

Node:		EZEIZA		Argentina		SAEZ	
Geo & Orbit Information:		Lat. 34° 49' 25 " S	Lon. 58° 31' 43 " W	INTELSAT IS-903 @ 335,5			
				Az. 49,78	El. 35,82 °	Dist. 38112,33 Km	

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SAME SCEL	11	0,36	8 Kbps	
		SAEZ SUMU	11	0,36	8 Kbps	
		Baires Carrasco APP	25	0,825	8 Kbps	
		Baires SUMU	20	0,66	8 Kbps	
		SAEZ Carrasco APP	11	0,36	8 Kbps	
TOTALS				2,565 (+50 %)	40 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SARE/SAEZ SGAS	2	0,066	
		SACO/SAEZ SCEL	2	0,066	
		SACO/SAEZ SLLP	1	0,033	
		SAVC/SAEZ SCEL/SCTE	1	0,033	
		SAVC/SAEZ SCEL/SCCI	1	0,033	
		SARE/SAEZ SBCT	2	0,066	
		SARE/SAEZ SUMU	1	0,033	
		SABE/SAEZ SUMU/SUCA	2	0,066	
		SARE/SAEZ SBCT/SBWI	3	0,1	
		SAZS/SAEZ SCEL/SCTE	2	0,066	
TOTALS				0,562 (+50%)	5 ports min.

		Calls	Calls per peak hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SAEZ ALL	3	0,25	
	Maintenance	SAEZ ALL	1	0,083	
				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SAEZ SCEL	13440	2400 bps	RS232 / V24
		SAEZ SUMU	17760	2400 bps	RS232 / V24
		SAEZ SGAS	16200	2400 bps	RS232 / V24
		SAEZ SLLP	9600	2400 bps	RS232 / V24
		SAEZ SPIM	22000	2400 bps	RS232 / V24
		SAEZ SBCT/SBBR	16600	2400 bps	RS232 / V24

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Network)	SAEZ SCEL	258000	2 Ports (19200 bps each)	RS232 / V24
		SAEZ SUMU			RS232 / V24
		SAEZ SGAS			RS232 / V24
		SAEZ SLLP			RS232 / V24
		SAEZ SPIM			RS232 / V24
		SAEZ SBCT/SBBR			RS232 / V24
		SAEZ SVMI			RS232 / V24

		Circuits	Avg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SAEZ ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SAEZ SBCT	9600	RS232 / V24
		SAEZ SUMU	9600	RS232 / V24
		SAEZ SGAS	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SAEZ ALL	(*) To be defined by the Tenders

SUMMARY**Node: EZEIZA (Argentina) SAEZ**

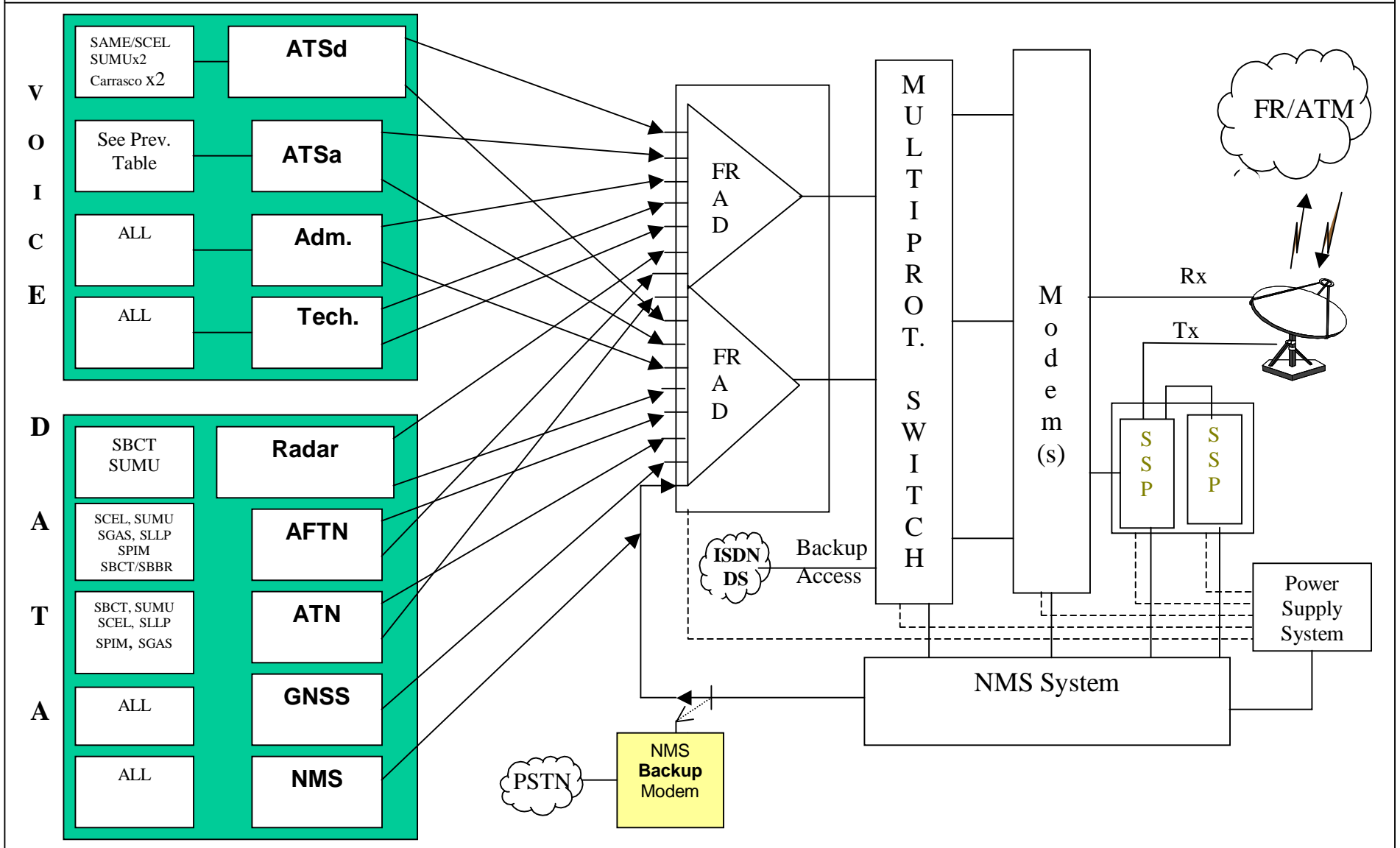
SAEZ	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM				X		X			X
SCEL	1	(4)		X		X			X
SAEZ									
SBCT		(3)	ALL	X	1	X	ALL	X	
SBRF									X
SBMN									X
SUMU	4	(2)		X	1	X			X
SGAS		(1)		X	1	X			X
SLLP		(1)		X		X			X
SOCA									X
SMPM									X
SYGM									X
SVMI						X			X
Ports	5	5	2	6	3	2	2	DEF	
Kb/s	40	NC	NC	NC	28.8	NC	NC	DEF	

- X** Required link
(N) Number of switched (ATSa) FASID requirements
NC Does not apply for permanent bandwidth
DEF To be defined by the Tenders

Lat. 34° 49' 25" S
Lon. 58° 31' 43" W

REDDIG node: Ezeiza (SAEZ)

Dist. 38112,33
IS-903 Elev. 35,82°
Azim. 49,78°



Node:	LA PAZ		Bolivia		SLLP
Geo & Orbit Information:	Lat. 16° 30' 22 " S	Lon. 68° 11' 09 " W	INTELSAT IS-903 @ 335,5		
			Az. 73,43°	El. 36,95 °	Dist. 38020,50 Km

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm	Interface
VOICE	ATSd (Hotline)	SLLP SPIM	3	0,1	8 Kbps	
		SLLP SBMN/SBPH	3	0,1	8 Kbps	
TOTALS				0,3 (+ 50%)	16 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SLLP SCEL	2	0,066	
		SLLP SBCT/SBBR	1	0,033	
		SLLP SAEZ/SACO	1	0,033	
		SLLP SBCT	2	0,066	
		SLLP SGAS	1	0,066	
TOTALS				0,3465 (+50%)	2 ports min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SLLP ALL	3	0,25	
	Maintenance	SLLP ALL	1	0,083	
TOTALS				0,333 (+ 50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SLLP SBCT/SBBR	NEW	2400 bps	RS232 / V24
		SLLP SAEZ	5000	2400 bps	RS232 / V24
		SLLP SPIM	13000	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25&UNI Netw)	SLLP SPIM	53000	2 Ports	RS232 / V24
		SLLP SAEZ		(19200 bps each)	RS232 / V24

		Circuits	Avrg. Tx. Kchars. Per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SLLP ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm.P to P)	SLLP SPIM	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SLLP ALL	(*) To be defined by the Tenders

SUMMARY

Node: LA PAZ (Bolivia) SLLP

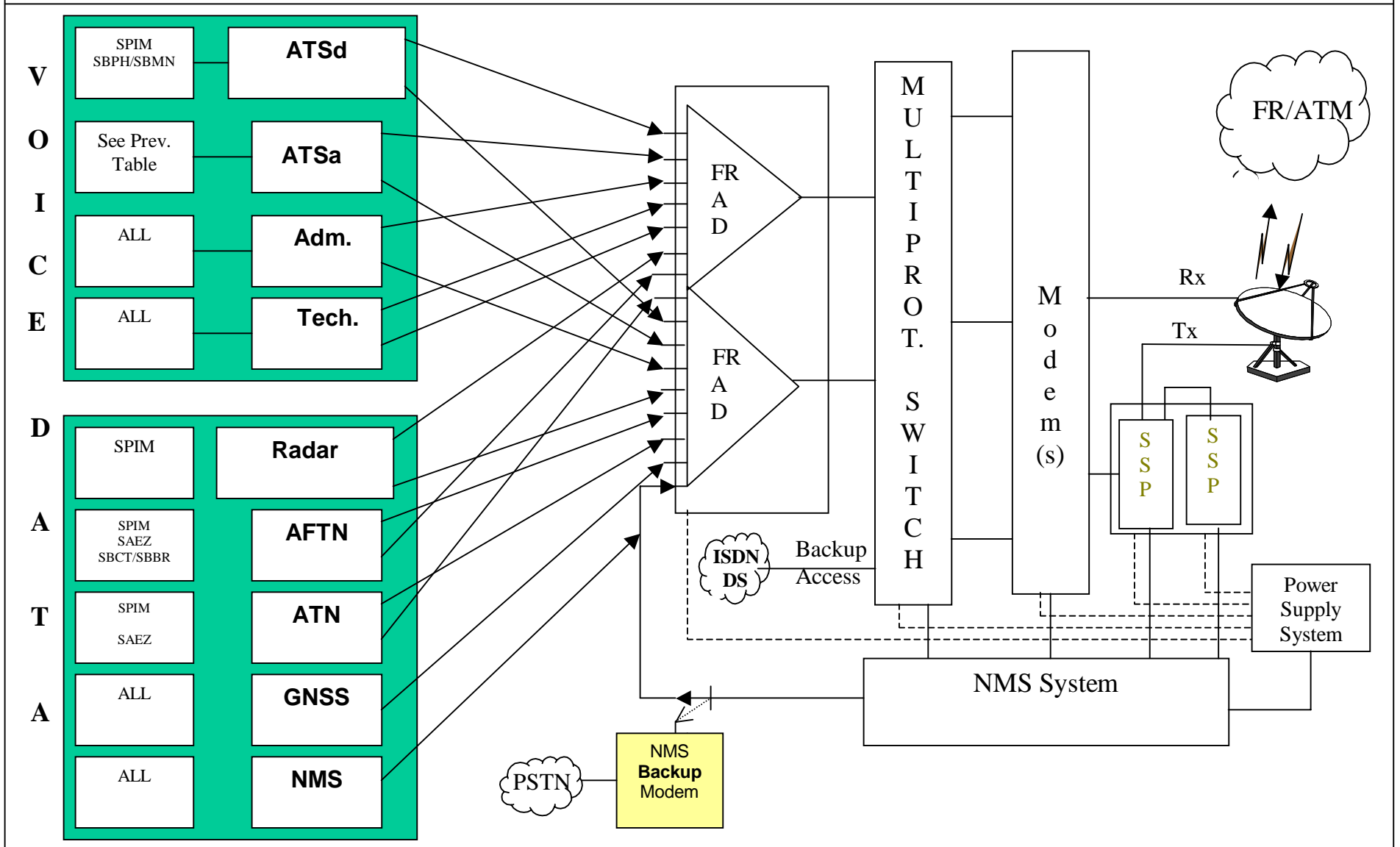
SLLP	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM	1			X	1	X			X
SCEL		(1)							X
SAEZ		(1)		X		X			X
SBCT		(2)		X					X
SBRF									X
SBMN	1								X
SUMU									X
SGAS		(1)							X
SLLP									
SOCA			ALL				ALL	X	
SMPM									X
SYGM									X
SVMI									X
Ports	2	2	2	3	1	2	2	DEF	
Kb/s	16	NC	NC	NC	9.6	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 16° 30' 22" S
Lon. 68° 11' 09" W

