45 megabits per second (Mbps) which is equivalent to 28 DS1 circuits or 672 DS0 channels. The DS3 channels may be derived by the customer's equipment or at the FRONTIER (SBC SNET) Central Office by using the multiplexing feature.

FRONTIER (SBC SNET) Point to Point OC-n Service

Optical Point-to-Point (OC-n) service is designed to provide a custom point-to-point linear network connecting customer locations and FRONTIER (SBC SNET) wire centers over a high bandwidth optical path.

OC-n Point-to-Point services can handle voice, data, video, imaging, Internet traffic, and other advanced broadband applications at the following transmission speeds:

- OC-3/OC-3c provides channels operating at the terminating bit rate of 155.52 Mbps.

- OC-12/OC-12c provides channels operating at the terminating bit rate of 622.08 Mbps.
- OC-48 provides channels operating at the terminating bit rate of 2488.32 Mbps.

OC-3, OC-12 and OC-48 channels may be used to connect:

- A customer designated premises to another customer designated premises, without the add/drop multiplexing capability.
- A customer designated premises to a FRONTIER (SBC SNET) location where add/drop multiplexing and add/drop functions are performed.

Network Survivability

There are three components of OCN network survivability:

- 1+1 protection
- 1+1 protection with cable survivability
- 1+1 protection with route survivability

1+1 Protection

This option provides two identical fiber pairs that are placed in the same cable and follows the same route. If the working pair fails, traffic shifts to the protect fiber pair. This option does not protect against a fiber cable cut.

The protected OC-3/OC-3c, OC-12/OC-12c and OC-48 services are offered with four fibers in the same cable and the protection card is activated when this option is ordered. This will allow customers to order protection if their equipment can accommodate it.

1+1 Protection with Cable Survivability

With this option, the working fiber pairs and the protect fiber pairs are located in two separate cables within the same conduit. If the working fiber pair cable experiences damages or a fiber cut, traffic will switch to the protect fiber pair in a separate cable. These cables are located in the same conduit, and if the conduit is cut, there is no protection. This option will provide 1+1 protection and additional loop survivability with the working fiber pair and protect fiber pair placed in separate cables within the same conduit.

1+1 Protection with Route Survivability

This option will provide 1+1 protection and offer additional protection from fiber cable cuts by routing the working fiber pair via the primary route and the protected fiber pair via a physically diverse alternate route. The protected fiber will be charged on a distance-sensitive basis, in addition to the protection optical charge and will be based on quarter route miles, from the customer premises to the serving wire center. This is the only option that will assure 100% availability of the service if dual entrances have been purchased.

National Security Emergency Preparedness (NS/EP) Telecommunications Service Priority (TSP) System

In 1988, the Federal Communications Commission revised the Restoration Priority System with the National Security Emergency Preparedness (NSEP) TSP System. This system ensures priority treatment of restoration to telecommunication services following natural or technical disasters.

TSP assigned telecommunication services are provisioned and restored before non-TSP services. Any Federal, State and local government, private industry or foreign government with telecommunications services supporting a national security or emergency preparedness mission qualifies for TSP.

Provisioning

If FRONITER (SBC SNET) receives an Emergency (E) provisioning priority it must take immediate action to provide the service at the earliest possible date, including dispatching service personnel outside of normal business hours. The FCC order requires that service vendors provision Emergency (designated by an E) TSP services before any Essential (designated by a 1, 2, 3, 4, or 5) TSP service or non-TSP services. The order processing is escalated up through management as far as necessary to complete

the order. Service vendors receiving service requests with an Essential provisioning priority must make their best effort to provide the TSP services by the service user's requested due date.

Restoration
When a trouble report is received, or FRONITER (SBC SNET) otherwise recognizes that the TSP circuit is out or unusable, it must allocate available resources to restore the service as quickly as possible. TSP services assigned restoration priorities of 1, 2, or 3 require dispatch outside normal business hours. Vendors must dispatch service personnel outside normal business hours to restore TSP service assigned a 4 or 5 priority only when the next business day is more than 24 hours away.