REDDIG node: La Paz (SLLP)

Dist. 38020,50
IS-903 Elev. 36,95°
Azim. 73,43°



Node:		CURITIBA		Brasil		SBCT	
Geo & Orbit Information:		Lat. 25° 24' 06 " S	Lon. 49° 14' 07 " W	INTELSAT IS-903 @ 335,5			
				Az. 47,04 °	El. 49,49 °	Dist. 37110,61 Km	

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SBCT SGAS	4	0,132	8 Kbps	
		SBCT SUMU	7	0,232	8 Kbps	
TOTALS				0,546 (+50 %)	16 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SBBR/SBCT SLLP	1	0,033	
		SBCT SAEZ/SARE	2	0,066	
		SBCT SLLP	2	0,066	
		SBWI/SBCT SAEZ/SARE	3	0,1	
		SBWI/SBCT SGAS	2	0,066	
		SBCT SBRF	3 (Backup)	0,1	
		SBCT SBMN	3 (Backup)	0,1	
TOTALS				0,531 (+50%)	3 ports min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SBCT ALL	4	0,333	
	Maintenance	SBCT ALL	1	0,083	
				0,416 + (50%)	3 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SBBR/SBCT SLLP	NEW	2400 bps	RS232 / V24
		SBBR/SBCT SAEZ	21500	2400 bps	RS232 / V24
		SBBR/SBCT SUMU	14600	2400 bps	RS232 / V24
		SBBR/SBCT SGAS	14000	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25 & UNI Network)	SBBR/SBCT SPIM	140000	(19200 bps each) 2 Ports	RS232 / V24
		SBBR/SBCT SAEZ			RS232 / V24
		SBBR/SBCT SUMU			RS232 / V24
		SBBR/SBCT SGAS			RS232 / V24
		SBBR/SBCT SBMN			RS232 / V24
		SBBR/SBCT SBRF			RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SBCT ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SBCT SAEZ	9600	RS232 / V24
		SBCT SUMU	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SBCT ALL	(*) To be defined by the Tenders

SUMMARY

Node: CURITIBA (Brazil) SBCT

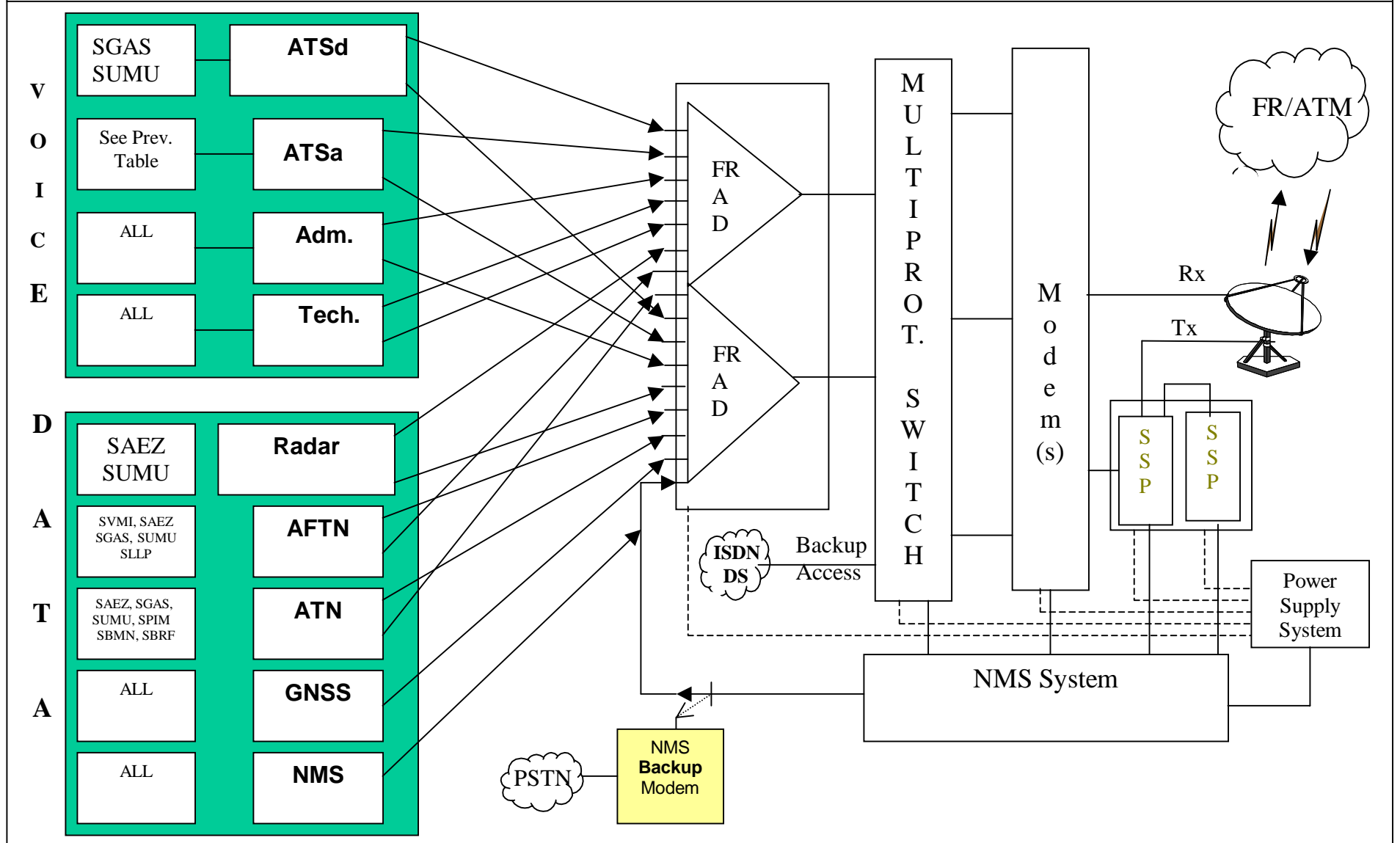
SBCT	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM						X			X
SCEL									X
SAEZ		(2)		X	1	X			X
SBCT									
SBRF		(1)	ALL			X	ALL	X	
SBMN		(1)				X			X
SUMU	1			X	1	X			X
SGAS	1	(1)		X		X			X
SLLP		(2)		X					X
SOCA									X
SMPM									X
SYGM									X
SVMI							X		
Ports	2	3	2	4	2	2	2	DEF	
Kb/s	16	NC	NC	NC	19.2	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 24° 06' 43" S
Lon. 49° 14' 07" W

REDDIG node: Curitiba (SBCT)

Dist. 37110,61
IS-903 Elev. 49,49°
Azim. 47,04°



Node:		RECIFE - ATLANTICO	Brasil	SBRF
Geo & Orbit Information:	Lat. 08° 08' 15 " S	Lon. 34° 55' 29 " W	INTELSAT IS-903 @ 335,5	
			Az. 52,42 °	El. 74,48 °
			Dist. 35983,75 Km	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SBRF SOCA	1	0,033	
		SBRF SUMU	2	0,066	
		SBRF SBMN	3 (Backup)	0,1	
		SBRF SBCT	3 (Backup)	0,1	
TOTALS				0,3 (+50%)	3 ports min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SBRF ALL	4	0,333	
	Maintenance	SBRF ALL	1	0,083	
				0,416 + (50%)	3 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SBRF SVMI	10800	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25 & UNI Network)	SBRF/SBBR SPIM	80000	2 Ports (19200 bps each)	RS232 / V24
		SBRF/SBBR SYGC			RS232 / V24
		SBRF/SBBR SMPM			RS232 / V24
		SBRF/SBBR SOCA			RS232 / V24
		SBRF/SBBR SVMI			RS232 / V24
		SBRF/SBBR SBMN			RS232 / V24
		SBRF/SBBR SBCT			RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SBRF ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Interface
DATA	NMS (LAN)	SBRF ALL	(*) To be defined by the Tender