Sponsorship
The FCC designated the Executive Office of the President (EOP) as administrator of the TSP Program. The EOP delegated its responsibilities to the Manager of the National Communications System (NCS), which, in turn, assigned the administration and execution of the TSP Program to the Office of Priority Telecommunications (OPT) located at the NCS. The primary roles of a Federal sponsor are to:

- Review and determine whether to approve foreign, State, and local government and private industry requests for priority actions.
- Affirm that the requested priority level assignment is appropriate.

Sponsorship for TSP may be obtained from the National Communications System through the TSP Web Site at http:\\tsp.ncs.gov.

SERVICE LEVELS:
Installation Intervals
2.4, 4.8., 9.6, 56 or 64 Kbps
Less than 10 lines = 9 business days
10 or more lines= Individual Case Basis
1.544 Mbps (DS1)
Less than 10 lines = 20 business days
10 or more lines = Individual Case Basis
DS3 Service
Less than 10 lines= 15 business days, if facilities are available
10 or more lines= Individual Case Basis
OC-n Service
Less than 10 lines= 45 days
10 or more lines= Individual Case Basis

Routine Repair Intervals
2.4, 4.8., 9.6, 56 or 64 Kbps
Response time = Less than 1 hour
Repair Resolution time = 4 hours or less
1.544 Mbps (DS1)
Response time = Less than 1 hour
Repair Resolution time = 3.7 hours or less
DS3 Service
Response time = Less than 1 hour
Repair Resolution time = 4 hours or less
OC-n Service
Response time = Less than 30 minutes
Repair Resolution time = 4 hours or less

Repair Service Level Definitions:
Repair Response is the time elapsed between when FRONTIER (SBC SNET) receives a report of a problem or otherwise becomes aware of a problem, and the time that FRONTIER (SBC SNET) responds to the end user or other designated contact to verify the problem.

Repair Resolution Time means the elapsed time between when the State notifies FRONTIER (SBC SNET) of a problem, and the time that FRONTIER (SBC SNET) restores service and such service is acceptable to the State.

SERVICE AVAILABILITY/LIMITATIONS:

SERVICE AVAILABILITY
See Service Availability spreadsheet

Connecticut Access Zones for DS3 Service

Zone 1	Bridgeport 01
	Danbury
	Hartford 03
	New Haven 02
	New Haven 03
	Stamford 01
Zone 2	Berlin
	Bloomfield
	East Hartford 01
	East Hartford 02
	Farmington
	Huntington
	Meriden
	Middletown
	Milford
	New Britain
	New London 02
	Norwalk 02
	Norwalk 03
	Stamford 02
	Stratford
	Waterbury
	Windsor
	Windsor Locks
Zone 3	Remainder of state

LIMITATIONS
DS3 and OC-n Services are provided through FRONTIER (SBC SNET)'s FCC #39 Interstate Tariff and are billed separately through the CABS billing system.

MASTER AGREEMENT NUMBER:	B-03-006	DAS APPROVAL DATE:	2/5/2016

VENDOR NAME: FRONTIER (SBC SNET)

SERVICE NAME: Private Line Service: Digital Private Line Service

A 2% credit will be issued monthly against the items ordered from this Product Schedule per the FRONTIER (SBC SNET) Master Agreement