SUMMARY

Node: RECIFE (Brazil) SBRF

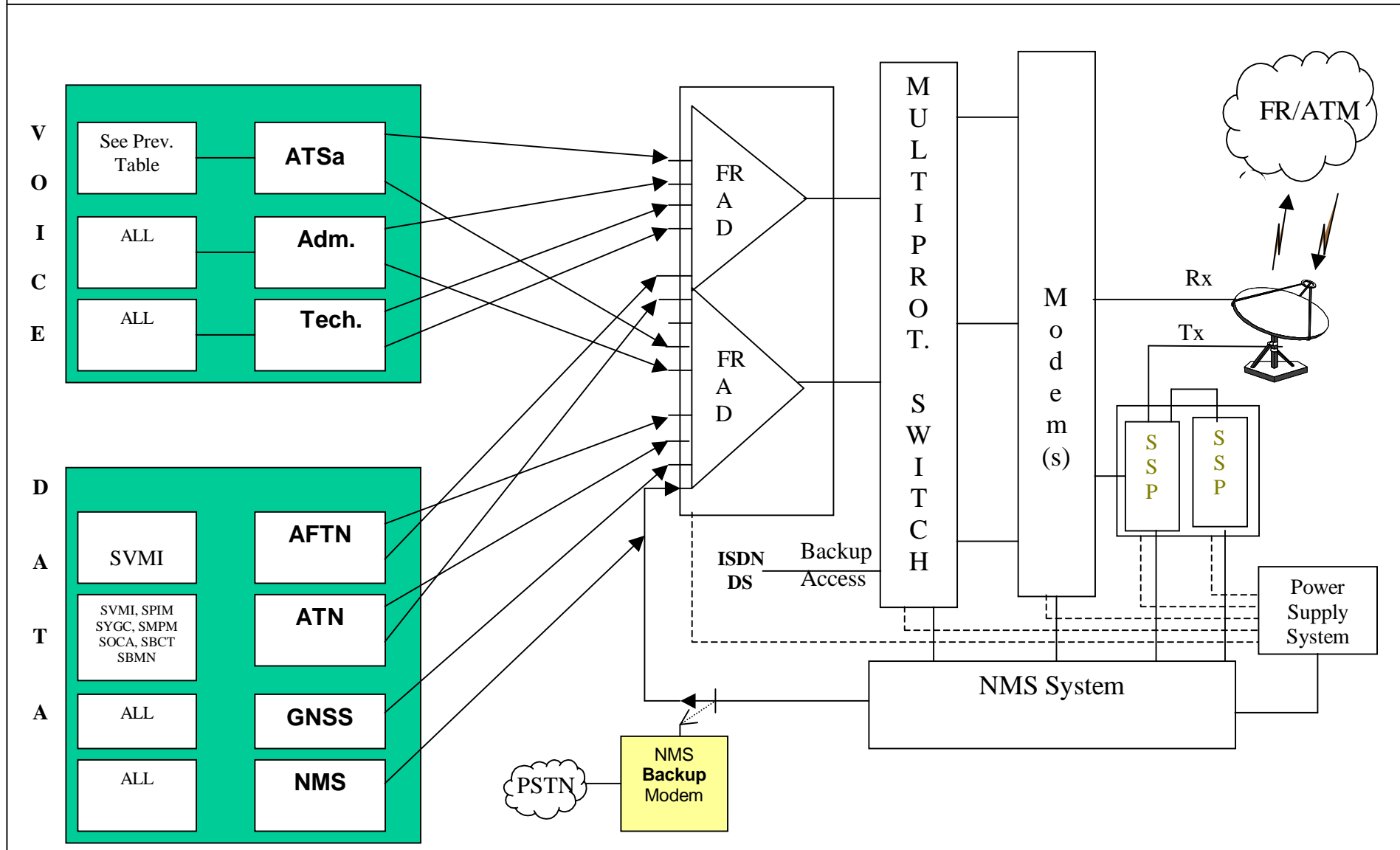
SBRF	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM						X			X
SCEL									X
SAEZ									X
SBCT		(1)				X			X
SBRF									
SBMN		(1)	ALL			X	ALL	X	
SUMU		(1)							X
SGAS									X
SLLP									X
SOCA		(1)				X			X
SMPM						X			X
SYGM						X			X
SVMI					X			X	X
Ports	0	3		2	1	0		2	2
Kb/s	0	NC	NC	NC	0	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 08° 15' 36" S
Lon. 34° 55' 29" W

REDDIG node: Recife - Atlántico (SBRF)

Dist. 35983,75
Elev. 74,48°
Azim. 52,42°



Node:	MANAUS		Brazil	SBMN
Geo & Orbit Information:	Lat. 03° 01' 52 " S	Lon. 60° 02' 29.9 " W	INTELSAT IS-903 @ 335,5	
			Az. 85,77 °	El. 48,60 ° Dist. 37168,32 Km

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SBMN SVMI	6	0,2	8 Kbps	
		SBMN SKED	3	0,1	8 Kbps	
		SBMN SKED/SKLT	3	0,1	8 Kbps	
		SBPH/SBMN SKED	3	0,1	8 Kbps	
		SBPH/SBMN SLLP	4	0,133	8 Kbps	
TOTALS				0,633 (+50 %)	40 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SBBE/SBMN SMPM	1	0,033	
		SBBE/SBMN SOCA	1	0,033	
		SBMN SYGC	1	0,033	
		SBPH/SBMN SPIM	1	0,033	
		SBMN SBRF	3 (Backup)	0,1	
		SBMN SBCT	3 (Backup)	0,1	
TOTALS				0,232 (+50%)	2 ports

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SBMN ALL	4	0,333	
	Maintenance	SBMN ALL	1	0,083	
				0,416 + (50%)	3 ports

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SBBR/SBMN SOCA	9250	2400 bps	RS232 / V24
		SBBR/SBMN SMPM	NEW	2400 bps	RS232 / V24
		SBBR/SBMN SYGC	NEW	2400 bps	RS232 / V24
		SBBR/SBMN SKED	NEW	2400 bps	RS232 / V24
		SBBR/SBMN SPIM	22350	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25 & UNI Net)	SBBR/SBMN SBRF	95000	(19200 bps each)	RS232 / V24
		SBBR/SBMN SBCT		2 Ports	RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SBMN ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SBMN SPIM	9600	RS232 / V24
		SBMN SVMI	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SBMN ALL	(*) To be defined by the Tenders

SUMMARY

Node: MANAUS (Brazil)

SBMN

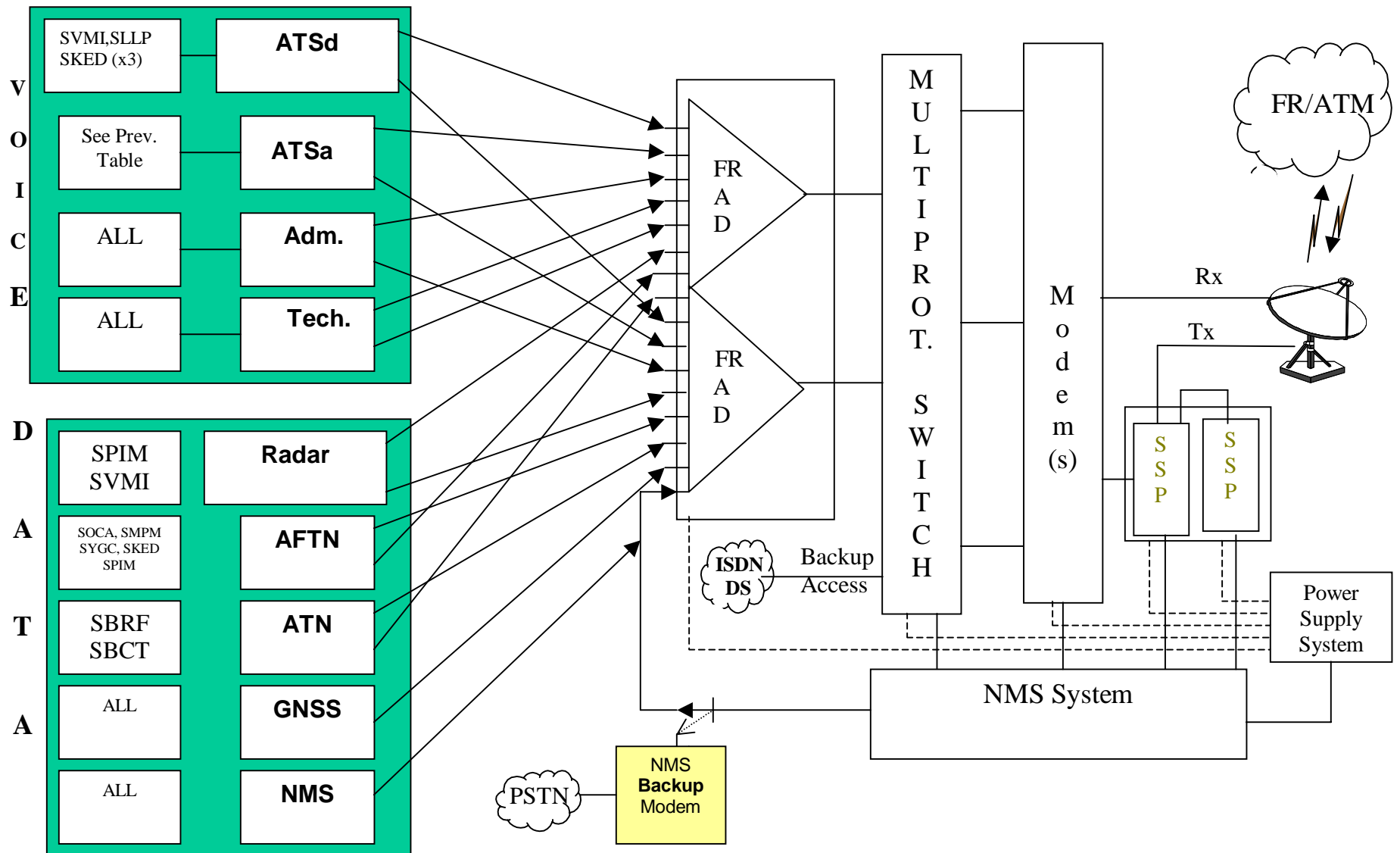
SBMN	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED	3		ALL	X			ALL	X	
SEGU									X
SPIM		(1)		X	1				X
SCEL									X
SAEZ									X
SBCT		(1)				X			X
SBMN									
SBRF		(1)	ALL			X	ALL	X	
SUMU									X
SGAS									X
SLLP	1								X
SOCA		(1)		X					X
SMPM		(1)		X					X
SYGM		(1)		X					X
SVMI	1					1			X
Ports	5	2	3	5	2	2	2	DEF	
Kb/s	40	NC	NC	NC	19.2	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 03° 01' 51.2" S
 Lon. 60° 02' 29.9" W

REDDIG node: Manaus (SBMN)

Dist. 37168,32
 IS-903 Elev. 48,60°
 Azim. 85,77°



Node:	SANTIAGO		Chile	SCEL
Geo & Orbit Information:	Lat. 33° 27' 06 " S	Lon. 70° 44' 18 " W	INTELSAT IS-903 @ 335,5	
			Az. 62,20 °	El. 25,57 ° Dist. 38831,23 Km

VOICE	ATSd (Hotline)	Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
		SCEL SPIM	7	0,232	8 Kbps	
		SCEL SAEZ/SAME	11	0,36	8 Kbps	
TOTALS				0,592 (+50 %)	16 Kbps	

VOICE	ATSa (Switched)	Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
		SCEL SAEZ/SACO	2	0,066	
		SCEL SLLP	2	0,066	
		SCTE/SCEL SAEZ/SAVC	1	0,033	
		SCCI/SCEL SAEZ/SAVC	1	0,033	
		SCTE/SCEL SAEZ/SAZS	4	0,136	
TOTALS				0,338 (+50%)	4 ports

VOICE	Administrative Maintenance	Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
		SCEL ALL	3	0,25	
		SCEL ALL	1	0,083	
				0,333 + (50%)	2 ports

DATA	AFTN (Point to Point)	Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
		SCEL SAEZ	13300	2400 bps	RS232 / V24
		SCEL SPIM	15100	2400 bps	RS232 / V24

DATA	ATN (X25 & UNI Net.)	Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
		SCEL SPIM	76000	(19200 bps each)	RS232 / V24
		SCEL SAEZ		2 Ports	RS232 / V24

DATA	GNSS (LAN)	Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
		SCEL ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

DATA	RADAR (Perm. P to P)	Circuits	Min. Port Speed (bps)	Interface
		SCEL SPIM	9600	RS232 / V24

DATA	NMS (LAN)	Circuits	Interface
		SCEL ALL	(*) To be defined by the Tenders

SUMMARY

Node: SANTIAGO (Chile)

SCEL

SCEL	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM	1			X	1	X			X
SCEL									
SAEZ	1	(4)	ALL	X		X	ALL	X	
SBCT									X
SBRF									X
SBMN									X
SUMU									X
SGAS									X
SLLP		(1)							X
SOCA									X
SMPM									X
SYGM									X
SVMI									X
Ports	2	4		2	2	1		2	2
Kb/s	16	NC	NC	NC	9.6	NC	NC	DEF	

X Required link

(N) Number of switched (ATSa) FASID requirements

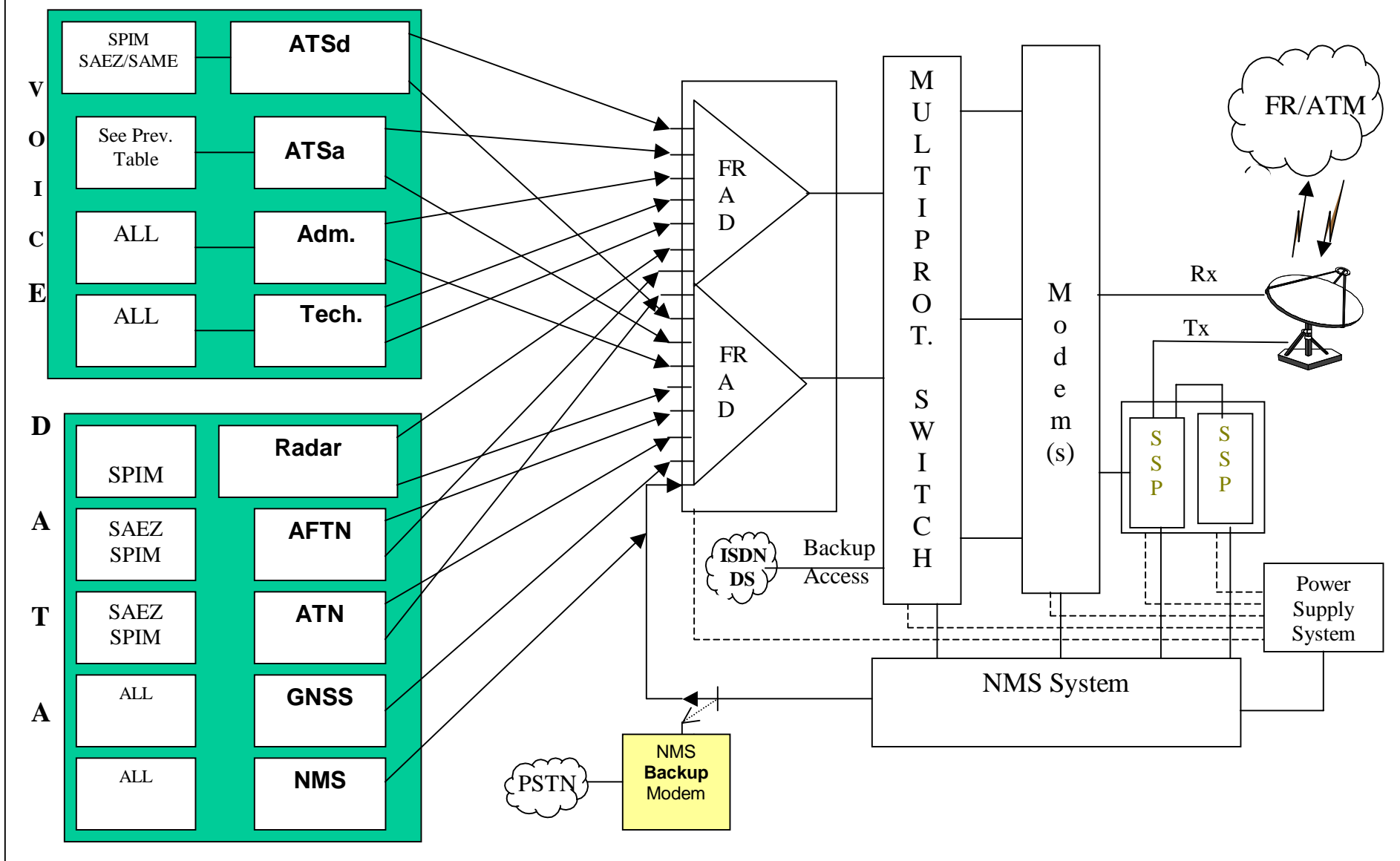
NC Does not apply for permanent bandwidth

DEF To be defined by the Tenders

Lat. 33° 23' 27" S
Lon. 70° 44' 18" W

REDDIG node: Santiago (SCEL)

Dist. 38831,23
IS-903 Elev. 27,57°
Azim. 62,20°



Node:	BOGOTÁ		Colombia	SKED
Geo & Orbit Information:	Lat. 04° 42' 05 " N	Lon. 74° 08' 48 " W	INTELSAT IS-903 @ 335,5	
			Az. 93,98 °	El. 32,90 ° Dist. 38358,61 Km

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SKED SEGU	9	0,3	8 Kbps	
		SKED SPIM	3	0,1	8 Kbps	
		SKED SVMI	4	0,133	8 Kbps	
		SKED SBMN	3	0,1	8 Kbps	
		SKED SBMN/SBPH	3	0,1	8 Kbps	
		SKEC/SKED SVMI	3	0,1	8 Kbps	
		SKLT/SKED SBMN/SBPH	4	0,133	8 Kbps	
TOTALS				0,963	56 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SKAN/SKED SEGU	2	0,066	
		SKCL/SKED SEGU	4	0,133	
		SKLT/SKED SPIM	1	0,033	
		SKCC/SKED SVMI	2	0,066	
TOTALS				0,3 (+50%)	3 ports

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SKED ALL	3	0,25	
	Maintenance	SKED ALL	1	0,083	
TOTALS				0,333 + (50%)	2 ports

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SKED SPIM	15900	2400 bps	RS232 / V24
		SKED SEGU	14100	2400 bps	RS232 / V24
		SKED SBMN/SBBR	NEW	2400 bps	RS232 / V24
		SKED SVMI	16000	2400 bps	RS232 / V24

		Circuits	Aprox.. Tx. Chrs. (peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Net.)	SKED SVMI	125500	(19200 bps each)	RS232 / V24
		SKED SPIM		2 Ports	RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SKED ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SKED SEGU	9600	RS232 / V24
		SKED SPIM	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SKED ALL	(*) To be defined by the Tenders

SUMMARY

Node: BOGOTÁ (Colombia) SKED

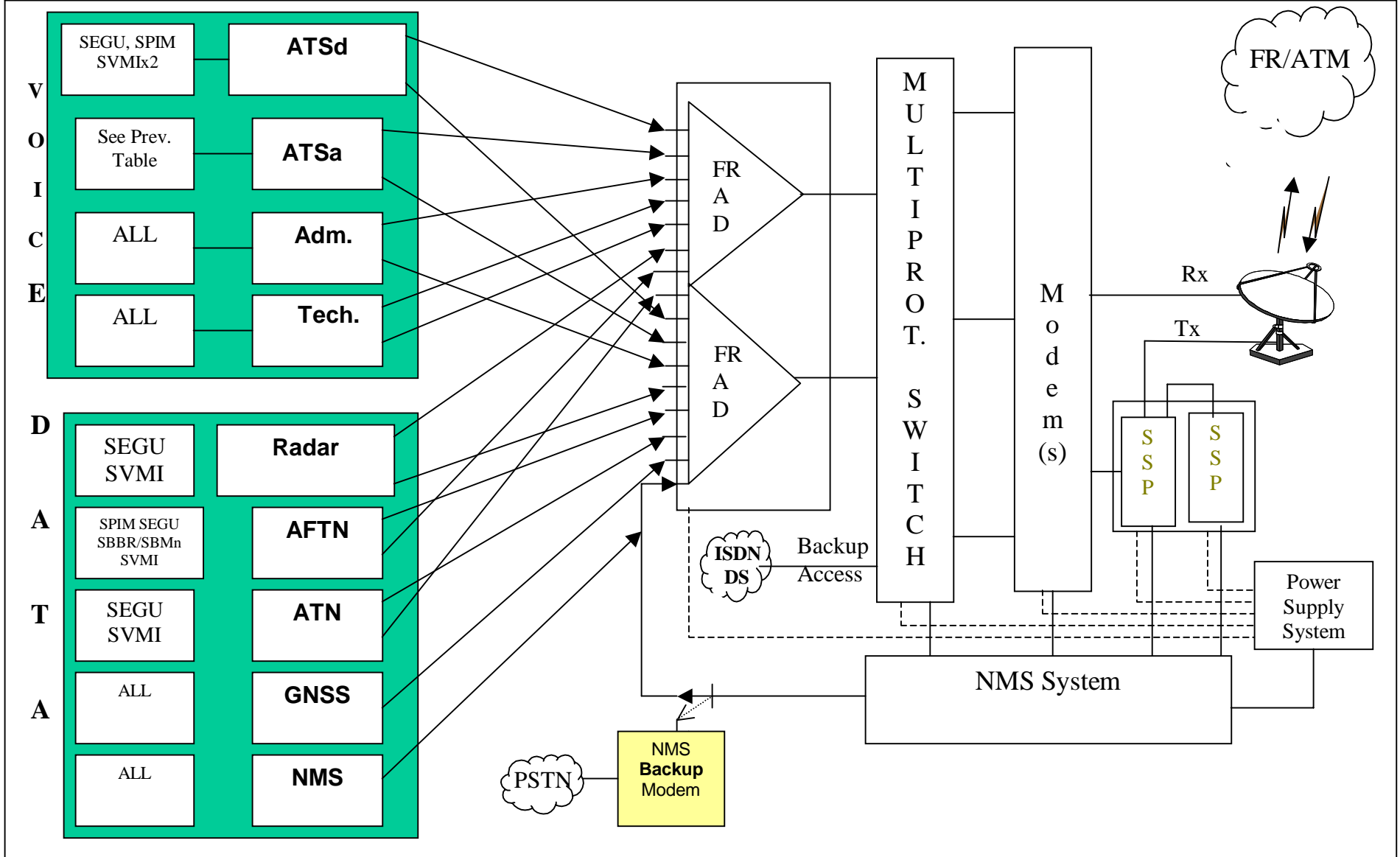
SKED	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED									
SEGU	1	(2)	ALL	X	X		ALL	X	
SPIM	1	(1)		X		X			X
SCEL									X
SAEZ									X
SBCT									X
SBRF									X
SBMN				X					X
SUMU	3								X
SGAS									X
SLLP									X
SOCA									X
SMPM									X
SYGM									X
SVMI	2	(1)		X	X	X			X
Ports	7	3		2	4	2		2	2
Kb/s	56	NC	NC	NC	19.2	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 04° 42' 05" N
Lon. 74° 08' 48" W

REDDIG node: Bogotá (SKED)

Dist. 38358,69
IS-903 Elev. 32,90°
Azim. 93,98°



Node:		GUAYAQUIL	Ecuador	SEGU
Geo & Orbit Information:	Lat. 02° 09' 12 " S	Lon. 79° 53' 00 " W	INTELSAT IS-903 @ 335,5	
			Az. 88,51 °	El. 26,83 ° Dist. 38899,10 Km