Activity (Add, Delete, Change)	Date of Vendor Request	Date Approved By DAS	Item	Item Code	Description of Service/Equipment	Unit	Non-Recurring Unit Cost	Recurring Monthly Cost	
Add	09/11/15	02/05/16	1		2.4 Kbps Local Digital Channel	ch	$520.55	$65.00	
Add	09/11/15	02/05/16	2		4.8 Kbps Local Digital Channel	ch	$520.55	$65.00	
Add	09/11/15	02/05/16	3	DC048	9.6 Kbps Local Digital Channel	ch	$520.55	$65.00	
Add	09/11/15	02/05/16	4	IFN95 DCO27 DC164	56/64 Kbps Local Digital Channel	ch	$591.53	$80.00	
Add	09/11/15	02/05/16	5		2.4, 4.8, 9.6 Kbps Interwire center mileage	mi	$0.00	$2.50	
Add	09/11/15	02/05/16	6	IFN96	56/64 Kbps Interwire ctr mileage	mi	$0.00	$2.75	
Add	09/11/15	02/05/16	7		Subsequent change of speed per LDC (2.4-64Kbps)	ch	$141.97	$0.00	
Add	09/11/15	02/05/16	8		Subsequent Secondary Channel Capabilitiy (2.4-64Kbps)	ch	$300.00	$0.00	
Add	09/11/15	02/05/16	9	DC074 HII01 IGC26	DS1(1.544 Mbps) Local Digital Channel	ch	$0.00	$135.00	
Add	09/11/15	02/05/16	10a	ICM01 1FG61	DS1(1.544 Mbps) Fixed Mileage - interexchange circuits - 1st mile	mi 1	$0.00	$50.00	
Add	09/11/15	02/05/16	10b	ICM01 1FG62	DS1(1.544 Mbps) Inter wirecenter mileage - interexchange circuits per mile	mi ea	$0.00	$14.00	
Add	09/11/15	02/05/16	11	LC056	DS1(1.544 Mbps) Inter wirecenter mileage w/ diverse route	mi	$189.29	$45.00	
Add	09/11/15	02/05/16	12		DS1(1.544 Mbps) Central Office Channelization	mux	$500.00	$225.00	
Add	09/11/15	02/05/16	13		Zone 1- DS3 (44.736 Mbps) Local Digital Channel*	ch	$0.00	$925.00	
Add	09/11/15	02/05/16	14	ASC10	Zone 2- DS3 (44.736 Mbps) Local Digital Channel*	ch	$0.00	$975.00	
Add	09/11/15	02/05/16	15	ASC10	Zone 3- DS3 (44.736 Mbps) Local Digital Channel*	ch	$0.00	$1,000.00	
Add	09/11/15	02/05/16	16		Zone 1 -DS3 Fixed Mileage over 0*	circ	$0.00	$425.00	
Add	09/11/15	02/05/16	17		Zone 1 - DS3 Per Mile*	mi	$0.00	$30.00	
Add	09/11/15	02/05/16	18		Zone 2 - DS3 Fixed Mileage over 0*	circ	$0.00	$450.00	
Add	09/11/15	02/05/16	19		Zone 2 - DS3 Per Mile*	mi	$0.00	$35.00	
Add	09/11/15	02/05/16	20	ASC10	Zone 3 -DS3 Fixed Mileage over 0*	circ	$0.00	$475.00	
Add	09/11/15	02/05/16	21	ASC10	Zone 3 - DS3 Per Mile*	mi	$0.00	$40.00	
Add	09/11/15	02/05/16	22		Zone 1 - Multiplexing DS3 to DS1*	circ	$0.00	$450.00	
Add	09/11/15	02/05/16	23		Zone 2 - Multiplexing DS3 to DS1*	circ	$0.00	$475.00	
Add	09/11/15	02/05/16	24		Zone 3 - Multiplexing DS3 to DS1*	circ	$0.00	$500.00	
Add	09/11/15	02/05/16	25		DS3 Rearrangement*	circ	$185.00	$0.00	
Add	09/11/15	02/05/16	26		OC3/OC3c (Point to Point) Local Distribution Channels*	ch	$0.00	$1,300.00	
Add	09/11/15	02/05/16	27		OC3/OC3c Interoffice Transport (Fixed)*	circ	$0.00	$886.00	
Add	09/11/15	02/05/16	28		OC3/OC3c Interoffice Mileage (per mile)*	mi	$0.00	$220.00	
Add	09/11/15	02/05/16	29		OC3/OC3c Colocation Transport (Fixed)*	circ	$0.00	$1,400.00	
Add	09/11/15	02/05/16	30		OC3/OC3c Colocation Transport (per mile)*	mi	$0.00	$220.00	
Add	09/11/15	02/05/16	31		OC3/OC3c Add/Drop Multiplexing (per arrangement)*	arrg	$0.00	$950.00	
Add	09/11/15	02/05/16	32		OC3/OC3c Add/Drop Function (per DS3)*	circ	$0.00	$150.00	
Add	09/11/15	02/05/16	33		OC3/OC3c Add/Drop Function (per DS1)*	circ	$0.00	$55.00	
Add	09/11/15	02/05/16	34		OC3/OC3c 1+1 Protection (per LDC)*	ch	$0.00	$300.00	
Add	09/11/15	02/05/16	35		OC3/OC3c 1+1 Protect w Cable Survivability (per LDC)*	ch	$500.00	$300.00	