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SEGU SKED	9	0,3	8 Kbps	
		SEGU SPIM	7	0,231	8 Kbps	
TOTALS				0,531	16 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SEGU SKAN/SKED	2	0,066	
		SEGU SKCL/SKED	4	0,133	
TOTALS				0,198 (+50%)	1 port min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SEGU ALL	3	0,25	
	Maintenance	SEGU ALL	1	0,083	
TOTALS				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SEGU SPIM	7200	2400 bps	RS232 / V24
		SEGU SKED	3900	2400 bps	RS232 / V24
		SEGU SVMI	NEW	2400 bps	RS232 / V24

		Circuits	Aprox.. Tx. Chrs. (peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Net.)	SEGU SVMI	49000	(19200 bps each)	RS232 / V24
		SEGU SPIM		2 Ports	RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SEGU ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SEGU SKED	9600	RS232 / V24
		SEGU SPIM	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SEGU ALL	(*) To be defined by the Tenders

SUMMARY

Node: GUAYAQUIL (Ecuador) SEGU

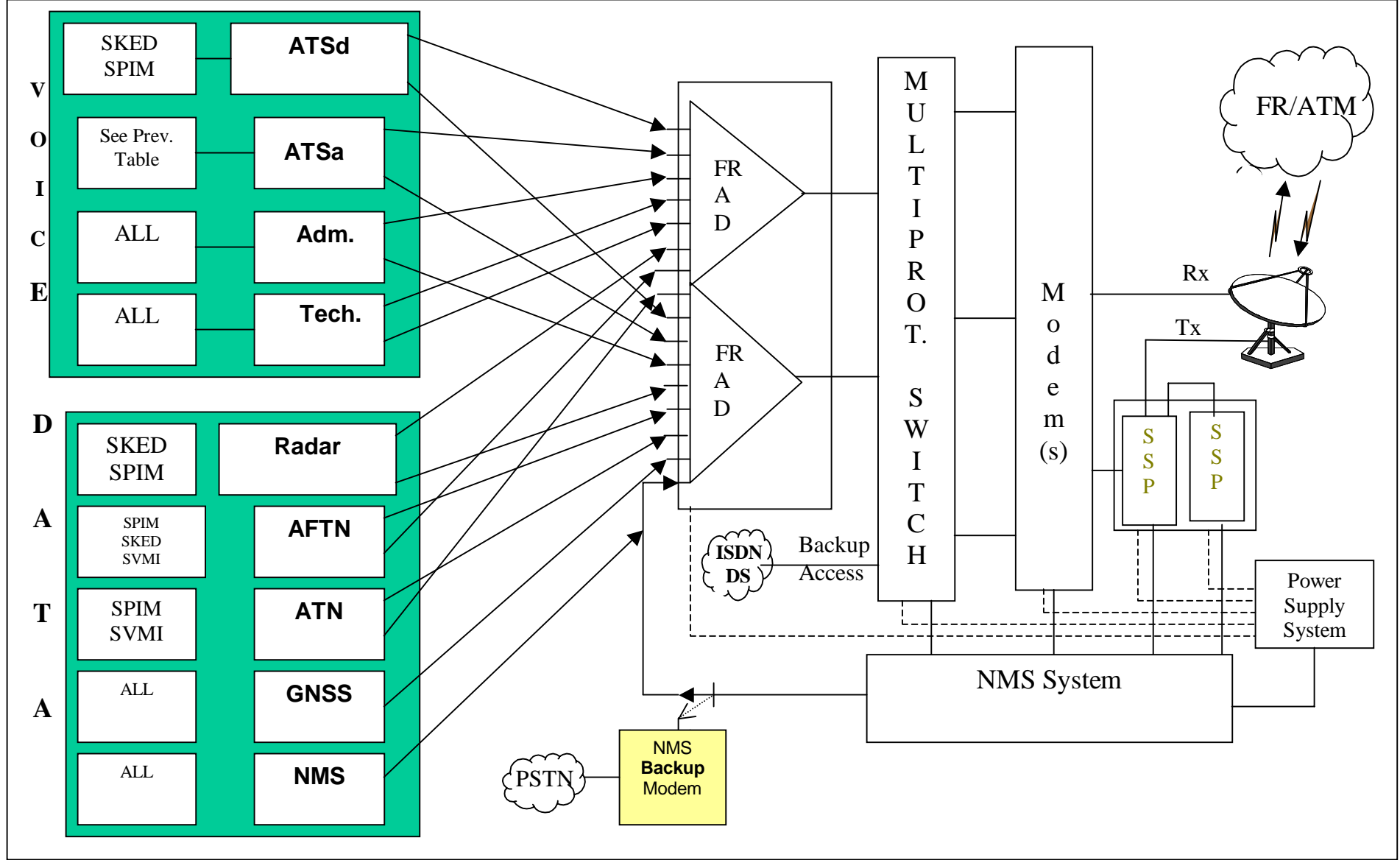
SEGU	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED	1	(2)	ALL	X	X		ALL	X	
SEGU									
SPIM	1		ALL	X	X	X	ALL	X	
SCEL									X
SAEZ									X
SBCT									X
SBRF									X
SBMN									X
SUMU									X
SGAS									X
SLLP									X
SOCA									X
SMPM									X
SYGM									X
SVMI					X			X	
Ports	2	1	2	3	2	2	2	DEF	
Kb/s	16	NC	NC	NC	19.2	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 02° 09' 12" S
Lon. 79° 53' 00" W

REDDIG node: Guayaquil (SEGU)

Dist. 38899,10
IS-903 Elev. 26,83°
Azim. 88,51°



Node:		CAYENNE - ROCHAMBEAU	French Guyana	SOCA	
Geo & Orbit Information:	Lat. 04° 49' 11 " N	Lon. 52° 21' 38 " W		INTELSAT IS-903 @ 335,5	
				Az. 99,03 °	El. 57,03 °

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SOCA SBMN/SBBE	1	0,033	
		SOCA SMPM	1	0,033	
		SOCA SBRF	1	0,033	
TOTALS				0,1 + (50%)	1 port min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SOCA ALL	3	0,25	
	Maintenance	SOCA ALL	1	0,083	
TOTALS				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SOCA SVMI	3800	2400 bps	RS232 / V24
		SOCA SBMN/SBBR	3800	2400 bps	RS232 / V24

		Circuits	Aprox.. Tx. Chrs. (peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Net.)	SOCA SVMI	20000	(19200 bps each)	RS232 / V24
		SOCA SBRF		2 Ports	RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SOCA ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Interface
DATA	NMS (LAN)	SOCA ALL	(*) To be defined by the Tenders

SUMMARY

Node: Cayenne-Rochambeau SOCA

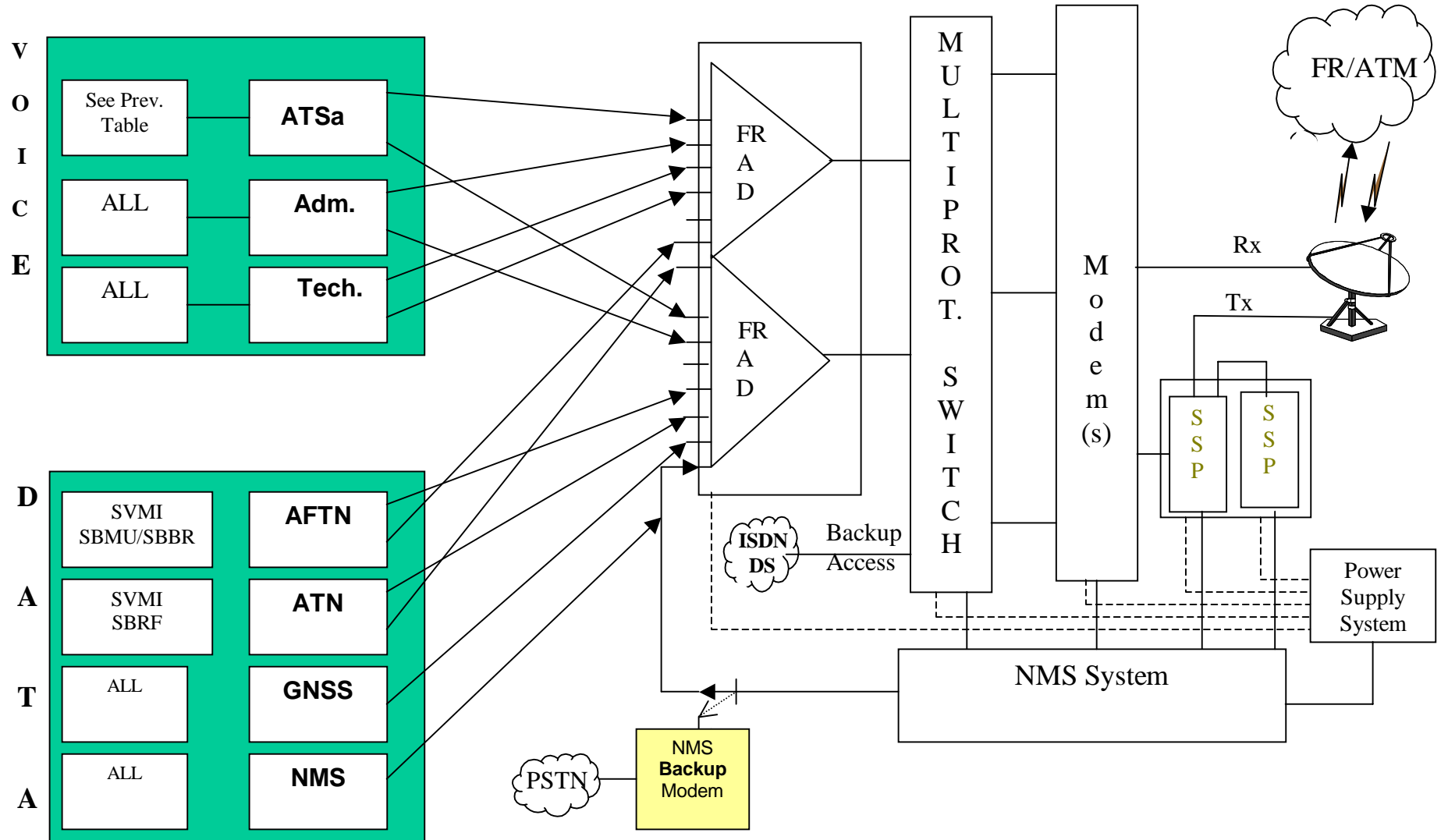
SOCA	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM									X
SCEL									X
SAEZ									X
SBCT									X
SBRF		(1)				X			X
SBMN		(1)			X				X
SUMU									X
SGAS									X
SLLP									X
SOCA									
SMPM		(1)	ALL				ALL	X	
SYGM									X
SVMI				X		X			X
Ports	0	1	2	2	0	2	2	DEF	
Kb/s	0	NC	NC	NC	0	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 04° 49' 11" S
Lon. 52° 21' 38" W

REDDIG node: Cayenne - Rochambeau (SOCA)

Dist. 36669,46
IS-903 Elev. 57,03°
Azim. 99,03°



Node:	GEORGETOWN		Guyana	SYGC
Geo & Orbit Information:	Lat. 06° 29' 55 " N	Lon. 58° 15' 14 " W	INTELSAT IS-903 @ 335,5	
			Az. 98,16 °	El. 50,31 ° Dist. 37058,71 Km