VENDOR NAME: FRONTIER (SBC SNET)

SERVICE NAME: Private Line Service: Digital Private Line Service

A 2% credit will be issued monthly against the items ordered from this Product Schedule per the FRONTIER (SBC SNET) Master Agreement

Activity (Add, Delete, Change)	Date of Vendor Request	Date Approved By DAS	Item	Item Code	Description of Service/Equipment	Unit	Non-Recurring Unit Cost	Recurring Monthly Cost	
Add	09/11/15	02/05/16	36		OC3/OC3c 1+1 Protect w Route Survivability (per 1/4 route mile)*	1/4 mi	$0.00	$50.00	
Add	09/11/15	02/05/16	37		OC3/OC3c Shared Network Arrangement (per order)*	ord	$0.00	$30.00	
Add	09/11/15	02/05/16	38		OC12/OC12c Local Distribution Channels*	ch	$0.00	$3,000.00	
Add	09/11/15	02/05/16	39		OC12/OC12c Interoffice Transport (Fixed)*	circ	$0.00	$2,250.00	
Add	09/11/15	02/05/16	40		OC12/OC12c Interoffice Mileage (per mile)*	mi	$0.00	$220.00	
Add	09/11/15	02/05/16	41		OC12/OC12c Colocation Transport (Fixed)*	circ	$0.00	$4,000.00	
Add	09/11/15	02/05/16	42		OC12/OC12c Colocation Transport (per mile)*	mi	$0.00	$400.00	
Add	09/11/15	02/05/16	43		OC12/OC12c Add/Drop Multiplexing (per arrangement)*	arrg	$0.00	$2,100.00	
Add	09/11/15	02/05/16	44		OC12/OC12c Add/Drop Function (per OC3)*	circ	$0.00	$250.00	
Add	09/11/15	02/05/16	45		OC12/OC12c Add/Drop Function (per DS3)*	circ	$0.00	$150.00	
Add	09/11/15	02/05/16	46		OC12/OC12c 1+1 Protection (per LDC)*	ch	$0.00	$400.00	
Add	09/11/15	02/05/16	47		OC12/OC12c 1+1 Protect w Cable Survivability (per LDC)*	ch	$600.00	$400.00	
Add	09/11/15	02/05/16	48		OC12/OC12c 1+1 Protect w Route Survivability (per 1/4 route mi)*	1/4 mi	$0.00	$100.00	
Add	09/11/15	02/05/16	49		OC12/OC12c Shared Network Arrangement (per order)*	ord	$0.00	$30.00	
Add	09/11/15	02/05/16	50		OC48 Local Distribution Channels*	ch	$0.00	$7,000.00	
Add	09/11/15	02/05/16	51		OC48 Interoffice Transport (Fixed)*	circ	$0.00	$4,500.00	
Add	09/11/15	02/05/16	52		OC48 Interoffice Mileage (per mile)*	mi	$0.00	$220.00	
Add	09/11/15	02/05/16	53		OC48 Colocation Transport (Fixed)*	circ	$0.00	$10,400.00	
Add	09/11/15	02/05/16	54		OC48 Colocation Transport (per mile)*	mi	$0.00	$440.00	
Add	09/11/15	02/05/16	55		OC48 Add/Drop Multiplexing (per arrangement)*	arrg	$0.00	$3,700.00	
Add	09/11/15	02/05/16	56		OC48 Add/Drop Function (per OC12)*	circ	$0.00	$625.00	
Add	09/11/15	02/05/16	57		OC48 Add/Drop Function (per OC3)*	circ	$0.00	$250.00	