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SYGC SBMN	1	0,033	
		SYGC SMPM	1	0,033	
		SYGC SVMI	1	0,033	
TOTALS				0,1 + (50%)	1 port min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SYGC ALL	3	0,25	
	Maintenance	SYGC ALL	1	0,083	
TOTALS				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SYGC SMPM	NEW	2400 bps	RS232 / V24
		SYGC SVMI	1700	2400 bps	RS232 / V24
		SYGC SBMN/SBBR	1700	2400 bps	RS232 / V24

		Circuits	Aprox.. Tx. Chrs. (peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Net.)	SYGC SVMI	16000	(19200 bps each)	RS232 / V24
		SYGC SBRF		2 Ports	RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SYGC ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Interface
DATA	NMS (LAN)	SYGC ALL	(*) To be defined by the Tenders

SUMMARY

Node: Georgetown SYGC

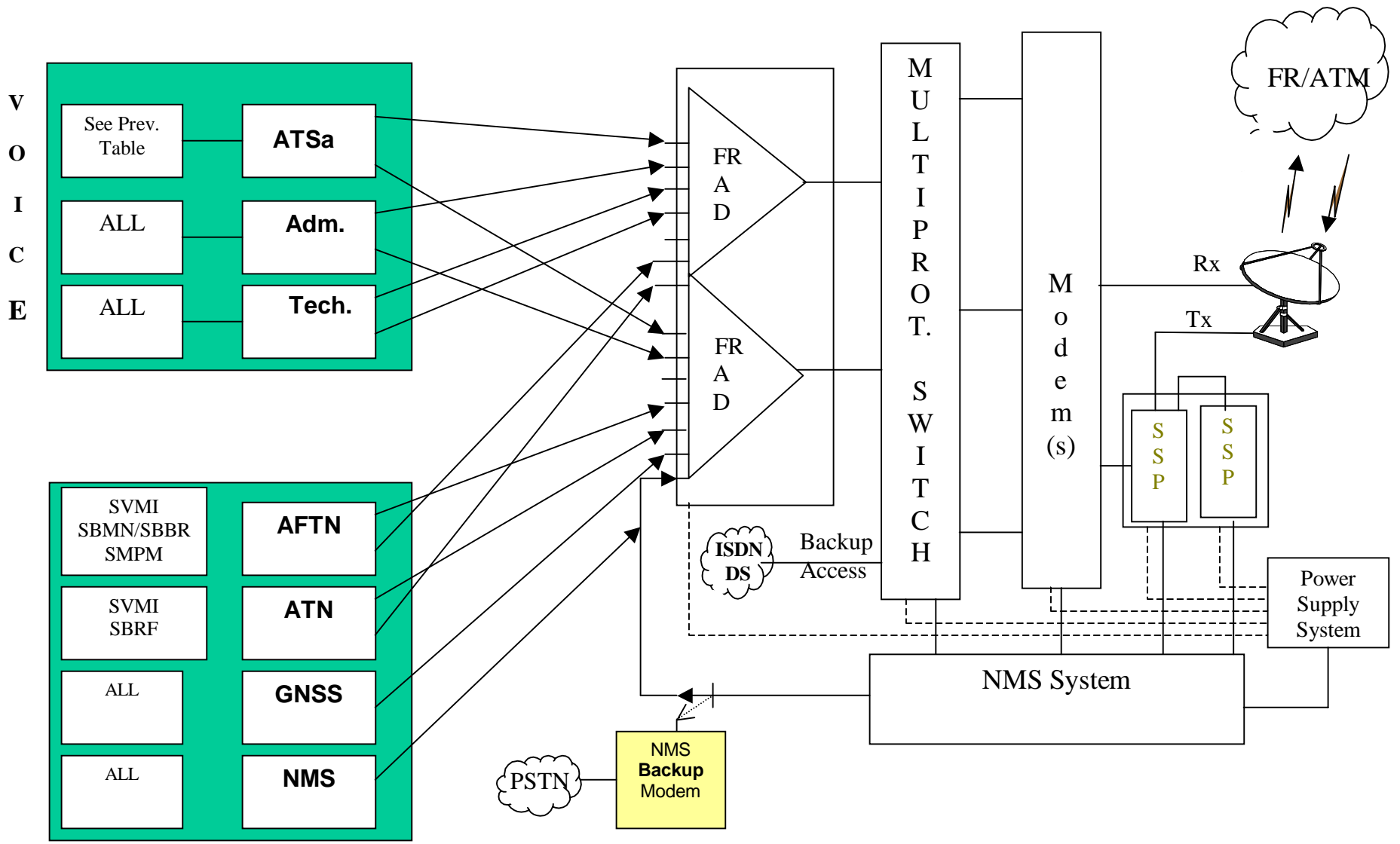
SYGC	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM									X
SCEL									X
SAEZ									X
SBCT									X
SBRF								X	X
SBMN		(1)			X				X
SUMU									X
SGAS									X
SLLP									X
SOCA									X
SMPM		(1)			X				X
SYGC									
SVMI		(1)	ALL	X		X	ALL	X	
Ports	0	1	2	3	0	2	2	DEF	
Kb/s	0	NC	NC	NC	0	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 06° 29' 55" N
Lon. 58° 15' 14" W

REDDIG node: Georgetown (SYGC)

Dist. 37058,70
IS-903 Elev. 50,31°
Azim. 98,16°



Node:		ASUNCION		Paraguay		SGAS	
Geo & Orbit	Lat. 25° 14' 24" S	Lon. 57° 31' 09 " W	INTELSAT IS-903 @ 335,5				
			Az. 56,73 °	El. 42,97 °	Dist. 37557,24 Km		

		Circuits		Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SGAS	SBCT	4	0,132	8 Kbps	
		TOTALS			0,132	8 Kbps	1 port min.

		Calls		Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SGAS	SLLP	1	0,033	
		SGAS	SBCT/SBWI	2	0,066	
		SGAS	SAEZ/SARE	2	0,066	
		TOTALS			0,166 (+50%)	1 port min.

		Calls		Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SGAS	ALL	3	0,25	
	Maintenance	SGAS	ALL	1	0,083	
		TOTALS			0,333 + (50%)	2 ports min.

		Circuits		Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SGAS	SBCT/SBBR	2650	2400 bps	RS232 / V24
		SGAS	SAEZ	3600	2400 bps	RS232 / V24

		Circuits		Aprox.. Tx. Chrs. (peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Net.)	SGAS	SBCT/SBBR	49000	(19200 bps each)	RS232 / V24
		SGAS	SAEZ		2 Ports	RS232 / V24

		Circuits		Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SGAS	ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits		Interface
DATA	NMS (LAN)	SGAS	ALL	(*) To be defined by the Tenders

SUMMARY

Node: ASUNCION (Paraguay) SGAS

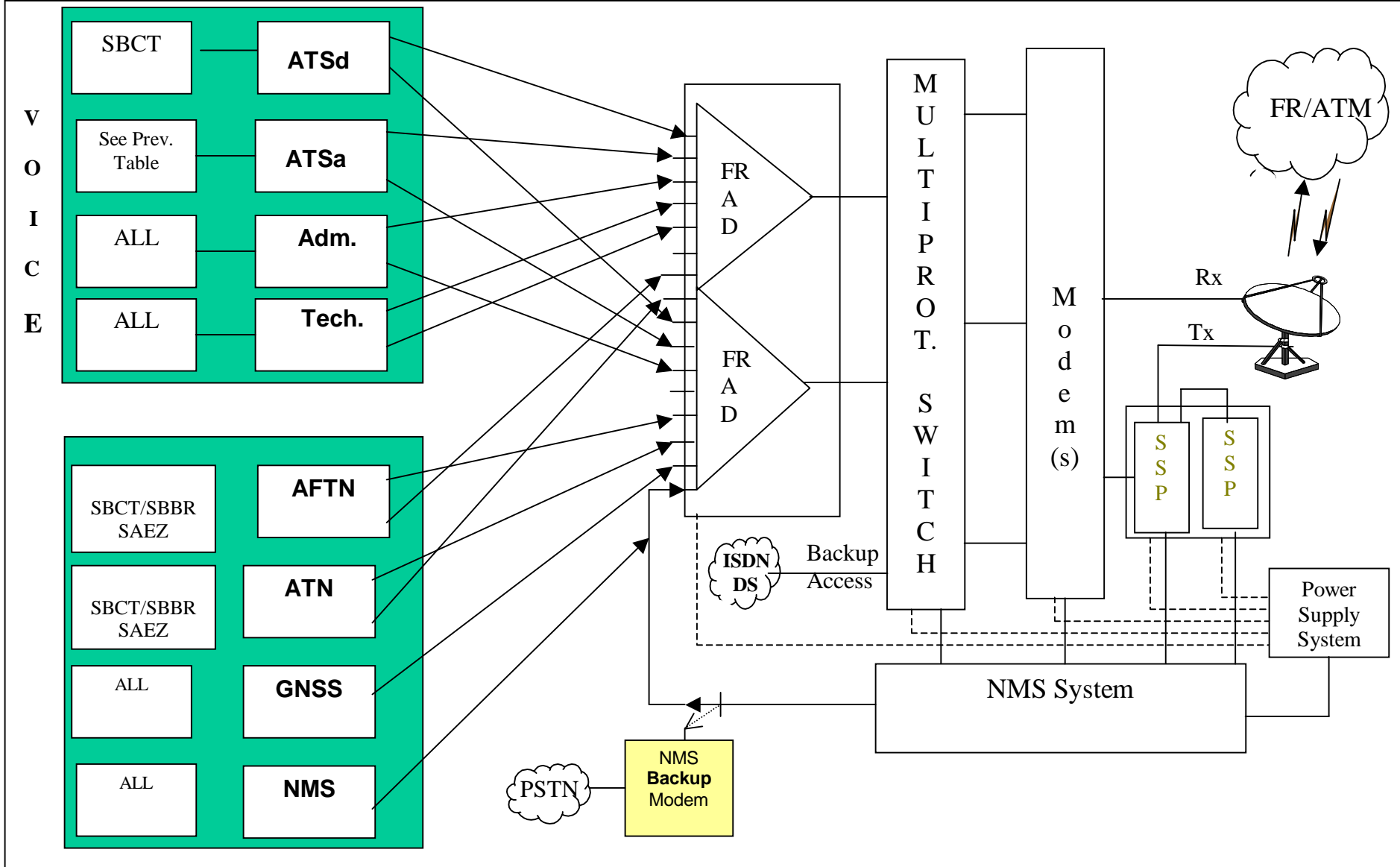
SGAS	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM									X
SCEL									X
SAEZ		(1)		X		X			X
SBCT	1	(1)		X		X			X
SBRF									X
SBMN									X
SUMU									X
SGAS									
SLLP		(1)	ALL				ALL	X	
SOCA									X
SMPM									X
SYGM									X
SVMI									X
Ports	1	1		2	2	0		2	2
Kb/s	8	NC	NC	NC	0	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 25° 14' 24" S
Lon. 57° 31' 09" W

REDDIG node: Asunción (SGAS)