Add	09/11/15	02/05/16	58		OC48 Add/Drop Function (per DS3)*	circ	$0.00	$150.00	
Add	09/11/15	02/05/16	59		OC48 1+1 Protection (per LDC)*	ch	$0.00	$1,200.00	
Add	09/11/15	02/05/16	60		OC48 1+1 Protection with Cable Survivability (per LDC)*	ch	$700.00	$1,200.00	
Add	09/11/15	02/05/16	61		OC48 1+1 Protection with Route Survivability (per 1/4 route mile)*	1/4 mi	$0.00	$125.00	
Add	09/11/15	02/05/16	62		OC48 Regenerator (each)*	regen	$0.00	$5,500.00	
Add	09/11/15	02/05/16	63		Administrative Charge (per order)*	ord	$60.00	$0.00	
Add	09/11/15	02/05/16	64		Design and Central Office Charge OC3/OC12 (per circuit)*	circ	$375.00	$0.00	
Add	09/11/15	02/05/16	65		Design and Central Office Charge OC48 (per circuit)*	circ	$500.00	$0.00	
Add	09/11/15	02/05/16	66		Customer Connection Charge OC3/OC12 (per termination)*	term	$450.00	$0.00	
Add	09/11/15	02/05/16	67		termination)*	term	$600.00	$0.00	
Add	09/11/15	02/05/16	68	ABD02	TSP Priority Installation	circ	$113.59	$0.00	
Add	09/11/15	02/05/16	69	ABD04	TSP Priority Restoration	circ	$101.82	$0.00	
Add	09/11/15	02/05/16	70	ABD06	TSP Priority Restoration change level	circ	$6.47	$0.00	
Add	09/11/15	02/05/16	71	ABD09	TSP Priority Restoration maintenance	circ	$0.00	$8.82	
Dept of Transportation Camera Network									
Add	09/11/15	02/05/16	72	ASC10	DS3 Local Channel Zone 1 Bpt- DOT 149 Prospect St, Bridgeport (see note 1)	ch	$0.00	$925.00	
Add	09/11/15	02/05/16	73	ASC10	DS3 Mileage Fixed (see note 1)	circ	$0.00	$450.00	

VENDOR NAME: FRONTIER (SBC SNET)

SERVICE NAME: Private Line Service: Digital Private Line Service

A 2% credit will be issued monthly against the items ordered from this Product Schedule per the FRONTIER (SBC SNET) Master Agreement

Activity (Add, Delete, Change)	Date of Vendor Request	Date Approved By DAS	Item	Item Code	Description of Service/Equipment	Unit	Non-Recurring Unit Cost	Recurring Monthly Cost	
Add	09/11/15	02/05/16	74	ASC10	DS3 Mileage NL-BPT 59 miles (see note 1)	mi ea	$0.00	$35.00	
Add	09/11/15	02/05/16	75	ASC10	DS3 M 1/3 Multiplexor Zone 2 NL- New London C.O. 26 Washington St, New London (see note 1)	circ	$0.00	$475.00	
* DS3 and OC-n service provided out of FCC Tariff 39 - separate CABS bill									
Note 1:	Order completion for 1/2013 bill – effective to 10/1/12								

NOTE: Grey highlighted items are no longer available. They have been either deleted, changed and/or no longer apply.