Dist. 37557,24
IS-903 Elev. 42,97°
Azim. 56,73°



Node:		LIMA		Perú		SPIM	
Geo & Orbit Information:		Lat. 12° 01' 27 " S	Lon. 77° 06' 20 " W	INTELSAT IS-903 @ 335,5			
				Az. 80,95 °	El. 28,82 °	Dist. 38716901 Km	

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SPIM SCEL	7	0,233	8 Kbps	
		SPIM SKED	3	0,1	8 Kbps	
		SPIM SEGU	7	0,233	8 Kbps	
		SPIM SLLP	3	0,1	8 Kbps	
TOTALS				0,666 (+50 %)	32 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SPI M SKED/SKLT	1	0,033	
		SPI M SBMN/SBPH	1	0,033	
TOTALS				0,066 (+50%)	1 port min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SPIM ALL	4	0,333	
	Maintenance	SPIM ALL	1	0,083	
				0,416 + (50%)	3 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SPIM SCEL	13500	2400 bps	RS232 / V24
		SPIM SEGU	21000	2400 bps	RS232 / V24
		SPIM SVMI	10000	2400 bps	RS232 / V24
		SPIM SKED	17500	2400 bps	RS232 / V24
		SPIM SLLP	15000	2400 bps	RS232 / V24
		SPIM SAEZ	13000	2400 bps	RS232 / V24
		SPIM SBMN/SBBR	13500	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25&UNI Net.)	SPIM SCEL	210000	(19200 bps each) 2 Ports	RS232 / V24
		SPIM SEGU			RS232 / V24
		SPIM SVMI			RS232 / V24
		SPIM SKED			RS232 / V24
		SPIM SLLP			RS232 / V24
		SPIM SAEZ			RS232 / V24
		SPIM SBCT			RS232 / V24
		SPIM SBRF			RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SPIM ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA RADAR	RADAR (Perm. P to P)	SPIM SCEL	9600	RS232 / V24
		SPIM SEGU	9600	RS232 / V24
		SPIM SLLP	9600	RS232 / V24
		SPIM SBMN	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SPIM ALL	(*) To be defined by the Tenders

SUMMARY

Node: LIMA (Peru) SPIM

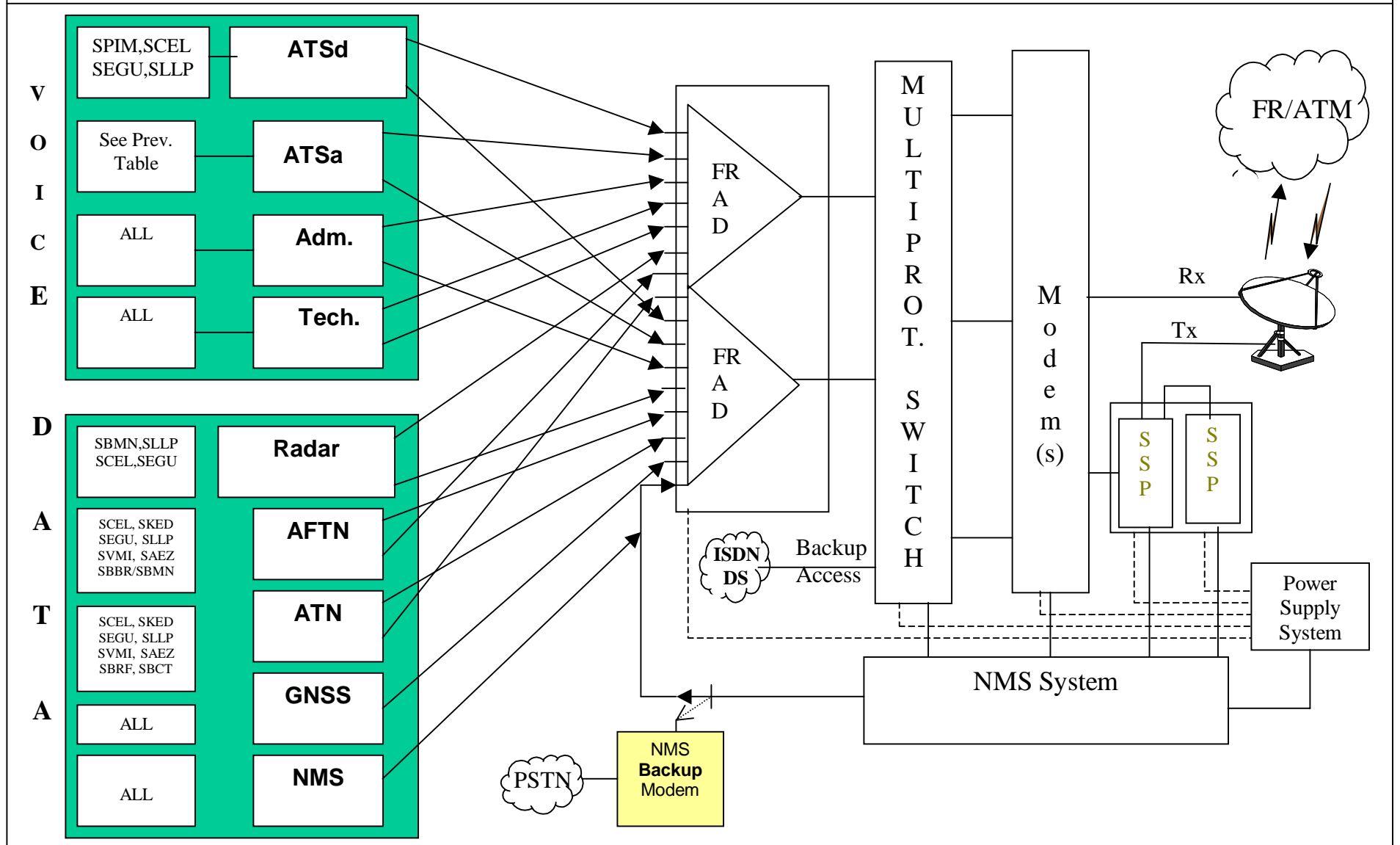
SPIM	Voice			Data				
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS
	8	8	8	2.4	9.6	2x19200	2x9600	DEF
SKED	1	(1)	ALL	X		X	ALL	X
SEGU	1			X	1	X		X
SPIM								
SCEL	1		ALL	X	1	X	ALL	X
SAEZ				X		X		X
SBCT						X		X
SBRF						X		X
SBMN		(1)		X	1			X
SUMU								X
SGAS								X
SLLP	1			X	1	X		X
SOCA								X
SMPM								X
SYGM								X
SVMI				X		X		X
Ports	4	1	3	6	4	2	2	DEF
Kb/s	32	NC	NC	NC	38.4	NC	NC	DEF

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 12° 01' 27" S
Lon. 77° 06' 20" W

REDDIG node: Lima (SPIM)

Dist. 38716,90
IS-903 Elev. 28,82°
Azim. 80,95°



Node:		PARAMARIBO	Suriname	SMPM
Geo & Orbit Information:	Lat. 05° 27' 10 " N	Lon. 55° 11' 16 " W	INTELSAT IS-903 @ 335,5	
			Az. 99,10 °	El. 53,75 ° Dist. 36851,55 Km

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SMPM SBMN/SBBE	1	0,033	
		SMPM SYGC	1	0,033	
		SMPM SOCA	1	0,033	
TOTALS				0,1 + (50%)	1 port min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SMPM ALL	3	0,25	
	Maintenance	SMPM ALL	1	0,083	
TOTALS				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SMPM SYGC	NEW	2400 bps	RS232 / V24
		SMPM SVMI	1700	2400 bps	RS232 / V24
		SMPM SBMN/SBBR	1700	2400 bps	RS232 / V24

		Circuits	Aprox.. Tx. Chrs. (peak hour)	Min. port Speed	Interface
DATA	ATN (X25 & UNI Net.)	SMPM SVMI	16000	(19200 bps each)	RS232 / V24
		SMPM SBRF		2 Ports	RS232 / V24

		Circuits	Avg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SMPM ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Interface
DATA	NMS (LAN)	SMPM ALL	(*) To be defined by the Tenders

SUMMARY

Node: Paramaribo SMPM

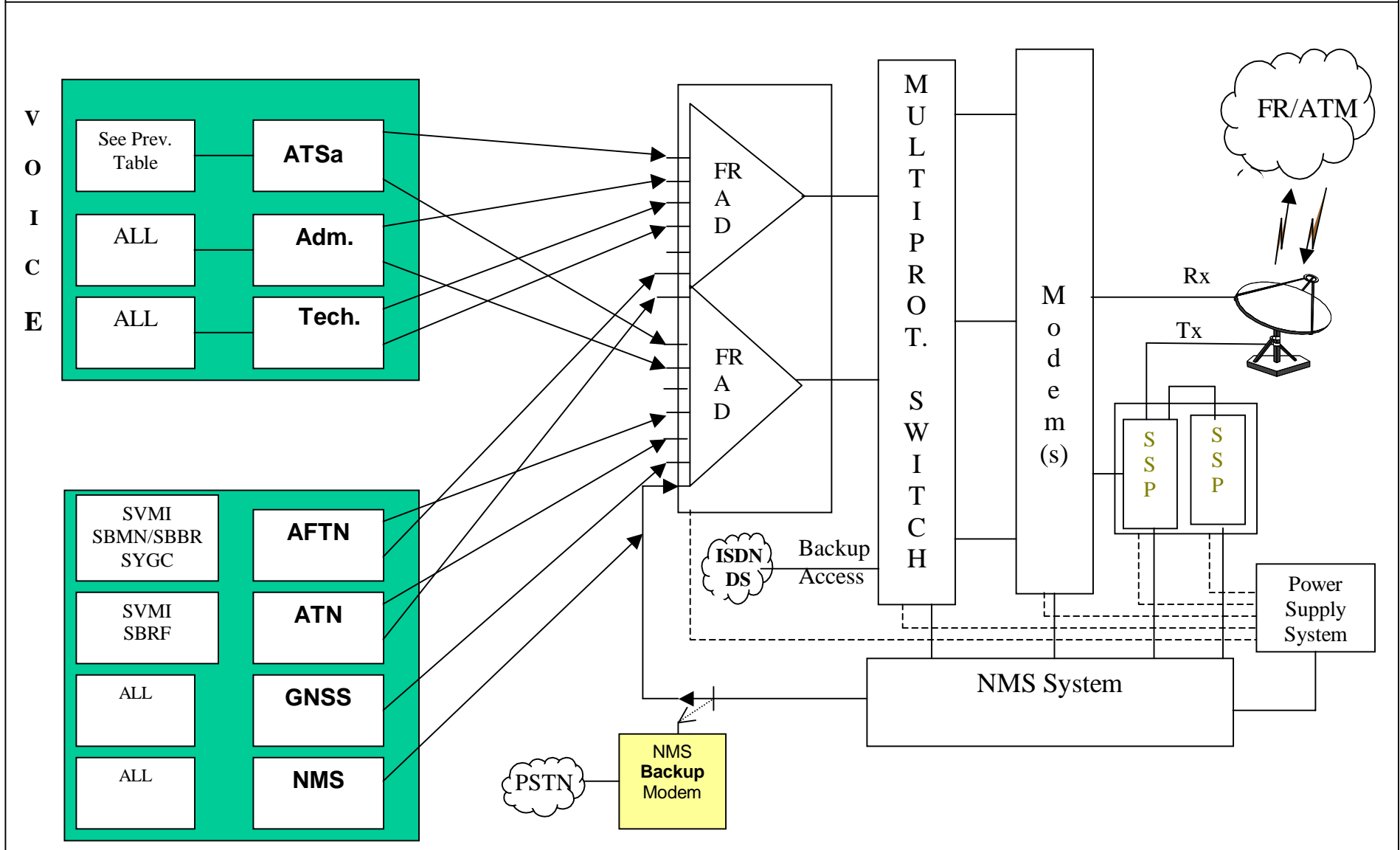
SMPM	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM									X
SCEL									X
SAEZ									X
SBCT									X
SBRF								X	X
SBMN		(1)			X				X
SUMU									X
SGAS									X
SLLP									X
SOCA									X
SYGC		(1)			X				X
SMPM									
SVMI		(1)	ALL	X		X	ALL	X	
Ports	0	1	2	3	0	2	2	DEF	
Kb/s	0	NC	NC	NC	0	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 05° 27' 10" N
Lon. 55° 11' 16" W

REDDIG node: Paramaribo (SMPM)

Dist. 36851,55
IS-903 Elev. 53,75°
Azim. 99,10°



Node:	MONTEVIDEO		Uruguay	SUMU
Geo & Orbit Information:	Lat. 34° 50' 15 " S	Lon. 56° 01' 49 " W	INTELSAT IS-903 @ 335,5	
			Az. 47,04 °	El. 37,50 ° Dist. 37796,19 Km

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSd (Hotline)	SUMU SAEZ	11	0,363	8 Kbps	
		SUMU BAIRES	20	0,66	8 Kbps	
		Carrasco APP BAIRES	25	0,825	8 Kbps	
		Carrasco APP SAEZ	11	0,363	8 Kbps	
		SUMU SBCT	7	0,233	8 Kbps	
TOTALS				2,44 (+50 %)	40 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SUMU SAEZ/SARE	1	0,033	
		SUCA/SUMU SAEZ/SABE	2	0,066	
		SUMU SBRF	2	0,066	
TOTALS				0,165 (+50%)	2 ports min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SUMU ALL	3	0,25	
	Maintenance	SUMU ALL	1	0,083	
				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SUMU SBCT/SBBR	6000	2400 bps	RS232 / V24
		SUMU SAEZ	6500	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25 & UNI Net.)	SUMU SBBR/SBCT	100000	(19200 bps each)	RS232 / V24
		SUMU SAEZ		2 Ports	RS232 / V24

		Circuits	Avg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SUMU ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SUMU SBCT	9600	RS232 / V24
		SUMU SAEZ	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SUMU ALL	(*) To be defined by the Tenders

SUMMARY

Node: MONTEVIDEO (Uruguay) SUMU

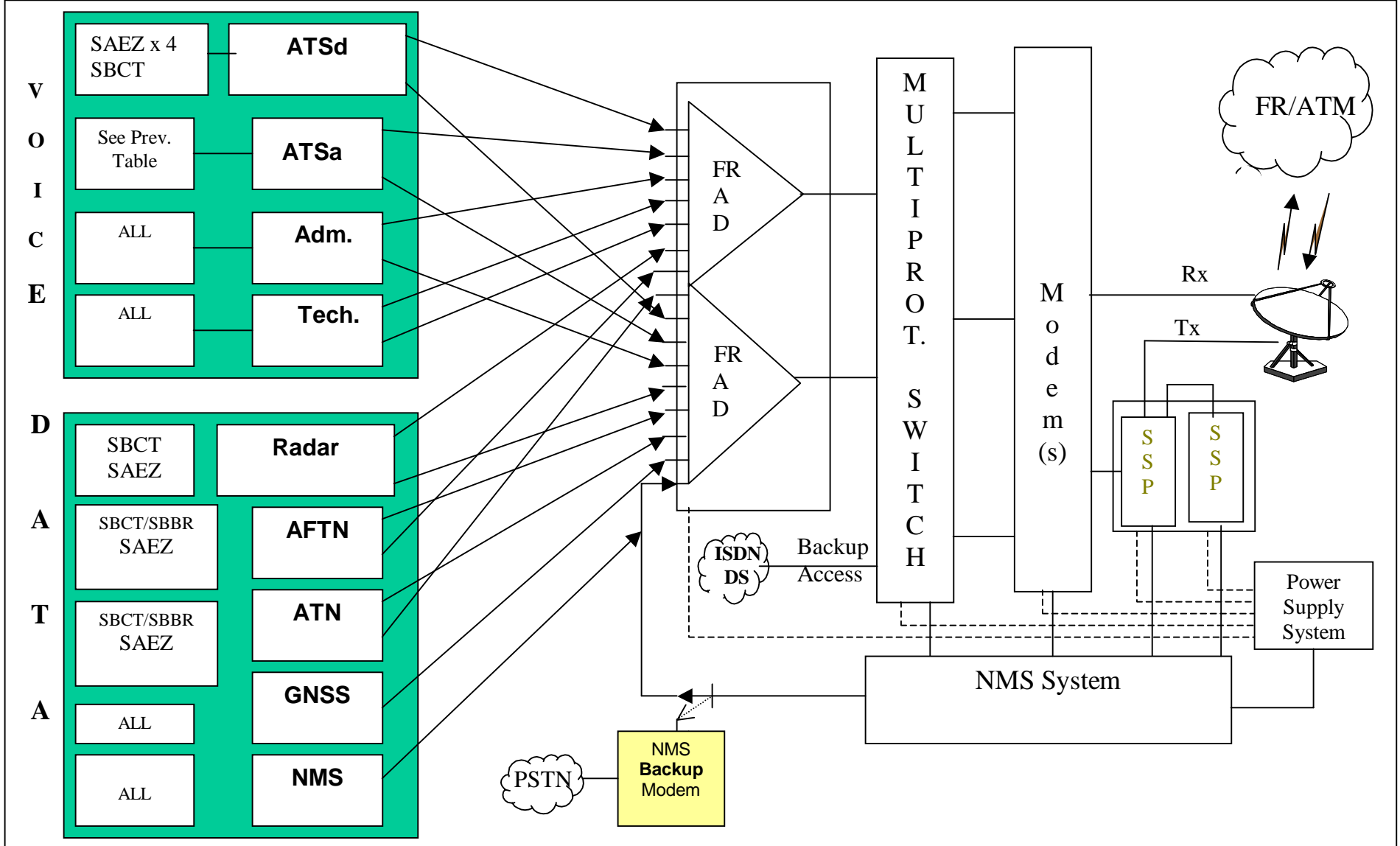
SBMN	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED			ALL				ALL	X	
SEGU									X
SPIM									X
SCEL									X
SAEZ	4	(2)		X	X	X			X
SBCT	1			X	X	X			X
SBRF		(1)							X
SBMN									X
SUMU									
SGAS			ALL				ALL	X	
SLLP									X
SOCA									X
SMPM									X
SYGM									X
SVMI									X
Ports	5	2		3	5	2		2	2
Kb/s	40	NC	NC	NC	19.2	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 34° 50' 15" S
Lon. 56° 01' 49" W

REDDIG node: Montevideo (SUMU)

Dist. 37976,19
IS-903 Elev. 37,50°
Azim. 47,04°



Node:	MAIQUETIA		Venezuela	SVMI
Geo & Orbit Information:	Lat. 34° 49' 25 " S	Lon. 58° 31' 43 " W	INTELSAT IS-903 @ 335,5	
			Az. 101,36 °	El. 39,78 ° Dist. 37797,33 Km

		Circuits	Calls per peak hour	Erlangs (HTM 2M)	Perm BW	Interface
VOICE	ATSD (Hotline)	SVMI SKED	4	0,133	8 Kbps	
		SVMI SBMN	6	0,2	8 Kbps	
		SVMI SKED/SKEC	4	0,133	8 Kbps	
TOTALS				0,466 (+50 %)	24 Kbps	

		Calls	Calls per peak hour	Erlangs (HTM 2M)	Interface
VOICE	ATSa (Switched)	SVMI SKED/SKCC	2	0,066	
		SVMI SYGC	1	0,033	
TOTALS				0,1 (+50%)	1 ports min.

		Calls	Calls per peak Hour	Erlangs (HTM 5M)	Interface
VOICE	Administrative	SVMI ALL	3	0,25	
	Maintenance	SVMI ALL	1	0,083	
				0,333 + (50%)	2 ports min.

		Circuits	Tx. Characters/ circuit (in peak hour)	Min. port Speed	Interface
DATA	AFTN (Point to Point)	SVMI SYGC	NEW	2400 bps	RS232 / V24
		SVMI SOCA	9500	2400 bps	RS232 / V24
		SVMI SMPM	14000	2400 bps	RS232 / V24
		SVMI SPIM	NEW	2400 bps	RS232 / V24
		SVMI SEGU	NEW	2400 bps	RS232 / V24
		SVMI SKED	23000	2400 bps	RS232 / V24
		SVMI SBRF	15000	2400 bps	RS232 / V24

		Circuits	Apprx. Tx. Chrs. (peak hour)	Min. port Speed (bps)	Interface
DATA	ATN (X25 & UNI Network)	SVMI SYGC	140000	(19200 bps each) 2 Ports	RS232 / V24
		SVMI SOCA			RS232 / V24
		SVMI SMPM			RS232 / V24
		SVMI SPIM			RS232 / V24
		SVMI SEGU			RS232 / V24
		SVMI SAEZ			RS232 / V24
		SVMI SKED			RS232 / V24
		SVMI SBRF			RS232 / V24

		Circuits	Avrg. Tx. Kchars. per hour	Network BW req.	Interface
DATA	GNSS (LAN)	SVMI ALL	3460	2x9600 bps	ISO/IEC 8802 10 BaseT

		Circuits	Min. Port Speed (bps)	Interface
DATA	RADAR (Perm. P to P)	SVMI SCEL	9600	RS232 / V24
		SVMI SBMN	9600	RS232 / V24

		Circuits	Interface
DATA	NMS (LAN)	SVMI ALL	(*) To be defined by the Tenders

SUMMARY

Node: MAIQUETIA (Venezuela) SVMI

SVMI	Voice			Data					
	ATSd	ATSa	ADM/SRV	AFTN	RADAR	ATN	GNSS	NMS	
	8	8	8	2.4	9.6	2x19200	2x9600	DEF	
SKED	2	(1)	ALL	X	X	X	ALL	X	
SEGU				X		X			X
SPIM				X		X			X
SCEL									X
SAEZ						X			X
SBCT									X
SBRF				X		X			X
SBMN	1					X			X
SUMU									X
SGAS									X
SLLP									X
SOCA				X		X			X
SMPM				X		X			X
SYGC		(1)		X		X			X
SVMI									
Ports	3	1	2	7	2	2	2	DEF	
Kb/s	24	NC	NC	NC	19.2	NC	NC	DEF	

- X Required link
- (N) Number of switched (ATSa) FASID requirements
- NC Does not apply for permanent bandwidth
- DEF To be defined by the Tenders

Lat. 10° 36' 12" N
Lon. 66° 59' 26" W

REDDIG node: Maiquetía (SVMI)

Dist. 37797,33
IS-903 Elev. 39,78°
Azim. 101,36°

